Chapter 24

ENVIRONMENTAL PROTECTION, BISCAYNE BAY AND ENVIRONS DESIGNATED AQUATIC PARK AND CONSERVATION AREA, THE BISCAYNE BAY ENVIRONMENTAL ENHANCEMENT TRUST FUND, AND THE ENVIRONMENTALLY ENDANGERED LANDS PROGRAM*

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^{*}Editor's note—Ord. No. 04-214, §§ 1, 5, repealed chapter 24 in its entirety and replaced it with a new chapter 24 consisting of similar material. Ordinances from which former chapter 24 was derived may be found in the Code Comparative Table at the end of Volume 3 of this Code.

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ARTICLE I. IN GENERAL

DIVISION 1. GENERAL PROVISIONS

Sec. 24-1. Short title.

This chapter enacted under and pursuant to the provisions of the Home Rule Charter of Government for Miami-Dade County, Florida, shall be known and may be cited as the "Miami-Dade County Environmental Protection Ordinance." (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-2. Declaration of legislative intent.

The Board finds and determines that the reasonable control and regulation of activities which are causing or may cause pollution or contamination of air, water, soil and property is required for the protection and preservation of the public health, safety and welfare. It is the intent and purpose of this chapter to provide and maintain for the citizens and visitors of Miami-Dade County standards which will insure the purity of all waters consistent with public health and public enjoyment thereof, the propagation and protection of wildlife, birds, game, fish and other aquatic life, and atmospheric purity and freedom of the air from contaminants of synergistic agents injurious to human, plant or animal life, or property, or which unreasonably interfere with the comfortable enjoyment of life or property, or the conduct of business. The Board finds it necessary to establish, within the unincorporated and incorporated areas of Miami-Dade County, Countywide water control, coastal engineering, and coastal wetlands management programs for the purpose of maintaining adequate water levels, flood control, drainage, water conservation, and prevention of saltwater intrusion; for preserving beaches and shorelines; for managing coastal wetland resources; for acquisition of lands by gift, donation, purchase, condemnation or otherwise, as necessary for such programs; and providing for cooperation with federal, State and local agencies and authorities.

The Board further finds it necessary to maintain within Miami-Dade County a freshwater wetlands management program for the purposes of providing adequate water levels, flood control,

water conservation, protection of water quality and recharge to the Biscayne Aquifer, and prevention of saltwater intrusion; for the maintenance of the biological integrity of freshwater wetlands in Miami-Dade County; for the protection of the interrelated natural functions between Miami-Dade County's wetlands and the natural systems in Everglades National Park; for managing freshwater wetland resources in accordance with environmental standards and management criteria as recommended by the Miami-Dade County Comprehensive Development Master Plan and Chapter 33B of the Code of Miami-Dade County, Florida, as amended from time to time; and providing for cooperation with federal. State, and local agencies and authorities.

The Board finds it necessary to establish for Miami-Dade County a Tree and Forest Resources Program for the purpose of protecting, preserving and replacing tree canopy, preserving natural forest communities including associated understory, providing protection for specimen-size trees and environmentally-sensitive tree resources, conserving rare, endangered, threatened and endemic species, protecting historically-significant tree resources, promoting the preservation of subtropical vegetation and unique or unusual species, providing for wildlife habitat, maintaining the natural character of neighborhoods, preserving the natural diversity of species, promoting environmentally-sound aesthetics, and providing for improved environmental quality by recognizing the numerous beneficial effects of trees (including improvements to air quality, maintenance of land areas essential to surface water management and aquifer recharge, reduction of heat and noise pollution, water and energy conservation and provision of shade and physical and psychological benefits to the people of Miami-Dade County by enhancing urban development). This program shall be a minimum standard and shall apply to both the incorporated and unincorporated areas, and in the unincorporated areas shall be enforced by the Department of Environmental Resources Management, and in the incorporated areas shall be enforced by the municipalities, unless the County is notified by a municipality, in the form of a letter from an official of the municipality or by resolution, that the municipality desires the County to

enforce the Miami-Dade County Tree and Forest Program within the municipality. Any municipality may establish and enforce its own ordinance provided such ordinance is equivalent to or more stringent than the provisions of Ordinance Number 89-8.

The provisions of this chapter are not intended and shall not be construed as superseding or conflicting with any statutory provisions relating to, or rules and regulations promulgated by, the Florida State Department of Environmental Protection, but shall be construed as implementing and assisting the enforcement thereof. It is not the intent of this Board to hereby preempt the authority of any municipality in the exercise of its authority to issue coastal construction permits or to restrict it from adopting more stringent standards, the purpose of this chapter being to establish minimum standards for the issuance of coastal construction permits within all of Miami-Dade County.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-3. Rules and regulations.

The Board of County Commissioners shall adopt, revise, and amend from time to time appropriate rules and regulations reasonably necessary for the implementation and effective enforcement, administration and interpretation of the provisions of this chapter, and to provide for the effective and continuing control and regulation of air and water pollution in this County within the framework of this chapter. No such rules and regulations, including amendments thereto, shall be adopted or become effective until after a public hearing has been held by the Board of County Commissioners pursuant to notice published at least ten (10) days prior to the hearing. When adopted by the Board of County Commissioners and filed with the clerk, such rules and regulations shall have force and effect of law.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-4. Application of chapter and time for compliance.

(1) *New facilities*. On and after the effective date of this chapter, any person installing, constructing, or placing in operation for the first time

any facility, equipment or process, the use of which will or may cause, or reasonably tend to cause, any air or water pollution as defined and controlled by this chapter, or who shall undertake the alterations, reconstruction or extension of existing facilities, equipment or processes in such a substantial manner as to materially increase the level or amount of air or water pollution, shall be subject to and required to comply with all the provisions of this chapter.

- (2) Existing facilities. All facilities, equipment, plants and projects that are in actual use and operation on the effective date of this chapter shall have until and including January 1, 1968, to fully comply with and conform to the requirements of this chapter, provided that all existing facilities shall comply with, and shall not commit violations of, the following provisions of this chapter after January 1, 1964, namely: Section 24-5 (Nuisance); Section 24-42 (Toxic waste discharges); Section 24-41 (Black smoke emissions); Section 24-41.4 (Open burning); and Section 24-41.9 (Reduction of animal matter).
- (3) Intent. It is intended that the provisions of this chapter shall be applicable to all new facilities and to any major or substantial addition, enlargement or extension of existing facilities; that existing facilities shall have until January 1, 1965, to comply with the specific sections of this chapter enumerated in subsection (2) hereinabove; and that existing facilities shall have until January 1, 1968, to comply with all other sections or provisions of this chapter (except those specifically designated in subsection (2) hereof), subject only to variances or extensions of time for compliance granted pursuant to the provisions of this chapter.
- (4) Replacements. The replacement with identical or similar parts and minor changes that do not affect the character of the waste discharge or emission of air contaminants, or do not materially increase the existing amount of air or water pollution, shall not be considered as constituting the alteration, reconstruction or extension of an existing facility, but shall be considered as constituting an existing facility, for the purpose of this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-5. Definitions.

In construing the provisions of this chapter, where the context will permit and no definition is provided herein, the definitions provided in Chapter 403, Florida Statutes, as may be amended from time to time, and in rules and regulations promulgated thereunder, as may be amended from time to time, shall apply. The following words and phrases when used in this chapter shall have the meanings ascribed to them in this section:

1990 Urban Development Boundary shall mean the line established by the Miami-Dade County Board of County Commissioners on July 8, 1983 by Ordinance 83-58 delineating the approved urban development boundary for Miami-Dade County, as amended by ordinance from time to time.

Abandonment in place of an underground storage facility shall mean:

- (1) Installation and sampling of the monitoring wells and soil borings required for the TCAR, and
- (2) Emptying, inerting and cleaning the interior of the underground storage facility, and
- (3) Filling the underground storage facility with a non-shrinking, inert and solid material approved by the Department.

Aboveground storage facility shall mean a tank, pipe, vessel or other container, or any combination of the foregoing, used or designed to be used for the aboveground storage or aboveground transmission of hazardous materials including but not limited to line leak detectors, monitoring wells and secondary containment systems associated therewith.

- (1) Aboveground storage facilities have less than ten (10) percent of their total volume below the surface of the ground.
- (2) Facilities with ten (10) percent or more of their volume below the ground surface and which are contained within a vault or structure of sufficient size to allow human access and visual inspection of all components thereof are hereby determined to be aboveground storage facilities.

Adequate protection by natural means shall mean one (1) or more of the following processes of nature that produces water consistently meeting the requirements of the standards in this chapter: dilution, storage, sedimentation, sunlight, aeration, and the associated physical and biological processes which tend to accomplish natural purification in surface waters and, in the case of groundwaters, the natural purification of water by infiltration through soil and percolation through underlying material and storage below the ground water table, as may be approved by the Director.

Adequate protection by treatment shall mean complete or full treatment which is the combination of the controlled processes of coagulation, sedimentation, absorption, filtration, disinfection, or other processes which produce a water consistently meeting the potable water standards including processes which are appropriate to the quality of the raw water supply; works which are of adequate capacity to meet maximum demands without creating health hazards, and which are located, designed and constructed to eliminate or prevent pollution; and conscientious operation by well trained and competent personnel whose qualifications are commensurate with the responsibilities of the position and acceptable to the DERM.

Adequate transmission capacity shall mean that each pump station receiving sewage flow from the sewer service connection, the pump station immediately upstream from the pump station receiving sewage flow from the sewer service connection, and all pump stations through which sewage flow from the sewer service connection is transmitted to the wastewater treatment facility receiving such sewage flow, is operating (A) with fixedspeed pumps at a nominal daily average pump station operating time equal to or less than ten (10) hours per day, taking into account all existing sewage flow and loadings, including anticipated sewage flow resulting from all previously authorized sewer service connections or (B) with multiplespeed pumps at a nominal average power consumption that is equal to or less than forty-six (46) percent of the rated multiple-speed pump station motor horsepower or the equivalent thereof as approved by the Director or the Director's designee or (C) with variable-speed pumps at a nominal average power consumption that is equal

to or less than a percentage of the rated variablespeed pump station motor horsepower as follows: (i) the percentage for all of the variable frequency driven pumps in the pump station shall be fortynine (49) percent; (ii) the percentage for all of the magnetic-drive type variable speed pumps in the pump station shall be sixty-five (65) percent; and (iii) the percentage for all of the electrolyte rheostat or resistor bank type of variable speed drive pumps in the pump station shall be sixty-one (61) percent; or the equivalent of any of the foregoing, as applicable, as approved by the Director or the Director's designee, or (D) in such a manner that, upon completion of a rainfall-dependent peak flow management study approved by the Director or the Director's designee, the pump station is capable of managing peak flows (during a one (1) in two-year storm event as determined by the South Florida Water Management District) with a back-up pump out-of-service without causing or contributing to overflows in the collection and transmission system.

Adequate treatment capacity shall mean that the wastewater treatment plant which will receive flow from a sewer service connection shall not be in noncompliance as defined in 40 C.F.R. Part 123.45, Appendix A.

Adequate water depth shall mean the vertical extent of the water column above submerged bottom lands which is sufficient at all times to prevent any damage to the submerged bottom lands and to any natural resources in or upon the submerged bottom lands.

Adverse environmental impact shall mean any change in the physical or biological conditions of the natural environment within or adjacent to the area that results in a substantial detrimental effect upon flora, fauna, air, water, minerals or other natural characteristic(s) of the area.

Affected tree shall mean any tree which shall be, or already has been, removed, relocated, or effectively destroyed, thereby requiring a permit pursuant to Ordinance Number 89-8.

Agricultural operation shall mean the growing of crops, the raising of fowl, animals or bees, as a

gainful occupation, but shall not include such activities engaged in as a hobby or truck farming in residential areas.

Agricultural site alteration shall mean preparation of a site for commercial or noncommercial horticultural or floricultural uses including, but not limited to: row crops, farms, groves, nurseries, horticultural farming, truck farming, barns, sheds or other structures not habitable by human beings which are used for the storage of farm machinery, fertilizer, seed or other items or equipment ancillary to an on-site agricultural use; and the maintenance and raising of animals for commercial purposes.

Agricultural vehicle or agricultural equipment maintenance facility shall mean a facility which repairs or maintains vehicles or equipment ancillary to and directly supportive of a bona fide agricultural purpose and which vehicle or equipment are owned or operated by the owner or leasee of the agricultural vehicle or agricultural equipment maintenance facility.

Air contaminants shall mean a particulate, gas or odor, including, but not limited to, smoke, charred paper, dust, soot, grime, carbon or any particulate matter, or irritating, malodorous or noxious acids, fumes or gases, or any combination thereof, but shall not include uncombined water vapor.

Air pollution shall mean the presence in the outdoor atmosphere of one (1) or more air contaminants or the combination thereof in such quantities and of such duration which are injurious to human, plant or animal life, or property, or which unreasonably interfere with the comfortable enjoyment of life or property, or the conduct of business.

Alter or altering a mangrove tree shall mean removing, poisoning, defoliating, or destroying a mangrove tree, either partially or entirely.

Ambient (natural) temperature shall mean the existing temperature of the receiving water at a location which is unaffected by man-made thermal discharges and a location which is also of a depth and exposure to winds and currents which typify the most environmentally stable portions of the receiving bodies of water.

Annular space shall mean the space between two (2) casings or between the outer casing and the wall of the well hole.

Approved recycling or recovery equipment shall mean any device designed to recapture or reuse ozone-depleting compounds which has the written approval of the Director or the Director's designee.

Asbestos shall mean a fibrous, rock-forming material, including, but not limited to, such amphibole varieties as tremilite, actinolite, anthophyllite, grunerite, richterite, edenite, amosite, crocilolite, and such serpentine varieties as amianthus and chrysotile, as well as synthetic asbestos fibers, including, but not limited to, fluor-tremilite, fluor-richterite, and fluor-edenite.

Association of primary and secondary wetland plant species shall mean an assemblage of primary and secondary wetland species within a defined area. In order for said assemblage to be classified as an association, it must be composed of at least twenty-five (25) percent primary wetland species.

Average day pumpage wellfield protection area shall mean the area within the cone of influence of a public utility potable water supply well based upon average day pumpage.

Average shall mean the arithmetic average of the results of at least three (3) separate samples collected within a referenced specific time period. At least one (1) of these samples shall be taken at peak flow conditions, where applicable, and a minimum of twenty-five (25) percent of the referenced time period shall serve as an interval between successive samples.

Back-up pump shall mean the highest capacity pump installed in a pump station.

Balanced system shall mean a gasoline or gasohol vapor recovery system that draws such vapor through a nozzle boot to an underground storage tank by means of the pressure differential created as the volume of gasoline or gasohol in the underground storage tank is reduced and the volume of gasoline or gasohol in the motor vehicle fuel tank is increased during motor vehicle refueling.

Basic wellfield protection area shall mean the area within two hundred ten (210) days travel time from a public utility potable water supply well based upon maximum day pumpage.

Basin B shall mean those lands within the following geographical boundary:

Section 13, 14, and 24, Township 52 South, Range 39 East, less those portions thereof lying southwesterly of the southwesterly right-ofway of Okeechobee Road, and

Sections 16, 17, 18 and 20, Township 52 South, Range 40 East, and

Section 19, Township 52 South, Range 40 East, less that portion thereof lying southwesterly of the northeasterly right-of-way of the Miami Canal and northwesterly of the northwesterly right-of-way of the Florida Turnpike, and

that portion of Section 21, Township 52 South, Range 40 East, lying westerly of the westerly right-of-way of Interstate I-75, and

Section 30, Township 52 South, Range 40 East, less that portion thereof lying northwesterly of the northwesterly right-of-way of the Florida Turnpike, and less those portions included within the right-of-way of the Miami River, and

Section 31, Township 52 South, Range 40 East, and

Sections 6, 7, 8, 17, 18 and 19, Township 53 South, Range 40 East, and

Section 30, Township 53 South, Range 40 East, less the southeast one quarter thereof.

All lying in Miami-Dade County, Florida.

Bird Drive Everglades Wetland Basin shall mean the wetlands described below:

That portion of Section 3, Township 54 South, Range 39 East lying south of U.S. Highway 41 (Tamiami Trail) and lying west of S.W. 143 Avenue north of S.W. 9th Terrace and lying west of S.W. 144 Avenue south of S.W. 9th Terrace; those portions of Sections 4, 5, and 6, Township 54 South, Range 39 East lying south of U.S. Highway 41 (Tamiami Trail); that portion of Section 10, Township 54 South, Range 39 East lying west of S.W. 144 Avenue; that portion of Section 31, Township 54 South, Range

39 East, lying north of S.W. 88th Street (North Kendall Drive); and Sections 7, 8, 9, 16, 17, 18, 19, 20, 29, 30, and 32, Township 54 South, Range 39 East.

Blackwater shall mean that portion of domestic sewage not emanating from residential showers, residential baths, residential bathroom washbasins, or residential clothes washing machines.

Boat docking facility shall mean a place where vessels may be secured to a fixed or floating structure or to the shoreline.

Boat slip shall mean a berthing space for a vessel which has been created or authorized pursuant to a permit or permits issued by the Department.

Boat storage facility shall mean a facility where recreational vessels are stored on uplands by one (1) or more of the following methods:

- (1) On boat trailers on a paved or unpaved surface; or
- (2) On individual boat racks; or
- (3) On multi-story boat racks.

Bona fide agricultural purposes shall mean good faith commercial or domestic agricultural use of the land. In determining whether the use of the land for agricultural purposes is bona fide, the following factors as set forth in Section 193.461, Florida Statutes (and as amended from time to time), though nonexclusive, shall be taken into consideration:

- (1) The length of time the land has been so utilized;
- (2) Whether the use has been continuous;
- (3) The purchase price paid;
- (4) Size, as it relates to specific agricultural use;
- (5) Whether an indicated effort has been made to care sufficiently and adequately for the land in accordance with accepted commercial agricultural practices, including, without limitation, fertilizing, liming, tilling, mowing, reforesting, and other accepted agricultural practices;

- (6) Whether such land is under lease and, if so, the effective date, length, terms and conditions of the lease; and
- (7) Such other factors as may from time to time become applicable.

Bona fide fruit grove shall mean a grove of fruit trees specifically planted to produce edible fruit for commercial purposes or for personal consumption by the owner.

Botanical garden shall mean any publiclyowned real property used for the cultivation of plants for display or scientific research.

C-9 Wetland Basin shall mean the wetlands within the following geographic boundaries:

Beginning at the intersection of U.S. Highway 27 (Okeechobee Road) and the south right-of-way of the C-9 Canal; thence run easterly to the west right-of-way of Interstate Highway 75; thence run southerly to the west right-of-way line of the Homestead Extension of Florida's Turnpike; thence run southwesterly and southerly to the north right-of-way of U.S. Highway 27 (Okeechobee Road); thence run northwesterly to the point of beginning.

Canopy coverage shall mean the areal extent of ground within the drip line of a tree.

Canopy shall mean those trees which constitute the tallest layer within a forest.

Casing shall mean the tubular material utilized to shut off or exclude a stratum or strata other than the source bed and conduct water from only the source bed to the surface.

Clean fill shall mean material consisting of soil, rock, sand, earth, marl, clay, stone and/or concrete rubble.

Closure shall mean cessation of operation of a County solid waste management system facility and the act of securing such a facility, in accordance with applicable regulatory requirements, so that it will pose no significant threat to human health or the environment. This includes closing, long term monitoring, maintenance and financial responsibility.

Coastal band community shall mean a mangrove community which borders Biscayne Bay or one (1) of the tributaries of Biscayne Bay and which receives frequent tidal inundation and whose dominant floral constituent is mature *Rhizophora mangle*. The boundary of a coastal band community shall not be limited or affected by artificial boundaries such as, but not limited to, property lines.

Coastal resources management line shall mean the landward extent of the areas where detrital cycles contribute to the ecological productivity of coastal waters.

Coastal waters shall mean all waters in the State which are not classified as fresh waters.

Coliform group shall include all organisms considered in the coliform group as set forth in Standard Methods for the Examination of Water and Waste Water, sixteenth edition.

Combustible refuse shall mean any combustible waste material containing carbon in a free or combined state.

Combustion contaminants shall mean particulate matter discharged into the atmosphere from the burning of any kind of material containing carbon in a free or combined state.

Commercial boat docking facility shall mean a boat docking facility which has boat slips, moorings, davit spaces, or vessel tieup spaces of which more than fifty (50) percent are designated for or contain commercial vessels.

Commercial vessel shall mean any vessel engaged in any activity wherein a consideration is paid by the user either directly or indirectly to the owner, operator or custodian of the vessel; or any vessel engaged in the taking of saltwater fish or saltwater products for sale either to the consumer, retail dealer or wholesale dealer.

Community water system shall mean a public water system which serves at least fifteen (15) service connections used by year-round residents or which regularly serves at least twenty-five (25) year-round residents.

Comprehensive environmental impact statement ("CEIS") shall mean a detailed report, based upon current data obtainable at the time of permit application submittal, which describes the

proposed work and its purposes and which addresses one (1) or more of the following assessment points so as to permit assessment of the probable environmental impacts, benefits and detriments of the proposed work:

- (1) An analysis of the probable impact of the proposed work in the wetland environment, including impact on ecological systems such as floral, faunal, marine and freshwater communities. Both direct and indirect potential adverse environmental impacts shall be included in the analysis. The statement shall include the effect, if any, of the proposed work upon the ability of the wetland to:
 - (a) Receive and store surface waters and to recharge groundwater.
 - (b) Contribute to quantity and quality of the water supply and protect against saltwater intrusion.
 - (c) Protect adjacent uplands from hurricane and tidal storm surges.
 - (d) Provide filtration and uptake of nutrients and pollutants from surface waters.
 - (e) Contribute sheet flow of surface waters to adjacent areas.
 - (f) Provide habitat for indigenous floral and faunal species, and rare, threatened and endangered species, as defined in this chapter.
 - (g) Provide protection for the recharge area of a wellfield.
- (2) An analysis of other adverse environmental impacts which cannot be avoided should the proposal be implemented, such as water or air pollution, undesirable land use patterns, urban congestion, threats to health or other consequences adverse to the County's environmental goals, as set forth in this Code and the Miami-Dade County Comprehensive Development Master Plan.
- (3) A description and analysis of alternatives to the proposed work which avoid or mitigate some or all of the probable adverse

environmental impacts of the proposed work or which increase the beneficial environmental effects of the proposed work. An economic cost-benefit analysis may be submitted by the applicant for the proposed work and each such alternative.

- (4) An analysis of the cumulative and longterm effects of the proposed work. The analysis shall compare the proposed work's short-term use of the environment with long-term environmental parameters including, but not limited to, biological productivity, habitat quality, protection of hydrological resources, and nutrient and pollution attenuation capacity.
- (5) An analysis of all irreversible commitments of natural resources which would occur if the proposed work is implemented. This analysis shall include the extent to which the proposed work would curtail the range of beneficial uses of the environment.
- (6) A summary of the problems and objections raised by any federal, State or local entities and by the public in the review process, the disposition of the issues involved, and the reasons therefor.
- (7) A description and analysis of the socioeconomic benefits that may be derived from implementation of the proposed work as well as the potential negative impacts to the public resulting from denial of or modifications to the proposed work.

Condensed fumes shall mean minute solid particles generated by the condensation of vapors from solid matter volatilization from the molten state, or may be generated by chemical processes, operations or reactions, when these processes create air-borne particles.

Cone of influence means a localized depression or draw-down of the groundwater due to water supply well pumpage.

Construction and demolition debris shall mean solid waste comprised exclusively of materials which are not hazardous materials and which are not water soluble, including steel, concrete, glass, brick, soils not containing any hazardous materials, asphalt roofing and paving material, and lumber from a construction or demolition project.

Contaminant shall mean any substance present in any medium which may cause an adverse effect upon public health, public safety, public welfare or the environment, or causes a nuisance as defined in Section 24-5, Section 24-27 or Section 24-28.

Cooling pond shall mean a body of water enclosed by natural or constructed restraints which has been approved by the State of Florida Department of Environmental Protection for purposes of controlling heat dissipation from thermal discharges.

Cross-connection shall mean any physical connection or arrangement whereby contamination may enter a water supply system; such as two (2) otherwise separate piping systems, one (1) of which contains or is designed to contain potable water and the other waste water or other fluids or material of unknown or questionable safety, where intermixing may occur depending on the pressure or temperature differential between the two (2) systems.

CTLs shall mean Clean-up Target Levels as set forth in Section 24-44.

Cumulative adverse environmental impact shall mean adverse environmental impact, as defined in this chapter, resulting from a proliferation of a particular proposed work or land use within a wetland area.

Daily average pump station operating time shall mean the total of the number of operating hours for all nonvariable speed and non-multiple-speed pumps in the pump station for the month divided by the number of days in the month which is then divided by the total number of the same type of pumps in the pump station less one (1) pump of the same type, or the equivalent thereof as approved by the Director or the Director's designee.

Davit space shall mean an area along a bulkhead or pier where a vessel may be suspended over tidal waters by a mechanical device.

Department shall mean the Miami-Dade County Department of Environmental Resources Management. Detention of stormwater shall mean the collection and temporary storage of stormwater in a manner that will provide treatment through physical, chemical or biological processes, with subsequent gradual release of the stormwater in a manner not to exceed the design limitations of the temporary storage area.

Detention pond shall mean an open basin which intercepts the groundwater table and is used for the temporary storage of stormwater runoff.

Developed land shall mean land upon which structures or facilities have been constructed.

Developed property shall mean any parcel of land which contains an impervious area.

Development shall mean any proposed activity or material change in the use or character of land, including, but not limited to, the placement of any structure, utility, fill, or site improvement on land, and any act which requires a building permit.

Dewater shall mean to discharge off-site or on-site water from an excavation, underground structure, or depressed land.

Diameter breast height (DBH) shall mean the diameter of a tree's trunk measured at a point four and one-half (442) feet from where the tree emerges from the ground at natural grade. In the case of multiple-trunked trees, the DBH shall mean the sum of each trunk's diameter measured at the point four and one-half (442) feet from where the tree emerges from the ground at natural grade.

Director shall mean the Director of the Miami-Dade County Department of Environmental Resources Management, with duties created pursuant to Section 24-6 of the Code of Miami-Dade County, Florida.

Dissolved hydrocarbon shall mean any substance soluble in fluorocarbon-113 and dispersed, emulsified, or otherwise dissolved throughout a sample.

Domestic sewage shall mean waste water from toilets, showers, sinks, baths, and other facilities designed for human sanitation whether located within residential or nonresidential land uses. Dominance shall mean the species or group of species having the largest total number of individuals in the canopy and/or understory within a defined area.

Dominant plant community shall mean a minimum of fifty-one (51) percent of the plant cover within an area based on the following formula: Dominance equals one hundred (100) multiplied by the total estimated basal area of wetland plant species divided by the total estimated basal area of all plant species.

Drainage area shall mean a geographically defined land surface having topographical features such that stormwater runoff will be directed towards a drainage structure or natural waterway.

Drainage well shall mean any excavation that is drilled, cored, bored, washed, driven, dug, jetted or otherwise constructed when the intended use of such excavation is for the artificial recharge of groundwater, or the intentional introduction of water into any underground formation.

Dredging shall mean the removal of soil (i.e., rock, clay, peat, sand, marl, sediments or other naturally occurring soil material) from the surface of submerged or unsubmerged coastal or freshwater wetlands, tidal waters or submerged bay-bottom lands. Dredging shall include, but not be limited to, the removal of soils by use of clamshells, suction lines, draglines, dredges or backhoes.

Drip line shall mean an imaginary vertical line extending from the outermost horizontal circumference of a tree's branches to the ground.

Dry exfiltration shall mean an underground stormwater disposal system where the invert of a perforated conveyance pipe is placed at or above the average October groundwater level as set forth in the Miami-Dade County Public Works Manual, Part II, Section D4, dated September 1, 1974, as may be amended from time to time.

Dry infiltration or dry retention shall mean the process which occurs when stormwater is conveyed to a grassed swale or open basin for disposal into the ground where the bottom of the grassed swale or open basin is at least one (1.0)

foot above the average October groundwater level as set forth in the Miami-Dade County Public Works Manual, Part II, Section D4, dated September 1, 1974, as may be amended from time to time.

Dry storage space shall mean a designated place where a recreational vessel is stored on uplands by one (1) of the following methods:

- (1) On a boat trailer on a paved or unpaved surface; or
- (2) On an individual boat rack; or
- (3) On a multi-story boat rack.

Dust shall mean minute solid particles released into the air by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, sweeping, etc.

Dwelling shall mean any building which is wholly or partly used or intended to be used for living, sleeping, cooking and eating.

Dwelling unit shall mean any room or group of rooms located within a dwelling and forming a single habitable unit with facilities used or intended to be used for living, sleeping, cooking and eating. This term shall include, for the purposes of this ordinance, rooming units.

East Turnpike Wetland Basin shall mean the wetlands described below:

Those portions of Sections 18 and 19, Township 52 South, Range 40 East, lying east of the Homestead Extension of Florida's Turnpike; and Sections 6, 7, 8, 17 and 18, Township 53 South, Range 40 East, Miami-Dade County, Florida.

Effectively destroy shall mean the girdling, or damaging of a tree's trunk, branch or root system or cutting, pruning or trimming not done in accordance with the most recent American National Standards (ANSI) A-300 Standard Practices for Tree Care Operations.

Emission shall mean the act of passing into the atmosphere an air contaminant or gas stream which contains or may contain an air contaminant; or the material so passed to the atmosphere.

Engineering control shall mean a process or structure which eliminates or reduces the migration of contaminants or eliminates or reduces the exposure of human and environmental receptors to contaminants.

Environment shall mean the complex of climatic, edaphic and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival and which will be affected by the proposed work.

Environmental remediation shall mean clean-up of, or mitigation for, air, soil or water contamination from the County solid waste management system and those facilities for which the County is legally responsible for environmental clean-up or mitigation.

Environmentally-sensitive tree resources shall mean a specimen tree, natural forest community, or any other tree or trees that substantially contribute(s) to the aesthetics of an area, and which are not exempted from permit requirements under Section 24-49(4)(f).

Equivalent residential unit (sometimes hereinafter referred to as "ERU") shall mean the statistically estimated average horizontal impervious area of residential developed property per dwelling unit. This estimated average is calculated by dividing the total estimated impervious area of four (4) residential categories, to wit, single family, mobile home, multifamily and condominium, by the estimated total number of residential dwelling units. For the purposes of this ordinance each dwelling unit, to wit, single family residence, mobile home, multifamily, or condominium, is assigned one (1) ERU.

Excavation shall mean the action or process of creating any lake, rockmining (excluding ancillary property uses necessary for extracting and processing subsurface materials), reservoir, pond or other surface water.

Exfiltration of stormwater shall mean the process by which stormwater flows out of a trench or a buried perforated pipe into the surrounding ground.

Existing heat source shall mean any thermal discharge:

- (1) Which is presently taking place, or
- (2) For which a construction or operating permit has been issued prior to the effective date of these rules.

Facility shall mean anything that is built or purchased to make an action or operation easier or to serve a special purpose.

Feasible distance for public water mains shall mean the distance between the closest point of the property and the nearest available point of connection to an available public water main is not excessive as determined by the Director or the Director's designee in accordance with the following:

(1) Residential uses. If the distance between the property and the nearest available point of connection to an available public water main is less than the distance derived by dividing the sum of the existing and proposed gross floor area by a factor of twelve (12) square feet per linear foot of public water main, extension of public water mains to serve the property is required, or

Notwithstanding the above, if the nearest available point of connection to an available public water main is located within two hundred (200) feet of the closest point of the property, extension of public water mains to serve the property is required.

(2) Office building uses. If the distance between the property and the nearest available point of connection to an available public water main is less than the distance derived by dividing the sum of the existing and proposed gross floor area by a factor of ten (10) square feet per linear foot of public water main, extension of public water mains to serve the property is required, or

Notwithstanding the above, if the nearest available point of connection to an available public water main is located within four hundred (400) feet of the closest point of the property, extension of public water mains to serve the property is required.

(3) Business district uses. If the distance between the property and the nearest available point of connection to an available public water main is less than the distance derived by dividing the sum of the existing and proposed gross floor area by a factor of ten (10) square feet per linear foot of public water main, extension of public water mains to serve the property is required, or

Notwithstanding the above, if the nearest available point of connection to an available public water main is located within six hundred (600) feet of the closest point of the property, extension of public water mains to serve the property is required.

(4) Industrial uses. If the distance between the property and the nearest available point of connection to an available public water main is less than the distance derived by dividing the sum of the existing and proposed gross floor area by a factor of ten (10) square feet per linear foot of public water main, extension of public water mains to serve the property is required, or

Notwithstanding the above, if the nearest available point of connection to an available public water main is located within seven hundred fifty (750) feet of the closest point of the property, extension of public water mains to serve the property is required.

- (5) In determining whether or not the distance between the closest point of the property and the nearest available point of connection to an available public water main is excessive, the Director or the Director's designee shall follow the principles set forth below:
 - (a) The nearest available point of connection to an available public water main shall be determined by the

- Director or the Director's designee in accordance with good engineering practices.
- (b) Notwithstanding any of the provisions of this definition, additions, modifications, or remodelings of existing improvements on the property shall not require extension of public water mains to serve the property from the nearest available point of connection to an available public water main, if the gross floor area of the new construction and new improvements is less than twenty-five (25) percent of the existing gross floor area.

Feasible distance for public sanitary sewers shall mean that distance between the closest point of the property and the nearest available point of connection to an available public sanitary sewer is not excessive as determined by the Director or the Director's designee in accordance with the following:

(1) Residential uses.

- (a) Development requiring gravity sewer line extensions: If the distance between the closest point of the property and the nearest available point of connection to an available public sanitary sewer is less than that distance derived by dividing the sum of the existing and proposed gross floor area by a factor of twenty (20) square feet of gross floor area per linear foot of public sanitary sewer, extension of public sanitary sewers to serve the property is required, or
- (b) Development requiring the installation of a sanitary sewer lift station for eleven (11) residential units or more: If the distance between the closest point of the property and the nearest available point of connection to an available public sanitary sewer is less than that distance derived by subtracting one thousand (1,000) linear feet of public sanitary sewer from that distance derived by dividing the

- sum of the existing and proposed gross floor area by a factor of seventeen (17) square feet of gross floor area per linear foot of public sanitary sewer, extension of public sanitary sewers to serve the property is required, or
- (c) Notwithstanding subsections (1)(a) or (1)(b) above, if the nearest available point of connection to an available public gravity sanitary sewer is located within one hundred (100) feet of the closest point of the property, extension of public sanitary sewers to serve the property is required.

(2) Office building uses.

- (a) If the distance between the closest point of the property and the nearest available point of connection to an available public sanitary sewer is less than that distance derived by dividing the sum of the existing and proposed gross floor area by a factor of fifteen (15) square feet gross floor area per linear foot of public sanitary sewer, extension of public sanitary sewers to serve the property is required, or
- (b) Notwithstanding subsection (2)(a) above, if the nearest available point of connection to an available public sanitary sewer is located within three hundred (300) feet of the closest point of the property, extension of public sanitary sewers to serve the property is required.

(3) Business district uses.

(a) If the distance between the closest point of the property and the nearest available point of connection to an available public sanitary sewer is less than that distance derived by dividing the sum of the existing and proposed gross floor area by a factor of fifteen (15) square feet gross floor area per linear foot of public sani-

tary sewer, extension of public sanitary sewers to serve the property is required, or

(b) Notwithstanding subsection (3)(a) above, if the nearest available point of connection to an available public sanitary sewer is located within five hundred (500) feet of the closest point of the property, extension of public sanitary sewers to serve the property is required.

(4) Industrial uses.

- (a) If the distance between the closest point of the property and the nearest available point of connection to an available public sanitary sewer is less than that distance derived by dividing the sum of the existing and proposed gross floor area by a factor of fifteen (15) square feet gross floor area per linear foot of public sanitary sewer, extension of public sanitary sewers to serve the property is required, or
- (b) Notwithstanding subsection (4)(a) above, if the nearest available point of connection to an available public sanitary sewer is located within seven hundred (700) feet of the closest point of the property, extension of public sanitary sewers to serve the property is required.
- (5) In determining whether or not the distance between the closest point of the property and the nearest available point of connection to an available public sanitary sewer is excessive, the Director or the Director's designee shall follow the principles set forth below:

The nearest available point of connection to an available public sanitary sewer shall be determined by the Director or the Director's designee in accordance with good engineering practices.

(6) Notwithstanding any of the provisions of this definition, additions, modifications, or remodelings of existing improvements

on the property shall not require extension of public sanitary sewers to serve the property from the nearest available point of connection to an available public sanitary sewer, if the gross floor area of the new construction and new improvements is less than twenty-five (25) percent of the existing gross floor area.

Filling shall mean the alteration of wetlands, tidal waters or bay-bottom lands, by adding material or soil to obtain higher elevations or better compaction of existing elevations.

Firebreak shall mean an area of bare ground no more than ten (10) feet in width in a forest which has been created to prevent the spreading of wild fires.

First inch of retention shall mean the disposal by on-site retention of the volume of stormwater generated by the first inch of runoff from a defined drainage area.

First inch of runoff shall mean the volume of stormwater runoff generated during the initial stages of a rainfall event and is calculated as the volume of stormwater runoff generated during the time required to supply and transport to the emergency overflow outfall, one (1) inch of stormwater runoff from the farthest point in the basin, as set forth in "DESIGN OF DRAINAGE STRUCTURE, AN UPDATED POLICY FOR THE DESIGN OF STORM RUNOFF DRAINAGE STRUCTURES, DECEMBER 1980," a document prepared by and on file in the offices of the Miami-Dade County Department of Environmental Resources Management.

Fixed structure shall mean anything of a permanent or temporary nature which is built, constructed, placed or installed in, on, over or upon tidal waters. Fixed structures shall not include vessels or floating structures.

Floating hydrocarbon shall mean any substance soluble in fluorocarbon-113 as set forth in EPA Method 413.1 and floating or otherwise forming a visible layer upon any aqueous surface.

Floating structure shall mean a barge-like entity, with or without accommodations, which is not used as a means of transportation on water

but which serves purposes or provides services typically associated with a structure upon or improvements to real property. A floating structure includes, but is not limited to, a residence, place of business, office, hotel, motel, restaurant, lounge, retail or wholesale store, clubhouse, helicopter pad, meeting facility, or a storage or parking facility. Incidental movement or the capability of movement upon water shall not preclude an entity from classification as a floating structure. Registration of the entity as a vessel in accordance with Chapter 327, Florida Statutes, shall not preclude an entity from classification as a floating structure.

Flooding shall mean the accumulation of stormwater on the ground surface which occurs as a result of excessive rainfall precipitation which has saturated the soil and filled the canals, lakes, ditches and drainage structures beyond their storage and transmission capacities.

Florida No. 1 grade or equivalent shall mean the classification of the quality of a nursery plant as published in Grades and Standards for Nursery Plants, Part II, Florida Department of Agriculture and Consumer Services, Division of Plant Industry.

Flue shall mean any duct or passage for air, gases, or airborne materials, such as a stack or chimney.

Forest management plan shall mean a document which specifies the techniques that will be implemented to maintain and preserve an individual natural forest community.

Free chlorine shall mean chlorine existing in water as hypochlorous acid, hypochlorite ions, and molecular chlorine.

 $Free\ product\ shall\ mean\ any\ non-aqueous\ liquid.$

French drain shall mean a structure consisting of a perforated, slotted or open joint pipe buried in a trench and surrounded by ballast rock and used for the underground disposal of stormwater runoff into groundwater or the unsaturated zone.

Fresh waters shall mean all waters of the state which are contained in lakes and ponds, or are in flowing streams above the zone in which tidal

actions influence the salinity of the water and where the concentration of chloride ions is normally less than five hundred (500) milligrams per liter.

Fully loaded vessel shall mean:

- (1) All of the vessel's fuel tanks, water tanks and other tanks are full, and
- (2) The vessel has the maximum allowable number of crew, passengers, equipment and provisions pursuant to the manufacturer's specifications and, where applicable, the United States Coast Guard certification, and
- (3) The vessel has all safety and rescue equipment required pursuant to state, federal and, if applicable, international law, and
- (4) The vessel contains the maximum authorized amount (by weight) of cargo pursuant to state, federal and, if applicable, international law.

Garbage shall mean every refuse accumulation of animal, fruit or vegetable matter that attends the preparation, use, cooking and dealing in, or storage of edibles, and any other matter, of any nature whatsoever, which is subject to decay, putrefaction and the generation of noxious or offensive gases or odors, or which, during or after decay, may serve as breeding or feeding material for flies or other germ-carrying insects.

Gas shall mean a formless fluid which occupies space and which can be changed to a liquid or solid state only by increasing pressure with decreased or controlled temperature, or by decreased temperature with increased or controlled pressure.

Grassed swale shall mean a depression on the ground surface which is covered by vegetation and is located entirely within the unsaturated zone.

Gravity injection means the introduction of water into a well from which the water enters the groundwater without any force other than the force of gravity. Said well shall be in excess of two (2) feet below the average yearly highest ground-

water elevation as specified in the Miami-Dade County Public Works Manual as same may be amended from time to time.

Graywater shall mean that portion of domestic sewage emanating from residential showers, residential baths, residential bathroom washbasins, or residential clothes washing machines.

Ground cover shall mean plants, other than turf grass, normally reaching an average maximum height of not more than twenty-four (24) inches at maturity.

Ground pollution shall mean the introduction into or upon any ground of any organic or inorganic matter or deleterious substances in such quantities, proportions or accumulations which are injurious to human, plant, animal, fish and other aquatic life, or property, or which unreasonably interfere with the comfortable enjoyment of life or property, or the conduct of business. It shall be a rebuttable presumption that the introduction of any hazardous waste as defined in Section 24-5 or hazardous materials as defined in Section 24-5 into or upon the ground, which exceeds any of the clean-up target levels (CTLs) set forth in Section 24-44, shall constitute and shall be deemed to be ground pollution.

Halophytic vegetation shall mean the following species:

Aizoaceae (carpetweed family)—Sesuvium portulacastrum (sea purslane)

Amaranthaceae (amaranth family)—*Philoxerus* vermicularis (marsh samphire)

Amaryllidaceae (amaryllis family)—*Hymenocallis latifolia* (spider lily)

Apocynaceae (oleander family)—Rhabdadenia biflora (mangrove rubber vine)

Asteraceae (aster family)—Aster tenuifolius var. aphyllus (salt-marsh aster)

Baccharis angustifolia (false willow)

Baccharis halimifolia (groundsel tree)

Borrichia arborescens (oxeye daisy)

Borrichia frutescens (oxeye daisy)

Iva frutescens (marsh elder)

Avicenniaceae (black mangrove family—Avicennia germinans (black mangrove)

Batidaceae (saltwort family)—Batis maritima (saltwort)

Chenopodiaceae (goosefoot family)—Salicornia virginica (perennial glasswort)

Salicornia bigelovii (annual glasswort)

Suaeda linearis (sea blite)

Salsola kali (saltwort)

Combretaceae (white mangrove family)— Conocarpus erecta (buttonwood)

Laguncularia racemosa (white mangrove)

Cymodoceaceae (manatee grass family)— Halodule wrightii (Cuban shoal weed)

Syringodium filiforme (manatee grass)

Cyperaceae (sedge family)—Cyperus odoratus (sedge)

Cyperus ligularis (sedge)

Cyperus planifolius (sedge)

Fimbristylis castanea

 $Fimbristylis\ spathacea$

Hydrocharitaceae (frog's bit family)—Thalassia testudinum (turtle grass)

Juncaceae (rush family)

Juncus roemerianus (rush)

Plumbaginaceae (leadwort family)—*Limonium* carolinianum var. carolinianum (sea lavender)

Limonium carolinianum var. angustatum (sea lavender)

Poaceae (grass family)—Distichlis spicata (seashore salt grass)

Monanthochloe littoralis (Key grass)

Paspalum vaginatum (salt joint grass)

Spartina alterniflora (smooth cord grass)

Spartina patens (salt-meadow cord grass)

Spartina spartinae (gulf cord grass)

Sporobolus virginicus (Virginia dropseed)

Primulaceae (primrose family)—Samolus ebracteatus (water pimpernel)

Pteridaceae (bracken family)—Acrostichum aureum (coastal leather fern)

Acrostichum danaeafolium (leather fern)

Rhizophoraceae (red mangrove family)— Rhizophora mangle (red mangrove)

Ruppiaceae (widgeon grass family)—Ruppia maritima (widgeon grass)

Solanaceae (nightshade family)—*Lycium* carolinanum (Christmasberry)

Surianaccac (bay-cedar family)—Suriana maritima (bay cedar)

Harmful obstruction or undesirable alteration of the natural flow of surface water shall mean any substantial diversion, obstruction, creation of backwater conditions, interruption, adverse change in velocity, volume, or depth of the natural flow of surface water. Natural flow need not be uniform or uninterrupted and may be seasonal or periodic.

Hazard index shall mean the sum of more than one (1) hazard quotient for multiple contaminants or for multiple exposure pathways.

Hazard quotient shall mean the ratio of a single contaminant exposure level over a specified time period to a reference dose for that contaminant derived from a similar exposure period.

Hazardous materials shall mean any waste, product, substance, or combination or breakdown product thereof which, because of its biological or chemical characteristics, if introduced into a potable public water supply well, will impair the potability of the water withdrawn by the potable public water supply well or which will be harmful or potentially harmful to human, plant or animal life or property or the conduct of business or which will increase the cost of operation of public water supply treatment facilities or which will increase the reliance by consumers of potable water from such potable public water supply wells on the operation of public water supply treatment facilities to provide potable water which is not harmful or potentially harmful to human, plant or animal life or property or the conduct of business.

Within ninety (90) days from the effective date of Ord. No. 83-96 and at least annually thereafter, the Director or the Director's designee shall submit to the Board of County Commissioners a list of wastes, products, substances or combination or breakdown products thereof which the Director or the Director's designee has determined to be hazardous materials as hereinabove defined. The Board of County Commissioners shall designate, by resolution, which of the wastes, products, substances or combination or breakdown products thereof so listed by the Director or the Director's designee shall be legally presumed to be hazardous materials as defined hereinabove. Such designation by the Board of County Commissioners shall create a rebuttable presumption that the wastes, products, substances or combination or breakdown products thereof so designated are hazardous materials as hereinabove defined. Such designations shall be deemed nonexclusive. Nondesignation by the Board of County Commissioners shall not create any presumption that the nondesignated wastes, products, substances or combination or breakdown products thereof are not hazardous materials. Nothing herein shall be construed to limit in any way the power of the Director or the Director's designee in the performance of his duties and responsibilities to determine that a waste, product, substance or combination or breakdown product thereof is a hazardous material as defined hereinabove.

Hazardous waste shall mean:

- (1) A waste defined as a hazardous waste in 40 C.F.R. Part 261, or
- (2) Used radiator fluid.
- (3) Used lubricating oil,
- (4) Used transmission fluid,
- (5) Used brake fluid, or
- (6) Used power steering fluid.

Health care facilities shall mean hospitals, skilled nursing facilities, clinics, intermediate care facilities, ambulatory surgical centers, health maintenance organizations, doctor's offices, dentist's offices or free standing hemodialysis centers.

Health hazards shall mean any conditions, devices, or practices in a water supply system or

its operation which create a possible danger to the health and well-being of the water consumer. (An example of a health hazard is a structural defect in the water supply system, whether of location, design or construction, which may regularly or occasionally prevent satisfactory purification of water supply or cause it to be polluted from extraneous sources.)

Heated-water discharges shall mean the effluents from commercial or industrial activities or processes in which water is used for the purpose of transporting waste heat.

Highway shall mean any public thoroughfare, including streets, designed for motor vehicles.

Impervious area shall mean a division of the horizontal ground surface which is incapable of being penetrated by rainwater. This shall include, but not be limited to, all structures, roof extensions, slabs, patios, porches, driveways, sidewalks, parking areas, swimming pools, athletic courts, and decks.

Individual water supply shall mean a well or wells or other source of water, and pump and piping if any, located on the premises served for supplying twenty-five (25) persons or less.

Industrial liquid waste facility shall mean any facility engaged in the manufacture, production, fabrication, packaging, repackaging, repair, processing or sale of goods or services, and which produces or generates or may reasonably be expected to produce or generate liquid waste.

Industrial waste shall mean discharges, effluents, spills, or leaks of any hazardous wastes, hazardous materials, process wastewater, or wastes other than domestic sewage, from an industrial liquid waste facility.

Infiltration means the distribution of water on the surface of land to permit the water to soak through the vegetation and soil into the groundwater.

Infiltration of stormwater shall mean the process by which stormwater flows vertically downward through the ground into the Biscayne Aquifer.

Inflow shall mean any water, other than domestic sewage or other wastewater approved by the Director or the Director's designee to be discharged into a sanitary sewer system, introduced into any publicly or privately owned or operated gravity sanitary sewer or pump station wet well which is not sewer system infiltration.

Institutional control shall mean a restriction on the use of, or access to, a site to eliminate or minimize exposure to contaminants. Examples include, but are not limited to, deed restrictions, restrictive covenants, or conservation easements.

Interim sewage treatment plant shall mean any sewage treatment plant, public or private, including but not limited to interim package sewage treatment plants, that discharges its effluent directly into the Biscayne Aquifer or inland surface waters of Miami-Dade County.

Intermediate care facilities shall mean day care centers, day nurseries, convalescent homes, adult congregate living facilities, rooming houses, boarding homes, homes for the elderly, homes for dependent children or retirement villages or any other facility providing shelter and supervision for dependent individuals who because of their mental or physical condition require health related care and services above the level of room and board.

Key manhole shall mean the sanitary sewer manhole into which the entire sewage flow from a sewer subsystem is discharged.

Landclearing shall mean the removal of vegetation or soils from submerged or unsubmerged wetlands. Landclearing shall not mean the removal of the following undesirable exotic vegetation: Melaleuca, Australian pine, or Brazilian pepper trees.

Landscape replacement plan shall mean a drawing containing proposed tree removal, tree replacement planting, tree relocation and preservation areas.

Liquid waste generator shall mean any person or entity whose act or process produces liquid waste, or who by the nature of its operations uses

materials in a process which would subsequently require disposal as a liquid waste as defined in this chapter.

Liquid waste shall mean sludge resulting from, but not limited to, a waste treatment works, air pollution control facility, domestic, commercial, mining, institutional, agricultural, or governmental operations; or other waste materials, including materials to be recycled or otherwise beneficially reused; or septic tank, grease trap, sediment trap, portable toilet, or oil and grease separator pump-outs; or solvents, sewage, industrial waste, hazardous waste, semisolid waste, or potentially infectious waste; or any similar materials which would cause a nuisance or would otherwise cause a violation of this chapter if discharged to the ground or waters of Miami-Dade County. However, sewage and industrial wastes which have been permitted by the Department to be discharged and which are discharged through a lateral connection to the sewerage system or on-site treatment facility are not included in this definition. Furthermore, subsurface materials extracted as a result of rock mining which are not discharged to canals or other water bodies are not included in this definition.

Liquid waste transporter shall mean any person or entity which carries, conveys, bears or transports any liquid waste in any moving vehicle including but not limited to a car, truck, tank car, railroad car or other vehicle.

Loading facility shall mean a gasoline, gasohol or petroleum distillates storage and distribution facility with an average daily throughput (calculated over a thirty-day period) equal to or greater than twenty thousand (20,000) gallons of gasoline, gasohol or petroleum distillates.

Local agencies shall mean any county or municipal government or agency thereof.

Mangrove tree shall mean any of the following species, regardless of size, including mangrove trees as small as rooted seedlings: Avicennia germinans (black mangrove), Rhizophora mangle (red mangrove), Laguncularia racemosa (white mangrove). Notwithstanding the foregoing, mangrove tree shall not include seedlings smaller than 3—5 leaf stage rooted seedlings.

Maximum contaminant level shall mean the maximum permissible level of a contaminant in water which is delivered to any user of a public water system.

Maximum day pumpage wellfield protection area shall mean the area within the cone of influence of a public utility potable water supply well based upon maximum day pumpage.

Metal recycling facility shall mean a facility using equipment to crush, shred, cut or otherwise process ferrous scrap metal into prepared ferrous scrap for resale or reuse. For the purpose of this definition, facilities limited to dealing in nonferrous metals are not included.

Miami-Dade County Nursery Report shall mean a monthly, published bulletin listing availability of trees, prices of trees, and stock of many major nurseries in Miami-Dade County which is prepared by the Florida Nurserymen and Grower Association.

Minimum flow shall mean the rate of sewage flow, expressed in gallons per day per inch diameter per mile, measured at a pump station wet well or a key manhole of a sewer subsystem from 1:00 a.m. to 5:00 a.m. or at such other time when the rate of sewage flow transmitted through the pump station or key manhole is at the lowest rate during any one (1) twenty-four-hour period exclusive of known or estimated sewage flows from commercial and industrial sources of wastewater.

Mist shall mean a suspension of any finely divided liquid in any gas.

Mobile home shall mean the same term as defined by Section 320.01(2), Florida Statutes, as same may be amended from time to time.

Monitoring well or test well shall mean a well constructed with a surface seal and a sand filter pack in accordance with accepted technical design practices to provide for the collection of representative groundwater samples for laboratory analyses. Such wells may also be used to detect the presence of free product or collect water-level elevation data to aid in determining the direction of groundwater flow.

Mooring shall mean a temporary or permanent piling or floating device anchored in tidal waters for the purpose of securing a vessel.

Motor vehicle fuel delivery vessel shall mean a tank truck or trailer equipped with a storage tank used for the transportation of gasoline or gasohol from sources of supply to stationary storage tanks at motor vehicle fuel service stations.

Motor vehicle fuel service station shall mean any location which has underground storage facilities or aboveground storage facilities or both and which location has a total storage capacity of gasoline or gasohol of ten thousand (10,000) gallons or more, or which dispenses ten thousand (10,000) gallons or more per month of gasoline or gasohol to motor vehicle fuel tanks from such location.

Motor vehicle shall mean any car, truck, bus or other self-propelled wheeled conveyance that does not run on rails.

Multiple and variable-speed daily average pump station operating time shall mean the equivalent of the daily average pump station operating time, computed as follows: The average daily kilowatthours of consumption of all pumps of the same type in a pump station divided by the average daily kilowatt criteria in kilowatt hours multiplied by ten (10). The average daily kilowatt criteria in kilowatt hours ("A") is computed as follows: $A = M \times 24 \text{ hrs.} \times .746 \text{ KW/HP}$ multiplied by P/100 where M is the Maximum Station HP. The applicable pump control factor ("P") is expressed as a percentage in parts (B) and (C) of the definition of adequate transmission capacity in this chapter. M is computed as follows: The rated horsepower of each pump at high speed multiplied by the number of pumps of the same type in the pump station less one (1) pump of the same type having the greatest rated horsepower, or the equivalent thereof as approved by the Director or the Director's designee.

Multiple-chamber incinerator shall mean any article, machine, equipment, contrivance, structure or part of a structure, used to dispose of combustible refuse by burning, consisting of three (3) or more refractory-lined combustion chambers in a series, physically separated by refractory

walls, interconnected by gas passage ports or ducts and employing adequate design parameters necessary for maximum combustion of the material to be burned.

The refractories shall have a pyrometric cone equivalent of at least seventeen (17), tested according to the method described in the American Society for Testing [and] Materials, Method C-24.

Native plant species shall mean a plant species with a geographic distribution indigenous to all or part of Miami-Dade County. Plants which are described as being native to Miami-Dade County in botanical manuals such as, but not limited to, "A Flora of Tropical Florida" by Long and Lakela and "The Biology of Trees Native to Tropical Florida" by P.B. Tomlinson, are native plant species within the meaning of this definition. Plant species which have been introduced into Miami-Dade County by man are not native plant species.

Natural attenuation shall mean a method of site rehabilitation action which allows natural processes to contain the spread of contaminants and to reduce the concentration of contaminants in groundwater and soil. Natural attenuation processes include, but are not limited to, diffusion and dispersion in conjunction with the following: sorption, biodegradation, chemical reactions, or volatilization.

Natural forest community shall mean all stands of trees (including their associated understory) which were designated as Natural Forest Communities on the Miami-Dade County Natural Forest Community Maps and approved by the Board of County Commissioners, pursuant to Resolution No. R-1764-84. These maps may be revised from time to time by resolution in order to reflect current conditions and to insure that, at a minimum, the canopy and understory of designated natural forest communities are dominated by native plant species, as defined herein. The Department shall evaluate the following additional factors when reviewing existing and proposed natural forest community sites:

(1) The presence of endangered, threatened, rare or endemic species included on the Federal List of Endangered and Threatened Species, the Florida Game and Fresh Water Fish Commission List of Endan-

gered and Potentially Endangered Fauna and Flora in Florida, or the Miami-Dade County Comprehensive Development Master Plan List of Endangered, Threatened, Rare and Endemic Plants in Miami-Dade County.

- (2) Overall plant species diversity of the site.
- (3) Size of the trees.
- (4) Size of the site.
- (5) Wildlife habitat value of the site.
- (6) Geological features of the site.
- (7) Percentage of the site covered by exotic (non-native) species.

Within one hundred twenty (120) days of the effective date of Ordinance Number 89-8, the Department shall develop a quantitative evaluation form incorporating the above factors to be used in evaluating natural forest community sites, and shall include a minimum quantitative threshold standard for inclusion on the revised natural forest community maps. Said evaluation form may be revised from time to time as appropriate, and shall be reviewed and approved by the Tree and Forest Resources Committee prior to its utilization.

Upon completion of the review of the existing natural forest community maps, the Director shall recommend to the Board of County Commissioners that only those sites which meet the minimum quantitative threshold standard established in the above-described evaluation form be maintained on the list and that all other sites be deleted. This shall not preclude the further addition of sites to the maps. The Director shall also recommend to the Board of County Commissioners that all applicable boundary changes be made to all remaining sites.

Natural grade shall mean the ground elevation of a property prior to the placement of any fill on the site.

Naturally occurring background concentrations shall mean concentrations of contaminants which are naturally occurring in the groundwater, surface water, soil or sediment in the vicinity of a site. Nominal average power consumption shall mean the total power consumption for the month of all of the pumps of the same type in the pump station divided by the number of days in the month and which is then divided by the total number of the same type of pumps in the pump station less one (1) of the same type of pumps, or the equivalent thereof as approved by the Director or the Director's designee, which is then averaged with the same computations performed for the previous eleven (11) months.

Nominal daily average pump station operating time shall mean the total of the number of operating hours for all nonvariable speed and non-multiple-speed pumps in the pump station for the month divided by the number of days in the month and which is then divided by the total number of nonvariable speed and non-multiple speed pumps in the pump station less one (1) of the same type of pumps, or the equivalent thereof as approved by the Director or the Director's designee, which is then averaged with the same computations performed for the previous eleven (11) months.

Nonresidential development property shall mean any parcel of land which contains an impervious area and which is classified by the Miami-Dade County Property Appraiser as land use types 10 through and including 49 and 70 through and including 99 as set forth in the Florida Administrative Code Rule 12D-8.008(2)(c), as same may be amended from time to time.

Nonstructural controls of stormwater shall mean any activity designed to reduce pollutant loading of stormwater including, but not limited to, pollution prevention management policies and public education programs.

Nonviable shall mean not capable of existing and continuing to provide the biological or aesthetic qualities associated with a healthy, functioning tree resource.

North Trail Basin shall mean a basin located in western Miami-Dade County comprising the following lands:

Sections 33, 34, 35 and 36, Township 53 South, Range 39 East and, Government Lots 1, 2, 3 and 4, Townships 53-54 South and, those portions of Sections 1, 2, 3 and 4, Township 54 South, Range 39 East, which lie north of the north right-of-way line of the Tamiami Canal.

North Trail Wetland Basin shall mean the wetlands described below:

That portion of Section 3, Township 54 South, Range 39 East, lying north of U.S. Highway 41 (Tamiami Trail); that portion of Section 4, Township 54 South, Range 39 East, lying north of U.S. Highway 41 (Tamiami Trail); Government Lot 2, located between Townships 53 and 54 South, Range 39 East; Government Lot 3, located between Townships 53 and 54 South, Range 39 East and Government Lot 4, located between Townships 53 and 54 South, Range 39 East, Miami-Dade County, Florida.

Nuisance shall mean and include the use of any property, facilities, equipment, processes, products or compounds, or the commission of any acts or any work that causes or materially contributes to:

- The emission into the outdoor air of dust, fume, gas, mist, odor, smoke or vapor, or any combination thereof, of a character and in a quantity as to be detectable by a considerable number of persons or the public so as to interfere with their health, repose or safety, or cause severe annovance or discomfort, or which tends to lessen normal food and water intake, or produces irritation of the upper respiratory tract, or produces symptoms of nausea, or is offensive or objectionable to normal persons because of inherent chemical or physical properties, or causes injury or damage to real property, personal property or human, animal or plant life of any kind, or which interferes with normal conduct of business, or is detrimental or harmful to the health, comfort, living conditions, welfare and safety of the inhabitants of this County.
- (2) The discharge into any of the waters of this County of any organic or inorganic matter or deleterious substance or chemical compounds, or any effluent containing the foregoing, in such quantities, proportions or accumulations so as to interfere

with the health, repose or safety of any considerable number of persons or the public, or to cause severe annoyance or discomfort, or which tends to lessen normal food and water intake, or produces symptoms of nausea, or is offensive or objectionable to normal persons because of inherent chemical or physical properties, or causes injury or damage to real property, personal property, human, plant or animal life of any kind, or which interferes with normal conduct of business, or is detrimental or harmful to the health, comfort, living conditions, welfare and safety of the inhabitants of this County.

- (3) Any violation of provisions of this chapter which becomes detrimental to health or threatens danger to the safety of persons or property, or gives offense to, is injurious to, or endangers the public health and welfare, or prevents the reasonable and comfortable use and enjoyment of property by any considerable number of the public.
- (4) Adverse environmental impact to a coastal or freshwater wetlands.
- (5) Cumulative adverse environmental impact to a coastal or freshwater wetlands.
- (6) Adverse environmental impact to environmentally-sensitive tree resources.
- (7) Cumulative adverse environmental impact to environmentally-sensitive tree resources.

Odor shall mean that property of a substance which materially offends the sense of smell.

Oil-effluent water separator shall mean any tank, box, sump or other container in which any petroleum or product thereof, floating on or entrained or contained in water entering such tank, box, sump or other container, is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

On-site domestic well system shall mean any water supply system using a well and piping to provide potable water for human consumption.

On-site shall mean within the boundaries of a facility location, property or site including those sites spatially separated by public or private rights-of-way.

On-site retention shall mean the containment and disposal of stormwater runoff by means other than positive drainage within the limits of the project site.

Open outdoor fire shall mean any combustion of combustible material of any type outdoors, in the open, not in any approved enclosure or device, where the products of combustion are not directed through a flue.

Out of service shall mean an underground storage facility which is empty, does not have hazardous materials transferred into or withdrawn from the underground storage facility, is not in active use and is in compliance with the requirements set forth in Chapter 62-761.800, Florida Administrative Code.

Outer wellfield protection zone shall mean the maximum extent of area protected by the wellfield protection provisions set forth in Chapter 24 of the Code of Miami-Dade County, Florida, for one wellfield or if a wellfield complex exists, the maximum extent of area protected by the wellfield protection provisions set forth in Chapter 24 of the Code of Miami-Dade County, Florida, as set forth in the wellfield protection maps adopted by the Board of County Commissioners.

Overflow outfall shall mean a drainage structure designed to discharge to an on-site or off-site location any excess stormwater runoff after an initial runoff volume has been retained on-site.

Overflow shall mean the discharge of sewage from any publicly or privately-owned or operated sanitary sewer collection system or wastewater treatment facility to the surface of the ground or to a surface water.

Overland sheet flow shall mean stormwater runoff flowing over an unrestricted ground surface area.

Owner-builder shall mean (an) owner(s) in fee who construct(s) no more than one (1) single-

family or duplex residence per year for personal use and occupancy by said owner(s), and not intended for sale.

Ozone-depleting compound shall mean any of the substances identified in Section 602(a) and Section 602(b) of Title VI of the Clean Air Act Amendments of 1990 by the United States Environmental Protection Agency as contributing to the depletion or destruction of the stratospheric ozone layer of the Earth.

Particulate matter shall mean any material which at standard conditions, is emitted into the atmosphere in a finely divided form as liquid or solid or both, but shall not include uncombined water vapor.

Party or parties responsible for site rehabilitation actions shall mean the discharger or, if the discharger is unknown or the contamination was the result of a previously unreported discharge, the property owner or operator who is subject to the provisions of Section 24-44(2).

Permeability shall mean the ability of an aquifer, soil, rock or other geological formation to transmit water.

Person shall be construed to include any natural person, individual, public or private corporation, firm, association, joint venture, partnership, municipality, governmental agency, political subdivision, public officer or any other entity whatsoever, or any combination of such, jointly or severally.

Point of discharge (POD) for a heated-water discharge shall mean either that point at which the effluent physically leaves its carrying conduit (open or closed) and discharges into the waters of the State, or a specific point designated by the Florida Department of Environmental Protection for that particular thermal discharge.

Pollution prevention shall mean the use of materials processes, or practices that reduce or eliminate the creation of, or toxicity of, pollutants or wastes at the source.

Pollution shall mean the presence of any foreign substance (organic, inorganic, radiological, biological or thermal) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.

Positive drainage shall mean the direct disposal of stormwater runoff by overland sheet flow or through a channel ditch, or closed pipe system into an on-site or off-site surface water body such as, but not limited to, a lake, lagoon, river, canal, bay or the ocean.

Potable water shall mean water that is satisfactory for drinking, culinary and domestic purposes meeting the quality standards defined in this chapter.

ppm (vol.) shall mean parts per million by volume.

ppm (*wt.*) shall mean parts per million by weight and is equivalent to milligrams per liter.

Prepared ferrous scrap shall mean any scrap iron or steel which has been mechanically or otherwise processed into a raw material meeting any of the specifications contained in the Scrap Specifications Circular 1993, published by the Institute of Scrap Recycling Industries, Inc., Washington, D.C. Guidelines for Ferrous Scrap.

Prescribed burning shall mean the process of periodic deliberate burning of a pineland in a controlled manner taking into consideration weather and understory moisture conditions, for the purposes of maintaining the pineland in a natural condition and for the promotion of pine regeneration.

Preservation area shall mean portions of a site that are to be protected from any tree or understory removal (except as required by the Department) and maintained without any development.

Primary pump station shall mean any pump station in a publicly or privately owned or operated sanitary sewer collection system which directly receives sewage flow from gravity sanitary sewers.

Privately owned or operated sanitary sewer collection system shall mean any sanitary sewer collection and transmission facilities, including that located both on private property and within a public right-of-way or easement, which is owned

or operated by any person other than Miami-Dade County, the state, the United States of America, or any municipality in Miami-Dade County.

Process weight per hour shall mean the total weight of all materials, except uncombined water, introduced into any unit process, which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels, combustion air, excess air, infiltrated and other air added to the process, will not be so considered. The process weight per hour will be derived by dividing the total process weight by the number of hours in one (1) complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle.

Protective barrier shall mean a temporary fence or other structure built to restrict passage into an area surrounding a tree or stand of trees for the purpose of preventing any disturbance to the roots, trunk or branches of the tree or trees.

Public water system shall mean plumbing for the provision to the public of water for human consumption, such plumbing has at least fifteen (15) service connections or regularly serves an averages of at least twenty-five (25) individuals daily at least three (3) months out of the year or serves at least five (5) individuals and is not a single-family residence or a duplex residence. Such term includes:

- (1) Any collection, treatment, storage and distribution facilities under control of the operator of such system and used primarily in connection with such system, and
- (2) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system.

Public water main shall mean any water main in a public water system owned and operated by a public utility.

Publicly owned or operated sanitary sewer collection system shall mean any sanitary sewer collection and transmission facilities, including that portion of the sewage lateral connection located within a public right-of-way or easement,

which is owned or operated by Miami-Dade County, the state, the United States of America, or any municipality in Miami-Dade County.

Publicly owned treatment works (POTW) shall mean any device or system that is used in the treatment (including recycling and reclamation) of sewage and that is owned by a state, county, or municipality. Sewers, pipes, or other conveyances are included only if they convey sewage to a POTW.

Rare, threatened and endangered species shall include all species classified as endangered, threatened or rare by Sections 581.185—581.187 and Chapter 372 of the Florida Statutes, as amended from time to time; or by Appendix A or B of the Comprehensive Development Master Plan for Miami-Dade County, Florida, as amended from time to time.

Rated multiple-speed pump station motor horsepower shall mean the sum of the rated horsepower for the same type of pumps in the pump station less the rated horsepower of the one (1) pump of the same type having the greatest rated horsepower, or the equivalent thereof as approved by the Director or the Director's designee.

Rated variable-speed pump station motor horsepower shall mean the sum of the rated horsepowers for the same type of pumps in the pump station less the rated horsepower of the one (1) pump of the same type having the greatest rated horsepower, or the equivalent thereof as approved by the Director or the Director's designee.

Recreational boat docking facility shall mean a boat docking facility which has boat slips, moorings, vessel tieup spaces, or davit spaces of which fifty (50) percent or more are designated for or contain recreational vessels.

Recreational vessel shall mean any vessel used by its owner or operator for noncommercial purposes.

Refrigerant shall mean any substance containing any ozone-depleting compound which is utilized in any refrigeration system.

Refrigeration system shall mean any refrigerator, freezer, chiller, cold storage warehouse, refrigeration unit, or any kind of air conditioner (mobile, portable, stationary, motor vehicle).

Relocated tree shall mean a tree which has been transplanted pursuant to Ordinance Number 89-8 and which continues to be viable at least one (1) year after transplanting.

Replacement tree shall mean a shade tree, small tree, or palm tree required to be planted pursuant to the provisions of Ordinance Number 89-8.

Residential developed property shall mean any parcel of land which contains an impervious area and which is classified by the Miami-Dade County Property Appraiser as land use types 00 through and including 09 and land use types 50 through and including 69 if said land use contains a single-family or multifamily residence, as set forth in Florida Administrative Code Rule 12D-8.008(2)(c), as same may be amended from time to time.

Resource recovery and management facility shall mean any facility the purpose of which is disposal, recycling, incineration, processing, storage, transfer, or treatment of solid or liquid waste; but for the purpose of permitting does not include sewage treatment, industrial waste treatment, or facilities exclusively within State or federal jurisdiction.

Retention pond shall mean an open basin which intercepts the groundwater table and is used for the storage and ultimate disposal of stormwater runoff by evaporation and seepage.

Right-of-way shall mean a strip of ground dedicated by the subdivider, or deeded by the owner, for public use.

Ringelmann Chart shall mean the method of estimating smoke density described in U.S. Bureau of Mines Information Circular 7718.

Risk Reduction shall mean the lowering or elimination of the level of risk posed to human health or the environment through interim remedial actions, remedial action, or institutional, and, if applicable, engineering controls.

Road shall mean any cleared, plowed, bull-dozed, filled, graded, excavated or paved area, elevated boardwalk or roadway used or capable of being used for the passage of vehicles or persons. Roads shall not mean tracks used or capable of being used solely by off-road vehicles such as airboats, swamp buggies and all-terrain vehicles.

Rockmining shall mean the dredging or excavation of an area for the purpose of extracting subsurface materials. Rockmining shall also include ancillary property uses necessary for extracting and processing subsurface materials.

Rockplowing shall mean the alteration of wetlands by breaking up the limestone surface of a wetland in preparation for agriculture. Rockplowing may include the regrading of surface materials into planting beds at elevations sufficiently high to protect crops from flooding.

Rooming unit shall mean any room or group of rooms, forming a single habitable unit, used or intended to be used for living and sleeping but not for cooking or eating purposes.

Root ball shall mean a group of roots extending from the base of a tree trunk that must be intact when relocating a tree in order to promote survival of the tree.

Sanitary nuisance shall mean the commission of any action, by an individual, municipality, organization or corporation, or the keeping, maintaining, propagation, existence or permission of anything, by an individual, municipality, organization or corporation, by which the health or life of an individual or the health or life of individuals, may be threatened or impaired or by which or through which, directly or indirectly, disease may be caused.

Sanitary sewer shall mean a conduit which is a part of a gravity or pressurized force main system which receives and transports waste water for treatment and disposal.

Secondary containment system shall mean an impervious layer of materials which is installed so that any volume of hazardous materials which may be discharged from an underground storage facility will be prevented from contacting the environment outside said impervious layer for the

period of time necessary to detect and recover all the discharged hazardous materials. Materials or devices used to provide a secondary containment system may include concrete, impervious liners, slurry walls, double-walled tanks, double-walled piping or other devices or materials approved by the Director or the Director's designee.

Seepage shall mean the introduction of water into a subsurface excavation from which the water enters the groundwater. Said excavation shall not exceed a depth of two (2) feet below the average yearly highest groundwater elevation described in the Miami-Dade County Public Works Manual as same may be amended from time to time.

Seepage trench or slab covered trench shall mean a trench cut into a rock strata supporting a reinforced concrete slab and providing the necessary wall and bottom areas required for exfiltration of stormwater.

Septic tank shall mean any settling tank in which the settled sludge is in immediate contact with sewage flowing through the tank thereby allowing the organic solids to be partially decomposed by putrefaction, i.e., anaerobic bacterial action.

Sewage lateral connection shall mean the pipe(s) which transmits wastewater from a building, residence or facility to a publicly or privately-owned or operated gravity sanitary sewer collection system.

Sewage loading shall mean the estimated average amount of waste water generated by the actual and projected use of a property as a function of the unsubmerged area of said property. Abutting easements and rights-of-way shall be included to the center lines thereof in calculating the unsubmerged area of the property.

Sewer service area shall mean that portion of a publicly or privately owned or operated sanitary sewer collection system which contributes sewage flow to a particular primary pump station.

Sewer subsystem shall mean a portion of a publicly or privately owned or operated sanitary sewer collection system which discharges sewage to a particular key manhole.

Sewer system infiltration shall mean the introduction of groundwater into any publicly or privately owned or operated gravity sanitary sewer or pump station wet well.

Shredder residue shall mean the predominantly non-metallic solid material including, without limitation, plastic, broken glass, rubber, foam rubber, soil and fabric, resulting from the shredding of ferrous metals such as, but not limited to, scrap automobiles and appliances.

Shrub shall mean a self-supporting woody perennial plant of low to medium height characterized by multiple stems and branches continuous from the base.

Site plan shall mean a drawing having a scale sufficient to provide the following information: Location of all proposed or existing buildings, septic tanks, utility easements, fences, walls, parking areas, driveways, access roads, setbacks, and any other site development.

Site rehabilitation action or SRA shall mean source removal, if applicable, site assessment and, if required, one or more of the following: risk assessment, monitoring or remediation. These site rehabilitation actions serve to characterize the nature and extent of contamination and to reduce the levels of contaminants through applicable treatment methods to comply with the clean-up target levels (CTLs) set forth in this chapter.

Small quantity generator of hazardous waste shall mean any person who brings into existence a quantity of fifty-five (55) gallons or less of hazardous waste during any one (1) period of three hundred sixty-five (365) consecutive days. However, within the average day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, Hialeah Wellfield and John E. Preston Wellfield, a small quantity generator of hazardous waste shall mean any person who brings into existence a quantity of fifty-five (55) gallons or less of hazardous waste during any one (1) period of one hundred twenty (120) consecutive days.

Smoke shall mean the solid particles produced by incomplete combustion or organic substances, including, but not limited to, particles, fly ash, cinders, tarry matter, soot and carbon.

Solid waste shall mean garbage, rubbish, refuse, trash, yard trash, construction and demolition debris, or other discarded material, including solids or contained gaseous material resulting from domestic, industrial, commercial, mining, agricultural, or governmental operations. However, subsurface materials which do not contain hazardous materials and which are extracted as a result of rockmining are not included in this definition.

Source bed shall mean the stratum or strata from which water is drawn in the well.

Source gas volume shall mean the volume, in standard cubic feet, of all gases leaving a source operation; and the boundary of a source operation is that point or surface at which the separation of the air contaminants from the process materials, or the conversion of the process materials into air contaminants, is essentially complete.

Source operation shall mean the last operation preceding the emission of an air contaminant, which operation:

- Results in the separation of the air contaminant from the process material or in the conversion of the process materials and air contaminants, as in the case of combustion fuel; and
- (2) Is not an air pollution abatement operation.

South Miami Heights Wellfield Complex shall mean the following wellfields: South Miami Heights, Roberta Hunter Park, Caribbean Park and Rockpit 77 Park wellfields.

Specimen tree shall mean a tree with any individual trunk which has a DBH of eighteen (18) inches or greater, provided, however, that the following trees are not specimen trees:

- (1) All trees listed in Section 24-49(4)(f).
- (2) Non-native fruit trees that are cultivated or grown for the specific purpose of pro-

ducing edible fruit, including, but not limited to, mangos, avocados, or species of citrus.

- (3) Non-native species of the genus Ficus.
- (4) All multitrunk trees in the palm family, except Acoelorrhaphe wrightii and Phoenix reclinata which have a minimum overall height of fifteen (15) feet.

SRA (see Site rehabilitation action)

Standard conditions shall mean a pressure of fourteen and seven-tenths (14.7) pounds per square inch, absolute, and a temperature of sixty (60) degrees Fahrenheit. Results of all analyses and tests shall be calculated or reported at this gas temperature and pressure.

Standard sample is taken to mean that for the bacteriological test it shall consist of:

- (1) For the bacteriological fermentation tube test, five (5) standard portions of either:
 - (a) Ten milliliters (10 ml).
 - (b) One hundred milliliters (100 ml).
- (2) For the membrane filter technique, not less than fifty milliliters (50 ml).

State of Florida Conservation and Recreation Lands Trust Fund shall mean a fund established under Florida Statutes Chapter 375 (as amended from time to time) for the purposes of purchasing environmentally-sensitive land.

State-approved plant nursery shall mean a business actively engaged in propagating, growing, maintaining and selling tree species that has been licensed to conduct such business by the State of Florida or Miami-Dade County.

Storm sewer shall mean any conduit which is designed to carry stormwater runoff.

Stormwater infrastructure shall mean the structural, nonstructural or natural features of a parcel of land or watershed which collect, convey, store, absorb, inhibit, treat, use, reuse, or otherwise affect the quantity or quality of stormwater.

Stormwater management area shall mean that portion of a tract of land which shall be left at natural grade (unfilled), filled to an elevation no less than four (4) inches above the seasonal high

water table, or excavated below natural grade for the purposes of: managing water which results from rainfall, storing water in the Biscayne Aquifer and recharging the Biscayne Aquifer.

Stormwater management program shall mean the same term as defined by Section 403.031(14), Florida Statutes, as same may be amended from time to time.

Stormwater management system shall mean the same term as defined by Section 403.031(15), Florida Statutes, as same may be amended from time to time.

Stormwater runoff shall mean the excess rainfall precipitation which runs over the ground surface when the rate of rainfall precipitation exceeds the rate of infiltration of stormwater into the ground.

Stormwater shall mean the water which results from rainfall.

Stormwater utility shall mean the same term as defined by Section 403.031(16), Florida Statutes, as same may be amended from time to time.

Structural controls of stormwater shall mean physical devices used to control stormwater including, but not limited to, levees, dikes, pump stations, spillways, locks, embankments, roadways, lakes, retention ponds, and detention ponds.

Substantial reduction in recharge of water to the Biscayne Aquifer shall mean a reduction in natural infiltration rates or reduction of volume of surface water from a defined area; or transportation of surface waters off-site to the extent that a site's natural hydrological regimen is changed.

Surcharged gravity sanitary sewer shall mean a condition during which a gravity sanitary sewer contains sewerage flows above the crown of the pipe.

Test well (see Monitoring well)

Top pruning shall mean the removal of any distal branches or limbs of a mangrove tree which will result in the reduction in the overall height of the mangrove tree.

Total hazardous organic materials (THOM) shall mean the sum of all quantifiable concentration

values of organics presumed to be hazardous materials by the designation of the Board of County Commissioners pursuant to Section 24-5 of the Code of Miami-Dade County, Florida.

Total metals shall mean the sum of the concentration of copper, nickel, total chromium, and zinc.

Total toxic organics (TTO) shall mean the sum of all quantifiable concentration values of those organics set forth in 40 CFR 413 and 40 CFR 433 of the Code of Federal Regulations, and Xylene.

Transitional Northeast Everglades shall mean the wetlands within the following geographic boundaries:

Beginning at a point on the north right-of-way line of theoretical N.W. 12th Street as it intersects the east side of the Miami-Dade-Broward levee, thence run northerly along the east side of the Miami-Dade-Broward levee for approximately 10 miles to its point of intersection with the eastern right-of-way line of the State Road 997 (Krome Avenue); thence, run northeasterly along the eastern right-of-way line of said State Road 997 (Krome Avenue); to its intersection with the west right-of-way line of U.S. Highway 27 (Okeechobee Road); thence run southeasterly along said west right-of-way line of U.S. Highway 27 (Okeechobee Road); to its intersection with the western right-of-way line of the Homestead Extension of Flordia's Turnpike; thence run southerly along said western right-of-way line of the Homestead Extension of Florida's Turnpike; for approximately 8 miles to theoretical N.W. 12th Street; thence run westerly along theoretical N.W. 12th Street to the point of beginning.

Beginning at a point on the south right-of-way line of U.S. Highway 41 as it intersects the west right-of-way line of State Road 997; thence run southerly along the west right-of-way line of State Road 997 for approximately 4 miles to the southeast corner of Section 25, Township 54 South, Range 38 East; thence run westerly for approximately 1 mile along the south section line of said Section 25 to its intersection with the east right-of-way line of Levee 31N; thence run northerly for approximately 4 miles along the east right-of-way line of Levee 31N to

its intersection with the south right-of-way line of U.S. Highway 41; thence run easterly for approximately 1 mile to the point of beginning.

Transmissivity shall mean the rate at which groundwater is transmitted through a unit width of aquifer under a unit hydraulic gradient.

Trash shall mean solid waste comprised of yard trash or construction and demolition debris, and shall include but not be limited to paper, cardboard, cloth, glass, plastics, street sweepings, and vehicle tires.

Travel time shall mean the period of time in days or equivalent distance in feet for groundwater to travel from one (1) point in an aquifer to another point in the aquifer.

Tree island shall mean a vegetative community located within freshwater wetlands whose dominant vegetative components consist of native hardwood trees and shrubs.

Tree removal shall mean directly or indirectly cutting down, destroying, removing or relocating, or effectively destroying (through damaging, trimming, authorizing or allowing the cutting down, destroying, removing, moving or damaging of) any tree.

Tree shall mean a woody or fibrous perennial plant with a trunk having a minimum DBH of three (3) inches or with an overall height of twelve (12) or more feet. Tree shall not include any mangrove tree as defined in Section 24-5.

Tree survey shall mean a drawing overlaid directly upon the site plan sufficient to provide the following information:

- The location, plotted by accurate techniques, in relation to all proposed development, of all existing trees which are proposed to be destroyed, relocated or preserved,
- (2) The common and scientific name of each tree,
- (3) The DBH of each tree, or if a multiple trunk tree, the sum DBH for all trunks, and
- (4) An estimate of the height of the canopy.

Tree well shall mean a soil retaining structure designed to maintain the existing natural ground elevation beneath a tree to preserve the tree when the surrounding area is filled to raise the ground elevation. Tree wells shall have a minimum radius of three (3) feet from the trunk of the tree and a maximum radius of ten (10) feet from the trunk of the tree.

Underground storage facility shall mean a tank, pipe, vessel or other container, or any combination of the foregoing, used or designed to be used for the underground storage or underground transmission of hazardous materials, including but not limited to line leak detectors, monitoring wells, continuous automatic leak detection systems and secondary containment system associated therewith, excluding hydraulic lift systems, excluding sanitary sewers, septic tanks, septic tank drainfields, the primary pipeline transmitting jet fuel from Port Everglades to Homestead Air Base, and any other primary pipeline transmitting hazardous materials from one (1) county to another county. Underground storage facilities have ten (10) percent or more of their total volume below the surface of the ground.

Understory shall mean the complex of woody, fibrous, herbaceous, and graminoid plant species that are typically associated with a natural forest community.

Unmaintained underground storage facility shall mean an underground storage facility which was not or is not properly closed or placed out of service in accordance with the rules and regulations of the State of Florida and Section 24-45(6) of this Code and for which there is neither a valid operating permit issued pursuant to Section 24-18(2) of this Code nor, a valid registration placard issued by the State of Florida Department of Environmental Protection.

Unsubmerged land shall mean any land which meets or exceeds the minimum elevation required by Miami-Dade County flood criteria.

Vacuum assist system shall mean a gasoline or gasohol vapor recovery system that uses a vacuum generating device to create a vacuum in the vapor return line from the nozzle boot to the underground storage tank during motor vehicle refueling.

Vapor shall mean any mixed material in a gaseous state which is deformed from a substance usually a liquid, by increased temperature.

Vessel shall mean a watercraft, boat, ship, yacht, barge, canoe, or kayak, used or capable of being used as a means of transportation on water. Vessel shall not mean a floating structure as defined in Section 24-5. Notwithstanding that the floating structure has previously been used as a means of transportation on water or is capable of being used as a means of transportation on water, vessel shall not mean a floating structure as defined in Section 24-5.

Vessel tieup space shall mean an area abutting a bulkhead or shoreline where a vessel may be secured.

Waste discharge shall mean any outfall, ditch, pipe, soakage pit, drainage well, drainfield, or any other method or device by which treated or untreated sewage, industrial waste, or other wastes can enter the surface waters, tidal salt water, or groundwaters, so as to cause water pollution as herein defined.

Water dependent use shall mean a use which cannot exist or occur without association with marine, freshwater or estuarine water masses.

Water pollution shall mean the introduction in, on or upon any surface water or ground water, or tidal water, of any organic or inorganic matter or deleterious substances in such quantities, proportions, accumulations or levels which exceed any of the clean-up target levels (CTLs) set forth in Section 24-44, or which are injurious to human, plant, animal, fish and other aquatic life, or property, or which unreasonably interfere with the comfortable enjoyment of life or property, or the conduct of business.

Water system shall mean a system which supplies water for drinking, culinary, fire, industrial, commercial, or domestic purposes.

Watershed shall mean the same term as defined by Section 403.031(17), Florida Statutes, as same may be amended from time to time.

Wellfield complex shall mean two or more wellfields which: a.) provide raw water to the same water treatment facility or provide raw water to interconnected water treatment facilities for treatment of raw water from the same wellfield and, b.) which wellfields are within the same outer wellfield protection zone.

Wet retention shall mean the disposal of stormwater runoff to a storage basin having a bottom elevation lower than one (1) foot below the average October groundwater level as set forth in the Miami-Dade County Public Works Manual, Part II, Section D4, dated September 1, 1974, as may be amended from time to time.

Wetlands shall mean those areas as defined in Chapter 373, Florida Statutes, as same may be amended from time to time.

Work shall mean any project, activity, or any artificial or man-made alteration of the environment, including, but not limited to, the construction or maintenance of roads; landclearing; trimming or cutting of a mangrove tree(s); dredging; filling; construction or placement of structures, floating structures, fixed structures, facilities or dwellings; excavations; or rockplowing.

Yard trash shall mean solid waste comprised of vegetative matter resulting from landscaping maintenance or land clearing operations and shall include, but not be limited to, Melaleuca, Australian pine, Brazilian pepper and other tree and shrub trimmings, grass clippings, palm fronds, trees and tree stumps, and soils not containing any hazardous materials.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 05-196, § 1, 11-3-05; Ord. No. 06-125, § 1, 9-12-06; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-6. Director of the Miami-Dade County Department of Environmental Resources Management— Office created; appointment; term; exempt from classified service and merit system; compensation; assistants; operating procedures.

The office and position of Director of the Miami-Dade County Department of Environmental Resources Management, is hereby created and es-

tablished. The Director of the Miami-Dade County Department of Environmental Resources Management, shall be appointed by and serve at the will of the County Manager. Such Director shall be chosen by the Manager on the basis of his qualifications and experience in the field of air and water pollution controls, and the Director shall be a professional engineer registered to practice in the State of Florida under the provisions of Chapter 471, Florida Statutes, or he shall become registered within eighteen (18) months after the date of appointment, or he shall have at least a bachelor's degree from an accredited university in a field which will, in the Manager's judgment, technically qualify him to discharge the duties imposed by this chapter. The Office of Director of the Miami-Dade County Department of Environmental Resources Management, shall constitute a position exempted from the classified service of Miami-Dade County and the State merit system. The salary for such position shall be fixed by the Board of County Commissioners. The Director shall serve under the administrative jurisdiction of the County Manager and subject to the direct supervision of the County Manager. The County Manager shall appoint such assistants to the Director as may be necessary in order that the duties of the Director may be performed properly. The organization and administrative operating procedures of such County office and its relationship and coordination with other County departments shall be established and placed in effect, from time to time, by administrative order of the County Manager, but the Manager shall not have any power to modify the duties imposed upon the Director by this chapter or the procedures prescribed herein for the performance of such duties. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-7. Same—Duties and powers.

The duties, functions, powers and responsibilities of the Director of the Miami-Dade County Department of Environmental Resources Management, shall include the following:

(1) The enforcement of the provisions of this chapter and the rules and regulations promulgated hereunder, all rules and regulations of the Florida Department of Environmental Protection pertaining to air and water pollution and the Federal Pretreatment Standards, promulgated under the authority of Section 307 of the Federal Clean Water Act, as incorporated in this chapter.

- (2) Investigate complaints, study and observe air and water pollution conditions, institute actions necessary to abate nuisances caused by air and water pollution, and prosecute proceedings for violations of this chapter.
- (3) Make appropriate surveys, tests and inspections to determine whether the provisions of this chapter are being complied with, and whether air and water pollution is being effectively controlled throughout this County.
- (4) Make inspections of property, facilities, equipment and processes operating under the provisions of this chapter to determine whether the provisions of this chapter are being complied with, and make recommendations for methods by which air and water pollution may be reduced or eliminated.
- (5) Maintain and review all operating records required to be filed by persons operating facilities and equipment subject to the provisions of this chapter and as required by 40 CFR 403.8 and 40 CFR 403.12, Federal Pretreatment Regulations.
- (6) Render all possible assistance and technical advice to persons operating equipment, facilities and processes, the use of which may cause air or water pollution, provided that the Director or the Director's designee shall not design equipment or facilities for any person.
- (7) Establish, operate and maintain a continuous program for monitoring air and water pollution by means of countywide air and water quality surveillance networks designed to provide accurate data and information as to whether the requirements of this chapter are being complied

- with and whether the level of air and water pollution is increasing or decreasing throughout this County.
- (8) Publish and disseminate information to the public concerning air and water pollution and recommended methods for decreasing and eliminating pollution. Additionally, publish annually a list of industrial users in significant noncompliance in accordance with the requirements of 40 CFR 403.8(f)(2)(vii), Federal Pretreatment Regulations.
- (9) Render assistance to the State of Florida Department of Environmental Protection in connection with the review of plans, specifications and processes filed in accordance with the requirements of this chapter.
- (10) Render all possible cooperation and assistance to federal, State and local agencies in the accomplishment of the effective control of air and water pollution.
- (11) Enlist and encourage public support, and the assistance of civic, technical, scientific and educational organizations, and the cooperation of industrial and business enterprises and organizations.
- (12) Make periodic reports concerning the status of air and water pollution in this County and the enforcement of the provisions of this chapter, and recommendations concerning the improvement of pollution requirements. Such reports shall be filed with the County Manager and made available to the County Commission, the State of Florida Department of Environmental Protection, and other cognizant agencies.
- (13) Make continuing studies and periodic reports and recommendations for the improvement of air and water pollution controls in the County, and work in cooperation with the State of Florida Department of Environmental Protection, the United States Public Health Service and other

- appropriate agencies and groups interested in the field of air and water pollution.
- (14) Investigate air and water pollution control programs and activities in operation in other areas and to make recommendations for the improvement of the regulation, administration and enforcement of pollution controls in this County. Publicize the importance of adequate pollution controls, to hold public hearings, discussions, forums and institutes, and arrange programs for the presentation of information by experts in the field of air and water pollution, and visit and study pollution control programs conducted in other metropolitan areas, subject to budget limitations.
- Whenever evidence has been ob-(15) (a) tained or received establishing that a violation of this chapter has been committed, the Director or the Director's designee, shall issue a notice to correct the violation or a citation to cease the violation and cause the same to be served upon the violator by personal service or certified mail or by posting a copy in a conspicuous place on the premises of the facility causing the violation. Such notice or citation shall briefly set forth the general nature of the violation and specify a reasonable time within which the violation shall be rectified or stopped, commensurate with the circumstances. Reasonable time herein means the shortest practicable time to rectify or stop the violation. If notice to correct the violation or citation to cease the violation is not obeyed within the time set forth therein, the Director or the Director's designee, shall have the power and authority to issue an order requiring the violator to restrict, cease or suspend operation of the facility causing the violation until the violation is corrected. Any orders issued by the Director or the Director's

- designee, hereunder may be enforced by suit brought by the Director in the appropriate court of competent jurisdiction.
- (b) Whenever a violation of this chapter has been committed, the Director may initiate proceedings against the violator in the appropriate court for such violation, whether or not a notice to correct the violation or citation to cease the violation has been issued by the Director or the Director's designee.
- The Director or the Director's designee, may, in the Director's or the Director's designee's discretion, terminate an investigation or an action commenced under the provisions of this chapter upon execution of a written consent agreement between the Director, or the Director's designee, and the persons who are the subjects of the investigation or action. The consent agreement shall provide written assurance of voluntary compliance with all the applicable provisions of this chapter by said persons. The consent agreement may, in the discretion of the Director, or the Director's designee, provide the following: environmental mitigation; compensatory damages; punitive damages; civil penalties; costs and expenses of the County in tracing the source of any discharge, in controlling and abating the source of the pollutants and the pollutants themselves, and in restoring the air, waters, ground and property, including animal, plant and aquatic life, of the County in accordance with the provisions of this chapter; costs of the County for investigation, enforcement, testing, monitoring, and litigation, including attorneys' fees; and remedial or corrective action. An executed written consent agreement shall neither be evidence of a prior violation of this chapter nor shall

such agreement be deemed to impose any limitation upon any investigation or action by the Director, or the Director's designee, in the enforcement of this chapter. The consent agreement shall not constitute a waiver of or limitation upon the enforcement of any federal, State or local laws and ordinances. Executed written consent agreements are hereby deemed to be lawful orders of the Director, or the Director's designee. Each violation of any of the terms and conditions of an executed written consent agreement shall constitute a separate offense under this chapter by the person who executed the consent agreement, their respective officers, directors, agents, servants, employees and attorneys; and by those persons in active concert or participation with any of the foregoing persons and who receive actual notice of the consent agreement. Each day during any portion of which each such violation occurs constitutes a separate offense under this chapter. Decisions and actions of the Director or the Director's designee, pursuant to Section 24-7(15)(c) of this Code and written consent agreements executed thereunder, shall not be subject to review pursuant to Section 24-11 of the Code of Miami-Dade County, Florida.

(16) In the event a violation of this chapter creates a health hazard or threatens serious damage to the public health, aquatic life or property, or creates a nuisance as herein defined, the Director or the Director's designee shall have the power and authority to order immediate cessation of the operations causing such conditions. Any person receiving such an emergency order for cessation of operation shall immediately comply with the requirements thereof. It shall be unlawful for any person to fail or refuse to comply with an emergency order issued and served under the provisions of this section. Any person

- who is convicted of willfully failing or refusing to comply with such an emergency order shall be punished by a fine not exceeding five hundred dollars (\$500.00) or by imprisonment in the County Jail for not more than sixty (60) days, or both, in the discretion of the appropriate court. Each day during which the willful failure or refusal to comply with such an emergency order continues shall constitute a separate offense.
- (17) In addition to and not limited by any other provision or remedy of this chapter, the Director shall have the power and authority to order a moratorium on the issuance of building permits by any County or municipal agency should it be determined:
 - (a) That violations of this chapter have occurred or may be reasonably anticipated to occur, or that the physical limitations of the public or private water or sewage system have or will be met so as to endanger or threaten the public health, aquatic life or property or creates a nuisance; and
 - (b) That such a situation can reasonably be anticipated to deteriorate by the issuance of additional building permits that require added or new demands being made on the water or sewage system involved.
- (18) Perform such other administrative duties as may be assigned by the County Manager.
- (19) To appoint with the approval of the County Manager, deputies who are hereby empowered to perform the duties of the Director, as provided by this chapter, subject to the Director's control.
- (20) Where necessary the Director and duly authorized deputies of the Director are hereby empowered to seek all search warrants reasonable and necessary to carry out their powers and duties as established by this chapter, in accordance with the requirements of the Constitutions of the United States and the State of Florida,

- the Laws of Florida, and in accordance with the procedures established by the Code of Miami-Dade County, Florida.
- (21) The powers and duties enumerated in this section shall be in addition to and not a limitation of any other power or duty specifically granted to the Director by any other provision of this chapter.
- (22) Whenever this chapter specifies the need for approval, a determination, permits, review or the promulgation of standards or criteria by an undisclosed entity, said approval, review, permitting, or promulgation shall be the duty and responsibility of the Director, unless otherwise specifically provided, subject to the manner and mode of review set in Section 24-11 of the Code. Said approvals, determinations, decisions to permit, and the promulgation of standards and criteria shall be based upon generally accepted concepts and standards of the particular professional discipline concerned.
- (23) The Board of County Commissioners hereby authorizes the establishment of Countywide water control, coastal engineering and wetlands management programs, and vests in the Director the administration of said programs. A plat showing existing and proposed watercontrol facilities and their general locations is hereby adopted and made a part of this chapter, said plat being identified as amended plat of Miami-Dade County Water Control Plan recorded in August. 1972, in plat book 94, page 4. The amended water control plan may be further revised at any time by resolution of the Board of County Commissioners. Authority for administering said program includes, but is not limited to, the power to:
 - (a) Establish, adopt, and implement water control, coastal engineering and wetlands management programs, as may be necessary or appropriate for prevention and control of floods, drainage, water conservation, prevention of saltwater encroachment,

- protection against pollution, safeguard of water supplies, protection of beaches, shorelines, and wetlands areas and the best use of all the water, shoreline and wetland resources of Miami-Dade County.
- (b) Administer the processing of property right exchanges and advise the Board of County Commissioners on the acquisition by gift, donation, dedication, purchase, condemnation or otherwise of such lands as may be necessary for aforesaid purposes of water control, beach and wetlands management, all acquisitions to be in accord with such State and local laws as may be applicable.
- (c) Defray costs and expenses of said water control, coastal engineering and wetlands management programs, including, but not limited to, the costs of engineering, construction, operation, maintenance, lands, rights-of-way, alterations, cooperation with other agencies and authorities, all as authorized herein, subject to County budgetary procedures and limitations.
- (d) Determine, establish, and regulate water levels in all parts of Miami-Dade County, including, but not limited to, levels of bays, streams, canals, ditches, lakes, borrow ditches, and the underground water table, by dams with or without locks or boat lifts, by gates, levees, or other facilities; providing, however, that said authority and powers are not to encroach upon, be inconsistent with, and are in conjunction with the statutes, rules and regulations of appropriate State and federal agencies as they exist now and in the future.
- (e) Administer programs for the preservation of beaches and shorelines, including cooperative federal, State, and local programs and projects; establish standards and permitting procedures for the control of excavation

- in water areas, dredging and filling and performing work in all saltwater and wetland areas.
- (f) Cooperate with appropriate federal, State, municipal and other local agencies. Any action(s) taken by the Department shall be taken only after the affected municipality(ies) has been notified of the proposed action(s).
- (g) Make and adopt reasonable rules and regulations, subject to approval of the Board of County Commissioners by ordinance, for the administration of said water control, coastal engineering and wetlands management programs, all such rules and regulations (within declared policies, powers, and authorities granted by the Board of County Commissioners) having the force and effect of law and being enforceable under Section 24-29 of this Code.
- (h) Require permits and set permit fees for connecting any private or public drain, ditch, canal, storm sewer, outfall, inlet, intake, outlet or irrigation pipe with, into, through, or across any ditch, canal, waterway, culvert or other water-control facility under the jurisdiction of Miami-Dade County.
- (i) Require permits and set permit fees for any type of public or private crossing over, under or within any ditch, canal, waterway, culvert or other such facility under the jurisdiction of Miami-Dade County, including, but not limited to, bridges, footbridges, culverts, earthfills, pipelines and other obstructions of any kind, such as fences, barricades, dams, and the like.
- (j) Require permits and set permit fees for excavating, filling and performing work in coastal areas and wetland areas of Miami-Dade County, including, but not limited to, beach and shoreline alteration, beach nourish-

- ment, and construction, installation, alteration or repairs of marinas, docks, piers, seawalls, fixed structures, or floating structures, and construction of roads, fill pads, rockplowing and rockmining within the incorporated or unincorporated areas of Miami-Dade County.
- (k) Provide for permits and fees for accomplishing, through contractors, land developers and others, the excavation of ditches, canals, and installation of water-control facilities, within the general limits of said programs of water control, coastal engineering and wetlands management.
- (1)Limit and control excavation or filling of wetlands, channels, ditches, canals, or lakes in wetlands by individuals, firms, corporations, miners, partnerships, joint ventures, estates, trusts, syndicates, fiduciaries, and all other associations and combinations whether public or private, including governmental agencies, to the extent necessary for the prevention of pollution or further saltwater encroachment and for the protection of water recharge areas and wetland and tidal habitats in Miami-Dade County.
- (24) To require and issue Florida Department of Environmental Protection and South Florida Water Management District permits as provided by law.
- (25) Require that a comprehensive environmental impact statement be submitted for any work or activity requiring a permit or permits issued by the Department or for any work or activity defined as a nuisance in Chapter 24 of the Code of Miami-Dade County, Florida, if, in the opinion of the Director, the work or activity may result in adverse environmental impact. The Director shall only require a comprehensive environmental impact statement if a comprehensive environmental impact statement, as defined in this

- chapter, has not already been submitted as part of a federal, State or regional permit application.
- (26) Order testing by any person who is or may be responsible for a violation of this chapter, or who installs, modifies, repairs, expands, replaces or operates any facility under the provisions of this chapter. The design and nature of such testing shall be approved by the Department prior to implementation of testing. Said testing shall be accomplished and the results thereof submitted to the Department for review no later than such time as determined by the Department.
- (27) When a violation of this chapter has occurred or continues to exist or when there may be an imminent endangerment to the public health or welfare or the environment because of a threatened release or discharge of a hazardous material, the Director or the Director's designee may:
 - (a) Take action necessary to prevent such violation, and
 - (b) Restore the air, water, and property, including but not limited to animal, plant, and aquatic life affected by said violation.

This provision shall not be construed to provide a defense to or otherwise relieve or limit the liability or responsibility of any person violating the provisions of this chapter. Furthermore, the Director may institute suit in a court of competent jurisdiction to recover the sums expended by the County for the investigation and the aforesaid restoration and prevention from the persons responsible. All sums received by the Director pursuant to this provision shall be deposited by the Director into the fund from which said sums were expended.

(28) The Board of County Commissioners hereby authorizes the establishment of a Countywide Tree and Forest Resources Program, and vests in the Director the administration of said program. Author-

ity for administering said program includes, but is not limited to, the power to:

- (a) Make and adopt reasonable rules and regulations subject to approval of the Board of County Commissioners by ordinance for the administration of said Tree and Forest Resources Program, all such rules and regulations (within declared policies, powers, and authorities granted by the Miami-Dade County Board of County Commissioners) having the force and effect of law and being enforceable under Section 24-29 with penalties and liabilities set forth under Sections 24-30 and 24-31 of this Code.
- (b) Require permits under the provisions of Section 24-49, and set permit fees for the removal of trees, and understory where applicable, in unincorporated areas of Miami-Dade County and municipalities in which this chapter is enforced by the Department.
- (c) Limit and control the removal of trees and understory in unincorporated areas of Miami-Dade County and municipalities in which Ordinance Number 89-8 is enforced by the Department under the provisions of Section 24-49 in order to preserve as many native trees and their understory and desirable nonnative trees as possible.
- (d) If the provisions of Section 24-49 or the provisions of a tree ordinance passed by a municipality are not adequately enforced by a municipality, or if the municipal ordinance does not meet the minimum standards of Ordinance Number 89-8, and it is the Department's intent to administer Section 24-49 in said municipality, then the Director shall notify the municipality by certified letter of the Department's intent and, following the municipality's receipt

- of the letter, the Department shall enforce Ordinance Number 89-8 within the municipality.
- (e) Require preparation and implementation of management plans for natural forest communities presently owned or managed by Miami-Dade County or those which are acquired by Miami-Dade County in the future. All said management plans shall be submitted to the Department for approval within two (2) years of the effective date of Ordinance Number 89-8 or within one (1) year after acquisition.
- (f) Review the existing Miami-Dade County Natural Forest Community Maps and make recommendations to the Board of County Commissioners concerning the addition to or deletion of specific sites from said maps. Modify the boundaries of existing natural forest communities, as indicated on the aforementioned maps, when it is determined that the approved boundaries no longer accurately reflect the boundaries of a natural forest community as defined herein.
- (29) Enlist or encourage cooperation by the general public and public utilities owning or operating public water systems to implement voluntary water conservation measures for prevention of contamination of the Northwest Wellfield.
- (30) Order public utilities owning or operating public water systems to reduce public water system pressure for the purpose of conserving water to prevent contamination of the Northwest Wellfield.
- (31) Impose mandatory water conservation restrictions in the unincorporated and incorporated areas of Miami-Dade County to prevent contamination of the Northwest Wellfield.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-8. Environmental Quality Control Board.

A Miami-Dade County Environmental Quality Control Board is hereby created and established, consisting of five (5) members appointed by the County Commission.

- (1) Qualifications of members. Members of the Board shall be residents of Miami-Dade County who possess outstanding reputations for civic pride, interest, integrity, responsibility and business or professional ability. Appointments shall be made by the Board of County Commissioners on the basis of experience or interest in the field of air and water pollution. The composition and representative membership of the Board shall be as follows:
 - (a) Two (2) members shall be scientists possessing Ph.D. degrees in biology.
 - (b) One member shall be a scientist possessing a Ph.D. degree in biochemistry.
 - (c) Two (2) members shall be professional engineers with experience in the field of sanitary engineering, who may be recommended by the Miami Chapter of the Florida Engineering Society.
- Terms of office. In order that the terms of office of all members of the Board shall not expire at the same time, the initial appointments to the Board shall be as follows: Two (2) members shall be appointed for the term of one (1) year, two (2) members shall be appointed for the term of two (2) years, and one (1) member shall be appointed for the term of three (3) years. Thereafter all appointments shall be made for the term of three (3) years. Appointments to fill any vacancy on the Board shall be for the remainder of the unexpired term of office. A member may be removed with or without cause by the affirmative vote of not less than a majority of the entire County Commission. Should any member of the Board fail to attend three (3) consecutive meetings without due cause, the Chairman shall certify

- the same to the County Commission. Upon such certification, the member shall be deemed to have been removed and the County Commission shall fill the vacancy by appointment.
- Organization of the Board; quorum; Secretary; compensation of members; meetings; personnel. The members of the Board shall elect a Chairperson and such other officers as may be deemed necessary or desirable, who shall serve at the will of the Board. A majority vote of the entire membership of the Board shall be necessary to take any action. Three (3) members of the Board shall constitute a quorum necessary to hold a meeting and take any action, except that the affirmative vote of four (4) members of the Board shall be required to grant variances and extensions of time for compliance with the requirements of this chapter for new or existing facilities, equipment, and processes or classes thereof, within the Northwest Wellfield protection area or within the West Wellfield Interim protection area. The Director shall be secretary of the Board and shall be responsible for the custody of all minutes and records of the Board, but shall not be entitled to vote on any matter before the Board. Members shall serve without compensation, but shall be reimbursed for necessary expenses incurred in the performance of their official duties, upon approval by the Board of County Commissioners. The Chairperson may call meetings of the Board, and the Board at any meeting may fix and call a meeting on a future date. Minutes shall be kept of all meetings of the Board. All meetings shall be public. The County Manager shall provide adequate and competent clerical administrative personnel as may be reasonably required by the Board for the proper performance of its duties, subject to budget limitations.
- (4) *Technical advisory panel*. The Board may designate from time to time one (1) or more citizens of the community to sit as one (1) or more technical advisory panels.

- The members of such panels shall be persons technically skilled and qualified to render advice on particular matters of pollution control then before the Board. The members shall serve at the will of the Board and shall furnish advice and information of a technical nature to the Board for so long a period of time as the Board may request it. All such advice and information given by the panel or any member thereof shall be in the form of testimony before the Board at a regularly scheduled meeting and subject to cross examination by any interested party. The members of the panels shall not be deemed County officers or employees within the purview of Sections 2-10.2, 2-11.1, or otherwise.
- (5) Duties and powers of the Environmental Quality Control Board. The Environmental Quality Control Board shall have the following duties, functions, powers and responsibilities:
 - (a) To hear appeals by any person aggrieved by any action or decision of the Director as provided in Section 24-11.
 - (b) To hear and pass upon all applications for variances and extensions of time in the manner provided by Sections 24-13 and 24-14, except for compliance with Federal Pretreatment Regulations set forth in 40 CFR 403 as incorporated in this chapter
 - (c) To hear and pass upon all applications for extension of time for compliance with the provisions of this chapter. All such applications shall be filed in accordance with the provisions of this chapter and shall be heard and considered by the Environmental Quality Control Board at a public hearing pursuant to notice. In considering such applications, the Board shall take into account such factors as practicability, availability of equipment, and relative benefits to the community. The Board shall not have the power and authority to

grant any application for extension of time to comply with the prohibitions against open burning (Section 24-41.4), or the prohibitions against reduction of animal matter (Section 24-41.8), or the prohibitions against a nuisance (Section 24-27), or the prohibitions against the discharge of cyanides or other toxic chemicals into the waters in excess of the standards set forth in Section 24-42(3). Applications for extension of time for compliance shall be considered on the basis of public interest and not merely on economic benefit to the applicant; applications shall be granted only when it is established that the requested extension of time for compliance will not be detrimental to the public health, welfare and safety, and will not create or permit the continuation of a nuisance, or that no technically feasible, economically reasonable means of compliance are readily available to the applicant. The Board shall not have the power and authority to grant extensions of time for compliance with the Federal Pretreatment Regulations set forth in 40 CFR 403 as incorporated in this chapter. Any person aggrieved by any decision of the Environmental Quality Control Board shall be entitled to judicial review in accordance with the Florida Rules of Appellate Procedure.

(d) To hear and pass upon all applications pursuant to Section 24-15 for approval of interim package sewage treatment plants. In considering such applications the Board shall take into account such factors as the public interest, compliance with the technical requirements of this chapter, factors of practicability and availability of equipment, alternative methods of sewage disposal and the likelihood of creating a present or future nuisance. If the Board approves such application it shall direct the Direc-

- tor to issue the Director's approval subject to any reasonable conditions that the Board finds to be in the public interest. Provided, however, that no action on the application shall be taken by the Board until a public hearing has been held upon at least ten (10) days notice of the time and place of such hearing published in a newspaper of general circulation in Miami-Dade County.
- To provide additional notice to the public, property that may be affected by the application shall be posted in a manner as shall provide notice of the purpose, time and place of such hearing. Failure to post such property shall not affect any action taken by the Board. Provided, however, that the Board may, upon application of any city or any governmental water and sewer authority existing on the effective date of this subsection and chartered pursuant to State law, waive the requirement for a public hearing on interim package sewage treatment plant applications where such proposed plant is to be located within a city that requires by law a public hearing before granting approval of such a plant where such applications are considered under standards equal to or stricter than those provided by Chapter 24 of the Code of Miami-Dade County, as amended from time to time.
- (f) To hear and pass upon applications by private and/or public water or sewer utilities for a statement of approved water quality or approved sewage service filed pursuant to the requirements of Section 24-15 of the Code.
- (g) To issue subpoena to compel the presence of a witness or documents at any hearing authorized above, such subpoenas to be issued by the Chair-

- man of the Board and enforced pursuant to the provisions of Section 24-9 of this chapter.
- (h) To review decisions of the Miami-Dade County Fire Department or other Fire Department having jurisdiction, pursuant to Section 2-103.23 of the Code.
- (i) The powers enumerated in this section shall be an addition to and not a limitation of any other power specifically granted to the Environmental Quality Control Board by any other provision of this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-9. Contempt powers.

The Board is empowered and authorized to hold any individual, corporation, or public utility which refuses to obey any legal order, mandate, decree or instruction issued by the Board during any proceeding before the Board, in contempt of the Board. The Board, through two-thirds of those members who are present, may fine any individual, corporation, or public utility which is in contempt of the Board a sum of up to one hundred dollars (\$100.00) for each contemptuous act, payable to the Miami-Dade County Finance Director within fifteen (15) days of the Board's ruling. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-10. Issuance of stop orders; injunctions; standards of service.

Whenever any public utility as herein defined engages or is about to engage in the construction, operation or extension of a water system or sewer system in violation of the provisions of this chapter, the Director, on the Director's own initiative or upon complaint, shall forthwith make such preliminary investigation as he may deem appropriate and may, either with or without notice, enter an order requiring such public utility to cease and desist from such construction, operation or extension until further order of the Board. A public hearing on such violation shall be held by the Board within thirty (30) days after the entry of the order to cease and desist. Reasonable

written notice of the public hearing shall be given by mail to the public utility involved. Within fifteen (15) days after the hearing the Board shall enter an order either requiring the permanent cessation of construction, operation or extension, or authorizing continuation thereof under such terms and conditions as may be commensurate with the public interest and welfare. Any failure to comply with the stop orders of the Board may be enjoined and restrained by injunctive order of the Circuit Court in appropriate proceedings instituted for such purpose.

The Environmental Quality Control Board shall have the power, and it shall be its duty, to establish reasonable standards of service for each class of public utilities as defined in Section 32-4(c) of the Code, after notice and public hearing, and thereafter to enforce such standards. In performing this duty, the Board shall exercise its powers to conduct investigations and inspections, to make examinations and tests, to prescribe standards of measurement for testing the quality, pressure, or other conditions pertaining to the supply or quality of the product furnished or adequacy of the service rendered by any such utility, and to fix fees for the examination and testing of meters and other measuring devices, as provided by law in establishing the general regulatory powers of the Board, and as directed herein. Standards previously adopted by the Water and Sewer Board pursuant to Section 32-51 remain in full force and effect under the jurisdiction of the Environmental Quality Control Board until modified as provided above.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-11. Appeals from actions or decision of the Director of the Miami-Dade County Department of Environmental Resources Management.

Any person aggrieved by any action or decision of the Director, may appeal to the Environmental Quality Control Board by filing within fifteen (15) days after the date of the action or decision complained of, a written notice of appeal which shall set forth concisely the action or decision appealed from and the reasons or grounds for the

appeal. The Environmental Quality Control Board shall set such appeal for hearing at the earliest possible date, and cause notice thereof to be served upon the appellant and the Director. The Environmental Quality Control Board shall hear and consider all facts material to the appeal, and render a decision promptly. The Environmental Quality Control Board may affirm, reverse or modify the action or decision appealed from provided that the Environmental Quality Control Board shall not take any action which conflicts with or nullifies any of the provisions of this chapter. The decision of the Environmental Quality Control Board shall constitute final administrative review and no hearing or reconsideration shall be considered. Any person aggrieved by any decision of the Environmental Quality Control Board on an appeal shall be entitled to judicial review in accordance with the Florida Rules of Appellate Procedure. The words "action" and "decision" as used herein shall not include the filing of any action by the Director, in any court. The Board shall not have jurisdiction to reconsider the subject matter of any appeal after its final administrative determination for a period of six (6) months from the date of the Board's final action, unless the Board determines that there has been a material and substantial change in the circumstances; provided, however, any action taken or decision made by the Director at any time may be reconsidered by the Director and the Director may therefore modify any such action or decision. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-12. Variances and extensions of time for compliance.

(1) The Environmental Quality Control Board shall have the power and authority to grant or extend from time to time variances and extensions of time for compliance with the requirements of this chapter to new or existing facilities, equipment and processes. Such variances or extensions may be granted to specific facilities, equipment or processes or to a class. The Environmental Quality Control Board may grant such variances or extensions only if it is affirmatively established by competent factual data and information that strict compliance with the require-

ments of this chapter is impossible or inappropriate because of conditions beyond the control of the person or persons involved, or that strict compliance would result in substantial curtailment or closing down of a plant, project or operation which would be detrimental to the public interest, or that the particular operation is essential for the public health or the national security, or that no technically feasible, economically reasonable means of compliance are available to the person or persons involved, or that the variance or extension will not be detrimental to the public health, welfare and safety and will not create a nuisance and will not materially increase the level of pollution in this County, or that a more unhealthy condition will occur if a variance or extension is not granted. Variances and extensions of time shall be considered and acted upon in accordance with the provisions of Section 24-4, Section 24-12, Section 24-13 and the provisions of Section 24-8(5)(b).

- (2) The above provisions for obtaining a variance shall not apply to applications for variances from the regulations of Section 24-49, which are provided for as follows. Any person desiring to do tree or understory removal work which is not in accordance with the regulations of Section 24-49 may apply to the Environmental Quality Control Board for a variance from such regulations in accordance with the provisions of Section 24-13. The Environmental Quality Control Board shall have the power and authority to grant such variances on a case-by-case basis only where it is affirmatively established by competent factual data and information that a literal application or enforcement of the regulations would result in unnecessary hardship (other than economical) and the relief granted would not be contrary to the public interest but will do substantial justice.
- (3) The board shall not have the power and authority to grant variances and extensions of time to comply with the Federal Pretreatment Regulations set forth in 40 CFR 403 as incorporated in this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-13. Procedure governing variances and extensions of time.

Applications for variances or extensions of time for compliance with this chapter shall be filed

with the Director in substantially the form prescribed therefor. The Director shall make written recommendations concerning such applications and promptly file the records with the Environmental Quality Control Board. Upon request by any applicant for a variance from the regulations of Section 24-49, the Tree and Forest Resources Advisory Committee shall also make written recommendations concerning such applications and promptly file the recommendations with the Environmental Quality Control Board. The Director may initiate and file with the Board an application for variance or extension. Upon receipt of an application and the recommendations of the Director and upon receipt of the recommendations of the Tree and Forest Resources Advisory Committee, where applicable, the Board shall promptly hold a public hearing upon the application, after publication of notice of the hearing. All interested persons shall be entitled to be heard before the Board. The Board shall promptly hear and pass upon all such applications, and shall set forth the grounds and reasons for granting or denying the application. Any person aggrieved by any decision of the Environmental Quality Control Board shall be entitled to judicial review in accordance with the Florida Rules of Appellate Procedure. The Board shall prescribe rules of procedure governing applications for variances or extensions of time, which shall conform to and be commensurate with the applicable and controlling provisions of this chapter. For purposes of this section, the County Manager may constitute a person aggrieved whenever the Environmental Quality Control Board renders a decision adverse to the recommendation of the Director.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-14. Statements of approved water or sewer service; Emergency water and/or sewer rate requests.

(1) Any public utility holding a valid certificate pursuant to Sections 32-33 and 32-39 of the Code that desires to apply for a change of rate or to change any rule or regulation as provided by Section 32-64 shall file with the Board or the Department a request for a statement of approved water quality or approved sewage service.

- (2) The Department shall within ten (10) days from the date of such request set a hearing date for consideration by the Board of such request in all cases not exempted under subsection (3), below.
- (3) A municipal public utility is exempted from the herein described public hearing process before the Board if both of the following conditions are met:
 - (a) The utility holds a valid County operating permit pursuant to Section 24-18, and
 - (b) Not more than twenty (20) percent of the utility's gross revenues are generated from customers located outside of the municipality.

If the utility obtains an exemption by having met the above two (2) conditions, said utility must obtain a statement of approval from the Department.

- (4) In determining whether or not a public utility is entitled to a statement of approved water quality or approved sewer service, the Board shall consider the water and effluent quality requirements of Chapter 24 and other evidence including public comments regarding the overall quality of service. If the Board finds that the utility has provided reasonable and satisfactory water quality and sewage service to the public, it shall issue its statement of approved water quality or approved sewage service which shall be valid for one (1) year from the date of issuance. The validity of the statement may be extended by the Board for a period not to exceed six (6) months beyond the original expiration date. Such a statement shall also indicate "excellent," "good" or "fair" quality of service depending on which, in the opinion of the Board, is most appropriate.
- (5) The public utility shall send a written notice to each customer informing:
 - (a) That the utility plans to file for a rate increase;
 - (b) The date, time and place of public hearing as set by the Department;
 - (c) The name, address and phone number of the Department; and

(d) The name, address and phone number of the consumer advocate.

The notice shall be reviewed and approved by the Department and shall be mailed at least twenty (20) days prior to the hearing. In the event that the hearing on the matter is continued, mailed notices of the continuation may be disposed with by the Board.

- (6) The Board may issue a conditional certificate pursuant to this section if it determines that certain improvements of said water and/or sewer utility are necessary or desirable to increase the quality of service provided to the consumers, and said conditions and improvements shall be specifically set out within said Board order granting the conditional certificate. In no event, however, shall the Water and Sewer Board grant any rate increase to said utility without requiring that the amounts collected from such rate increase be placed in escrow account under Water and Sewer Board control and not released until the conditions set forth in said conditional approval have been complied with by the utility. However, the Board or the Department may not issue its approval of the water or sewer service provided by a water and/or sewer utility if it does not meet the minimum requirements of Chapter 24.
- (7) Notwithstanding the requirements of this Section the Board may grant a qualified statement of approval of water or sewer service which shall be sufficient to permit the utility to apply to the Water and Sewer Board for an emergency rate increase solely for the purpose of permitting immediate repairs and improvements necessary to bring water or sewer service and quality to minimum standards. Said qualified approval will authorize the filing of an application for a change in rates as required by Section 32-64 of the Code, but qualified approvals received pursuant to this section will only support a temporary rate increase for such time as is necessary to finance the approved or authorized improvements required to achieve minimum water and/or sewage service quality, as noted above. In no event, however, shall the rate increase be imposed in excess of the life expectancy of the particular improvement or improvements so constructed. In addition, any rate increase granted pursuant to a statement

issued under this section shall be used solely and exclusively by the utility for the purpose of improving its water or sewer service to the minimum standards required under the Miami-Dade County Code. Said repairs and improvements shall be specifically set out within said order granting the qualified statement of approval. Any approved rate increase pursuant to this section shall terminate when sufficient funds to finance the repairs and improvements have been collected from the rate increase. Statements of qualified approval may be granted by the Board only when the Board finds that:

- (a) Water service and/or sewage service is below minimum acceptable standards either as to the quality of water and/or sewage treatment or the quality of service for same.
- (b) That an emergency exists as to the quality of water or water service available to the public or quality of sewage treatment or sewer service available to the public.
- (c) That a temporary rate increase may be required to remedy the immediate problem of inadequate quality or service or treatment.
- (d) That no other reasonable adequate means exists for improving the quality of service or the quality of water and/or sewage treatment.

The provisions of this Section requiring notice of hearing shall also be required for any utility applying under this emergency section. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-15. Plan approval required.

(1) *Intent*. It is the intent and purpose of this section to require that all new facilities, equipment and processes constructed or operated after the effective date of this chapter shall comply with the requirements herein contained, and that any major or substantial enlargement, expansion or addition to existing facilities also shall comply with the requirements herein contained. Any build-

ing permit issued by the County or a municipality in violation of the provisions of this chapter is hereby determined to be void.

(2) Waste water facilities. It shall be unlawful for any person to enter into or let a contract for or to commence the installation, extension, or operation of any sewerage system or waste treatment facility or any industrial waste disposal facility without first obtaining the prior written approval of the Director or the Director's designee. It shall be unlawful for any person to make any enlargement, alteration or addition to any facility, or commence the construction of any facility, that will reasonably be expected to be a source of water pollution without first obtaining the prior written approval of the Director or the Director's designee. No building permit involving the generation or discharge of effluents shall be issued by the County or any municipality unless the application for a building permit has been approved by the Director or the Director's designee.

The provisions of this section shall not apply to facilities discharging only domestic wastes to a public sewer system approved by the Director or the Director's designee. Notwithstanding the foregoing, the provisions of this section shall apply to facilities discharging only domestic wastes to a public sewer system approved by the Director or the Director's designee if the facilities provide any form of pretreatment in conjunction with a grease trap.

Provided that after January 25, 1974, the Director shall not approve an application for an interim package sewage treatment plant unless directed to do so by the Environmental Quality Control Board after a public hearing pursuant to notice.

For the purpose of this subsection, an interim package sewage treatment plant shall include all domestic waste water treatment facilities that are not included in the regional treatment system as described in the approved 1973 Water Quality Management Plan.

(3) Air facilities. It shall be unlawful for any person to make any major or substantial alteration, enlargement or addition to any existing facility, equipment or operation, or to commence

the construction or operation of any new facility, that may be a source of air pollution as herein defined, without first obtaining the prior written approval of the plans, equipment or processes thereof by the Director or the Director's designee. No building permit shall be issued by the County or any municipality unless the application therefor or the plans for construction of the proposed facility have been approved by the Director or the Director's designee. The provisions of this chapter shall not apply to individual family dwellings or multiple-family dwellings of not more than four (4) units in respect to heating equipment or comfort space heating.

- (4) Potable water facilities. It shall be unlawful for any person to enter into or let a contract for or to commence the installation, extension, alteration or operation of any public water supply facility without first obtaining the prior written approval of the Director. No building permit involving a demand on a public water supply shall be issued by the County or any municipality unless the application for a building permit or plans for construction thereof have been approved by the Director or the Director's designee.
- (5) Aboveground storage facilities. It shall be unlawful for any person to install, repair, modify, expand, replace or permit, cause, allow, let or suffer the installation, repair, modification, expansion or replacement of any aboveground storage facility, without first obtaining the prior written approval of the Director or the Director's designee. No building permit shall be issued by the County or any municipality unless the application therefor or the plans for construction of the proposed aboveground storage facility show the approval of the Director or the Director's designee.
- (6) Underground storage facilities. It shall be unlawful for any person to install, repair, modify, expand, replace or permit, cause, allow, let or suffer the installation, repair, modification, expansion or replacement of any underground storage facility, without first obtaining the prior written approval of the Director or the Director's designee. No building permit shall be issued by the County or any municipality unless the application or the plans for construction of the proposed

underground storage facility have been approved in writing by the Director or the Director's designee. The Director, or the Director's designee, shall issue such written approval only upon receipt of formal engineering plans, which are signed and sealed by a professional engineer registered in the State of Florida and which plans detail that the underground storage facilities specified in said plans shall be constructed in compliance with the requirements of this Chapter, Chapter 62-761 of the Florida Administrative Code and the referenced standards contained therein. After receipt of written approval from the Director, or the Director's designee, the owner or operator of the underground storage facility shall notify the Department a minimum of two (2) working days prior to the commencement of installation, repair, modification, expansion or replacement of any underground storage facility. The installation, repair, modification, expansion or replacement shall be subject to inspection by the Department to determine compliance with the approved plans and applicable laws and ordinances.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 05-196, § 2, 11-3-05; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-15.1. Procedure for approval of plans.

- (1) APPLICATION FOR APPROVAL. Application for approval of plans required hereunder shall be made on forms prescribed for such purpose and filed with the Director. Such application shall be signed by the person seeking to install, extend or alter the facility involved or a duly authorized representative vested with lawful power to bind the applicant. Upon receipt of such application and supporting data, the Director shall review all data and render a decision on the acceptability of the facility.
- (2) REQUIRED INFORMATION. Each such application shall be accompanied by the following data and information:
 - (a) Report of engineer. A comprehensive engineer's report describing the project, the basis of design including design data, and all other pertinent data necessary to give an accurate understanding of the work to be undertaken and the reason therefor. Such report shall contain a certificate of a registered engineer certifying

that in the professional opinion of such registered engineer the facility or project will fully comply with the requirements of this chapter and the rules and regulations promulgated hereunder, and will not cause or tend to cause any pollution as herein defined.

- (b) Blueprints. Blueprints or white prints of the drawings of the work to be done in sufficient detail necessary to make it clear to the contractor constructing the facility or project exactly what work is to be accomplished.
- (c) Specifications. Complete specifications in sufficient detail necessary to supplement the drawings and specify the work and the methods by which it is to be accomplished.
- (d) *Processes*. A description of all processes proposed to be utilized in connection with the operation of the facility or project sufficient to indicate whether or not such processes will reasonably comply with the requirements of this chapter.
- (e) Additional data. Such additional data and information as may be reasonably required by the Director or the Director's designee, including, but not limited to, Baseline Monitoring Reports, Compliance Reports, or any report required for compliance pursuant to the Federal Pretreatment Regulations.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-15.2. Registered engineer required.

The drawings, specifications and other data submitted with the application filed hereunder shall be prepared by a competent professional engineer or engineers registered under the provisions of Chapter 471, Florida Statutes. The plans and other data required to be submitted with the application shall have affixed thereto the names and certificate and registration number of the

engineer preparing the same. The Director shall not accept or receive any application that does not comply with the requirements of this section. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-15.3. Standards for preparation of plans.

- (1) Waste treatment works shall be designed in accordance with the sewerage guide promulgated by the Florida State Board of Health, or similar professional publication, recommended standards for sewage works and water pollution control federation manuals of practice numbered eight (8) and nine (9), as applicable to conditions prevailing within Miami-Dade County, and in accordance with good engineering practices.
- (2) Outfalls shall be extended or carried to the channel of a stream or to deep water where outlet is submerged at all times. The extent and length of the outfall shall conform to the requirements of the Director or the Director's designee. No outfall shall be approved unless satisfactory evidence is presented to establish that solids or other objectionable pollutants will not be deposited on the shore, and that other forms of pollution will not be caused.
- (3) Grease traps shall be provided and installed in accordance with the rules and regulations promulgated under the provisions of this chapter. At a minimum, all grease traps discharging to publicly or privately-owned or operated sanitary sewer collection systems shall be provided with a sampling point on the effluent discharge side of the grease trap. Wastes containing sizable quantities of grease such as those produced by restaurants shall not be deemed suitable for disposal into tile drainfields.
- (4) Drainage or disposal wells shall not be used for disposal of treated or untreated wastes except as approved by the Director or the Director's designee.
- (5) Air pollution facilities designed to control the emission of air contaminants to the atmosphere in accordance with the provisions of this chapter shall be designed in accordance with good engineering practice taking into consideration the

meteorological conditions prevailing within this County. Such facilities shall comply with the requirements of this chapter and rules and regulations promulgated under and pursuant to the provisions of this chapter.

- (6) Approval of plans for potable water supply facilities shall be dependent, in part, upon:
 - (a) Owner's program for protective measures to protect and prevent development of health hazards to the water supply.
 - (b) Protective measures for water quality throughout all parts of the system by frequent surveys, proper operation by personnel certified by the State of Florida.
 - (c) Adequate system capacity to meet peak demands without development of low pressures or other health hazards.
 - (d) Records of laboratory examinations showing consistent compliance with the water quality requirements of this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-15.4. Technical Reports/Professional Engineer/Professional Geologist required.

All applicable portions of the technical plans, reports, proposals or studies required as set forth in Section 24-44(2) shall be signed and sealed by a licensed professional engineer registered in the State of Florida or licensed professional geologist registered in the State of Florida. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-16. Construction of waste water facility or air pollution abatement facility, or potable water facility.

(1) After approval of an application, the person causing the installation or construction of the project or facility shall furnish the Director or the Director's designee with monthly reports of a registered engineer certifying that the work to date has been accomplished in strict compliance with the approved plans, drawings and specifications and that there has been no major or substantial deviation therefrom. If during construction, changes are proposed which would materially

alter the quality characteristics of the effluent of a waste water facility, or which would materially alter the emission of air pollutants of an air pollution abatement facility or would materially alter the quality characteristics of the effluent of a potable water facility, then plans and specifications for such changes prepared by a registered engineer shall be submitted to the Director or the Director's designee for approval before making such changes. The Director shall have the right at any reasonable time to enter upon the project for the purpose of making inspections of the work, and may require reports and additional information at any stage of construction.

(2) It shall be unlawful for any person causing the installation or construction of the project or facility to deviate from the conditions of the approval of the Director or the Director's designee without the prior written approval of the Director or the Director's designee.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-17. Certificate of occupancy.

No certificate of occupancy shall be issued by the County or any municipality for any facility or project subject to the provisions of this chapter, and no such facility or project shall commence operations, until the Director or the Director's designee certifies that the work has been completed in strict compliance with the approved plans and specifications, and that there is good cause to believe that the facility or project will operate in accordance with the provisions of this chapter and an operating permit has been obtained from the Director.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-18. Operating permits.

(A) Permit Required No person shall operate, maintain or permit, cause, allow, let or suffer the operation or maintenance of a public water system, public sewerage system, location at which a site rehabilitation action has been completed in accordance with the provisions set forth in Section 24-44(2)(k)(ii) or any of the following facilities, all of which will reasonably be expected to be

a source of air pollution, ground pollution or water pollution, without a valid operating permit issued by the Director or the Director's designee or in violation of any condition, limitation or restriction which is part of an operating permit:

- (1) Interim package sewage treatment plants;
- (2) Interim package water treatment plants;
- (3) Private sewage pumping station;
- 4) Facilities which generate, dispose of, store, use, discharge, handle or reclaim any liquid waste other than domestic sewage, any hazardous waste or any hazardous material (except factory prepackaged products intended primarily for domestic use or consumption), including, but not limited to, the following:
 - (a) Industrial and agricultural waste reclaim systems; waste or product holding tanks; or waste or product spill prevention control systems;
 - (b) Industrial and agricultural waste pretreatment facilities;
 - (c) Industrial and agricultural waste treatment facilities;
 - (d) The following industrial and agricultural liquid waste facilities:
 - (i) Aircraft, vehicle, construction equipment, and boat mechanical maintenance or repair facilities including, but not limited to, engine and electric motor maintenance and repair, and facilities which perform maintenance or repair of any component parts of aircraft, vehicles, boats, or construction equipment;
 - (ii) Chemical manufacturing, packaging, repackaging, storage, or distribution facilities;
 - (iii) Pest control facilities;
 - (iv) Photographic processing facilities or laboratories;
 - (v) Printing facilities;

- (vi) Paint manufacturing, distribution, and product testing; paint research laboratory facilities;
- (vii) Battery manufacturing; battery reclaiming facilities; battery refurbishing facilities;
- (viii) Hospitals;
- (ix) Medical, research or chemical laboratories;
- (x) Animal hospitals; animal clinics, and animal grooming facilities;
- (xi) Plastics manufacturing facilities;
- (xii) Anodizing facilities;
- (xiii) Silk screening and silk printing facilities;
- (xiv) Junk yards;
- (xv) Jewelry manufacturing and repair facilities;
- (xvi) Machine shops;
- (xvii) Construction contractor's facilities handling hazardous materials;
- (xviii) Funeral homes;
- (xix) Agricultural field packing facilities;
- (xx) Stationary agricultural packinghouses;
- (xxi) Aerial pesticide applicators (crop-dusters);
- (xxii) Dry cleaning facilities;
- (xxiii) Textile dyeing facilities;
- (xxiv) Vehicle paint and body shops;
- (xxv) Metal recycling facilities;
- (5) Notwithstanding any provision of this Code, nonresidential land uses which are served or will be served by a liquid waste storage, disposal or treatment method or those nonresidential land uses which use, generate, handle, dispose of, discharge or store hazardous materials, on any portion of the property within the Northwest Wellfield protection area or within the West Wellfield Interim protection area;

- Notwithstanding any provision of this Code, nonresidential land uses which are served or will be served by any liquid waste storage, disposal or treatment method (other than public sanitary sewers) or those nonresidential land uses which use, generate, handle, dispose of, discharge or store hazardous materials, on any portion of the property within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, Hialeah Wellfield or within the outer protection zone of the South Miami Heights Wellfield Complex;
- (7) Resource recovery and management facilities;
- (8) Facilities that will reasonably be expected to be a source of air pollution; provided, however, the operation of heating equipment or comfort space heating within individual facility dwellings or multiple family dwellings of not more than four (4) units is exempt from the requirement of obtaining a permit pursuant to this section;
- (9) All commercial boat docking facilities. Operating permits shall be required for all such facilities no later than May 17, 1990;
- (10) All boat storage facilities contiguous to the tidal waters of Miami-Dade County with a total of ten (10) or more dry storage spaces. Operating permits shall be required for all such facilities no later than May 17, 1990;
- (11) All recreational boat docking facilities with a total of ten (10) or more boat slips, moorings, davit spaces, and vessel tieup spaces. Operating permits shall be required for all such facilities no later than May 17, 1990;
- (12) Underground storage facilities;
- (13) Aboveground storage facilities;
- (14) Loading facilities;

- (15) Balanced systems utilized by motor vehicle fuel service stations;
- (16) Vacuum assist systems utilized by motor vehicle fuel service stations;
- (17) Any facility which sells or distributes or which offers to sell or distribute any refrigerant or which recharges or causes, lets, allows, permits, or suffers the recharging of refrigerant into any refrigeration system;
- (18) Any nonresidential facility, including, but not limited to, restaurants, bakeries, hotel and cafeteria kitchens, processing plants or such other nonresidential facilities discharging into a publicly or privately-owned or operated sanitary sewer collection system, if oil and grease can be introduced into a sewer by such nonresidential facility in quantities which have the potential to affect or hinder the operation of sewage collecting, transmission or treatment facilities.
- (19) Privately owned or operated sanitary sewer collection systems, except sanitary sewers which are less than six (6) inches in diameter.
- (20) Locations at which a site rehabilitation action has been completed in accordance with the provisions set forth in Section 24-44 (2)(k)(ii).

The criterion for issuance of an operating permit pursuant to this section is compliance with Chapter 24, Miami-Dade County Code. Additionally, no resource recovery and management facility permit shall be granted without the written recommendation of approval of the Director of the Department of Solid Waste Management issued pursuant to the provisions of Chapter 15, Miami-Dade County Code. At the discretion of the Director or the Director's designee, conditions, limitations or restrictions may be required as part of the operating permit if said conditions, limitations and restrictions are consistent with the requirements of this chapter.

The Director or the Director's designee may deny the issuance of an operating permit if the public water system, public sewerage system or pollution source does not comply with the provisions of this chapter.

The Director or the Director's designee may suspend or revoke an operating permit if the public water system, public sewerage system or pollution source does not comply with the provisions of this chapter.

Such operating permits shall not be required for the aforesaid facilities, systems, and plants existing on the effective date of this section until one hundred twenty (120) days from the effective date of this section.

This section shall not be immediately applicable to air pollution sources with valid air pollution control operating permits on the effective date of this section. However, said air pollution sources shall comply with this section by obtaining the operating permit required by this section no later than one hundred eighty (180) days from the effective date of this section.

Notwithstanding anything in this chapter to the contrary, such operating permits shall not be required for underground storage facilities until ninety (90) days from the effective date of this paragraph.

All applications for permits issued pursuant to this section shall be on a form prescribed by the Director and accompanied by a fee which shall be established by administrative order of the County Manager and approved by the Board of County Commissioners.

- (B) Disposition of Fees The permit fee payable hereunder shall be deposited in a separate County fund and shall be used exclusively by the Department to pay for the costs of the following environmental services to, and environmental regulation of, the aforesaid facilities, systems and plants:
 - (1) Monitoring and evaluating purification and disposal systems of said sources.
 - (2) Responding to and attempting to resolve citizen complaints against said sources.
 - (3) Investigation, preparation, and prosecution of enforcement actions, pursuant to

- Chapter 24 of this Code, to protect the groundwater, surface water, drinking water, and air quality.
- (4) Ambient monitoring of groundwater, surface water, and air quality.
- (5) Special studies of groundwater, drinking water, surface water, and air quality when deemed necessary by the Director to protect the groundwater, surface water, drinking water, and air quality.
- (6) Air quality and water supply protection, planning, and programming.
- (7) Laboratory analyses of groundwater, surface water, drinking water, waste water, ambient air, air emissions, and other effluents affecting air or water quality.
- (8) Restoration of the air, water, property, animal life, aquatic life, and plant life to their condition prior to any violation of this chapter.
- (9) Prevention of any imminent threat of any violation of this chapter.

No part of said fund shall be used for purposes other than the aforesaid.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 06-125, § 2, 9-12-06; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-19. Operation of facility; competent supervision.

(1) The owners or operators of each facility or project installed or constructed under the provisions of this chapter shall provide competent and responsible personnel for the operation thereof in order that the requirements of this chapter shall be observed and complied with in respect to the operation of such facility or project. Competent personnel shall be construed to mean a person or persons who have experience or knowledge concerning the proper operation of the particular facility involved, and a knowledge of the basic scientific principles relating to the proper operation of waste treatment plants and collection systems, or a knowledge of the basic scientific principles relating to the proper operation of facilities causing emissions of air contaminants from incineration, salvage, heat transfer, general

- combustion, or other operations of a similar nature, as the case may be. The names and qualifications of the supervisory personnel responsible for the proper operation of such facilities shall be furnished to the Director or the Director's designee upon request.
- (2) All sewage treatment plants shall be operated under the direct supervision of a qualified sewage treatment plant operator who must hold a minimum of a class "C" operator's license issued by the State of Florida and/or any higher level of certification as required by the State of Florida Department of Environmental Protection. All operation reports submitted pursuant to this chapter shall be signed by the licensed operator, which signature shall be a verification by said operator of the authenticity of said report.
- (3) All potable water treatment plants shall be operated under the direct supervision of a qualified water treatment plant operator who must hold a minimum of a class "C" operator's license issued by the State of Florida. In addition, all public water supplies which provide adequate protection by treatment for an effluent which exceeds ten (10) MGD shall be operated under the direct supervision of a qualified water treatment plant operator who must hold a minimum of a class "A" operator's license issued by the State of Florida. All operation reports submitted pursuant to this chapter shall be signed by the licensed operator, which signature shall be a verification by said operator of the authenticity of said report. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-20. Abnormal occurrences.

(1) Reports required. In the event of any breakdown or lack of proper functioning of any facility installed or operating under the provisions of this chapter, which causes or may cause improperly treated or untreated potable water or sewage or hazardous materials or industrial wastes to be discharged from the plant or facility, or which causes or may cause a nuisance or sanitary nuisance or the emission of air contaminants in excess of the quantity permitted by the provisions of this chapter, it shall be the duty of the owner or operator thereof to immediately notify the Director or the Director's designee and to take all actions necessary to prevent or minimize air, water or ground pollution. It shall be unlawful to fail to notify the Director or the Director's designee as required herein and said notification shall not be a defense to any civil liability imposed under the provisions of this chapter.

(2) Power to stop operation of facility. If in the judgment of the Director or the Director's designee, the abnormal operation of any facility, equipment, process, or plant is causing or will cause air, water or ground pollution to such extent as to be or become dangerous to the public health, safety or welfare, the Director or the Director's designee may require such corrective measures as may be necessary for the protection of the public on an emergency basis, and the Director or the Director's designee shall have the power and authority to cause all operation(s) of the facility, equipment, process or plant to cease until appropriate corrective measures have been taken by issuing an order to the owner or operator thereof directing the cessation of the operation(s) or by ordering the utility providing water service to the facility or plant to cease providing such service. If the cessation of the operation(s) of any sewage treatment plant would cause greater danger to the public than that caused by the continued operation(s) thereof, the Director or the Director's designee, shall not order such cessation, but shall order that steps be taken immediately to rectify the dangerous condition. Any person polluting the ground or waters of the County shall, within the earliest practicable time, correct the violations caused by the pollution and restore said ground or waters in accordance with the provisions of this chapter. If such person fails to make said restoration, the Director may seek an injunction in a court having jurisdiction to compel said person to perform such restoration. In the alternative and at his election, if restoration is not effected, the Director may restore the ground or waters and shall be reimbursed by the persons causing the pollution for the actual costs of investigation, restoration and prevention. The Director shall institute suit to enforce such reimbursement if it is not made within ten (10) days from demand therefor.

- (3) Permissible operations. Discharges or emissions exceeding any of the limits established in this chapter as a direct result of upset conditions in or breakdown of any pollution control equipment or related operating equipment, or as a direct result of the shutdown of such equipment for scheduled maintenance, shall not be deemed to be in violation of the rules establishing such limits, provided that such occurrence shall have been reported to the Director or the Director's designee, as soon as reasonably possible; for scheduled maintenance such report shall be submitted at least twenty-four (24) hours prior to shutdown, and for upset conditions or breakdown such report shall in any case be made within four (4) hours of the occurrence; and provided that the person responsible for such discharge or emission shall, with all practicable speed, initiate and complete appropriate reasonable action to correct the conditions causing such discharge or emission to exceed said limits; to reduce the frequency of occurrence of such conditions; to minimize the amount by which said limits are exceeded; and to reduce the length of time for which said limits are exceeded; and shall, upon request of the Director or the Director's designee, submit a full report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions taken; provided that the provisions of this subsection shall not be construed to permit any nuisance, sanitary nuisance, or any other conditions dangerous to the public health, safety, or welfare, or as imposing any limitation upon the powers of the Director prescribed in subsection (2) hereof.
- (4) *Emergencies*. Classification and procedure [for emergencies] are as follows:
 - (a) Class A—those emergencies which involve (i) the loss of human life, limb, or property due to natural calamitous occurrences such as, but not limited to, hurricanes, tornadoes, fires, floods, or high winds, and (ii) the breaks of dams or levees. No permit shall be required for temporary measures taken to correct or give relief from class A emergencies. Immediately after the occurrence of a class A emergency, the Department shall be notified of the emergency. Within fourteen

(14) calendar days after the correction of the emergency a report to the Department shall be made outlining the details of the emergency and the steps taken for its temporary relief. The report shall be a written description of all of the work performed involving dredge and fill activities and shall set forth any pollution measures which were utilized or are being utilized to prevent pollution of waters over submerged lands and/or coastal wetlands. A permit shall be required in connection with dredge and fill activities for permanent measures in relief of class A emergencies.

(b) Class B—other, non-natural disasters such as, but not limited to, bridge collapses, sudden and unpredictable structural collapses and failures, and sudden and unpredictable hazards to navigation, which do not threaten the immediate action for relief. No permit shall be required for temporary measures needed to correct or give relief from class B emergencies. Temporary measures shall be limited to only those minimum works required to protect against loss of life, limb, health or property or which immediately threaten plant and animal life. The Department shall be notified within fourteen (14) calendar days after completion of the temporary measures which have been taken. The report shall be a written description of all works which have been performed as well as pollution control measures utilized. A permit shall be required in connection with dredge and fill activities for permanent measures taken for relief of class B emergencies.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-21. Operating records.

The owner or operator of any facility installed or operating under the provisions of this chapter shall cause to be maintained and kept such records of the operation data and control tests as may be required by the Director to indicate the operating efficiency of such facility, and to show whether or not such facility is causing pollution as herein defined, and to furnish all such information and data concerning the operation of the facility as the Director may require from time to time.

In addition to the above, any industrial user, as defined in section 24-42.4(1)(c) of this Code, shall comply with the reporting and record keeping requirements set forth in 40 CFR 403.12, Federal Pretreatment Regulations.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-22. Circumvention unlawful.

It shall be unlawful for any person to build, erect, construct, install, design, or use any article, device, machine, equipment, process, or other contrivance, the use of which, without resulting in a reduction in the total discharge of contaminants in the water, or the total release or emission of air contaminants to the atmosphere, conceals a discharge or an emission which would otherwise constitute a violation of the provisions of this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-23. Information concerning processes shall be confidential.

Confidentiality of all submittals shall be in accordance with all applicable federal and state laws.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-24. Waiver of performance bonds.

Waiver of performance bonds. The Director of the Department may waive all requirements concerning posting of a performance bond by any governmental agency whenever the work is to be performed by employees of said agency, provided that, in lieu of the posting of a performance bond, said agency shall furnish the Department satisfactory written assurances that the work performed by its employees will comply fully with all requirements of the permit, and provided, further, that the Director of the Department may waive the posting of a performance bond by any private firm or corporation under contract with any governmental agency when said firm or corporation shall have posted a satisfactory and

acceptable bond with the said governmental agency, proof of such bond having been furnished by said agency to the Department.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

DIVISION 2. STATE AND FEDERAL ADOPTIONS

Sec. 24-25. Violations of rules and regulations of the State of Florida Department of Environmental Protection, Florida Department of Health, and the United States Environmental Protection Agency.

- (1) All of the following rules and regulations are hereby adopted and are incorporated herein by reference hereto as same may be amended from time to time:
 - (a) Chapter 62-160 of the Florida Administrative Code
 - (b) Chapter 62-550 of the Florida Administrative Code
 - (c) Chapter 62-713 of the Florida Administrative Code
 - (d) Chapter 62-761 of the Florida Administrative Code
 - (e) Chapter 64E-8 of the Florida Administrative Code
 - (f) Chapter 62-770 of the Florida Administrative Code
 - (g) Chapter 62-777 of the Florida Administrative Code
 - (h) Chapter 62-782 of the Florida Administrative Code
 - Chapter 62-785 of the Florida Administrative Code
- (2) The regulations of the United States Environmental Protection Agency as set forth in 40 C.F.R. 403 on the effective date of this ordinance are hereby adopted and are incorporated herein by reference hereto.

- (3) All rules and regulations promulgated by the State of Florida Department of Environmental Protection pursuant to provisions of Chapters 373, 403 and 253, Florida Statutes, as they may be amended from time to time, are hereby adopted and are made a part of this chapter by reference.
- (4) Any person who commits a violation of any rules and regulations adopted pursuant to this section shall be deemed guilty of committing a violation of this chapter. Violations of such rules and regulations shall constitute violations of this chapter triable in the court of appropriate jurisdiction.

Nothing herein shall be construed to prohibit Miami-Dade County from enacting ordinances stricter than the rules and regulations incorporated herein or to invalidate or supersede ordinances heretofore enacted by Miami-Dade County which are stricter than the rules and regulations incorporated herein. Notwithstanding the foregoing provision, nothing in Sections 24-42(2) and (4), 24-20(2), and 24-31(9) of this Code shall supersede Sections 24-25(1)(c), (f), (g), (h), and (i) with respect to cleanup target levels for contaminants found in groundwater, surface water, and soil for sites contaminated in whole or part with petroleum substances subject to Chapter 62-770, F.A.C., for sites contaminated in whole or in part with dry cleaning solvent substances subject to Chapter 62-782, F.A.C., and for sites governed in whole or in part by the terms of a brownfields site rehabilitation agreement pursuant to Chapter 62-785, F.A.C.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-26. Brownfields Redevelopment Act; sections adopted.

- (1) Sections 376.77, 376.78, 376.79, 376.80, 376.81, 376.82 and 376.83(1), Florida Statutes, and any rules and regulations promulgated thereunder by the Florida Department of Environmental Protection, as all of the foregoing laws, rules, and regulations may be amended from time to time, are hereby adopted and made a part of this chapter by reference hereto.
- (2) Any person entitled to liability protection pursuant to Section 376.82, Florida Statutes, shall be relieved of further liability, to the same extent

provided by Section 376.82, Florida Statutes, with respect to any enforcement action pursuant to Chapter 24 of the Code of Miami-Dade County, Florida.

- (3) Private Cause of Action for recovery of reasonable assessment or remediation costs pursuant to a Brownfields Site Rehabilitation Agreement.
 - (a) A private cause of action is hereby created for any person who undertakes the assessment or remediation of a brownfields site pursuant to a Brownfields Site Rehabilitation Agreement authorized by Section 376.80, Florida Statutes, and Section 24-26 of the Code of Miami-Dade County, Florida. Said person may recover reasonable assessment or remediation costs or both. Nothing herein shall be construed to require the Director to bring any such action on behalf of a private person or entity other than Miami-Dade County.
 - (b) The following persons, except for Miami-Dade County and any municipality in Miami-Dade County, shall be liable for all reasonable assessment and remediation costs incurred by any person at a brownfields site in accordance with a Brownfields Site Rehabilitation Agreement authorized by Section 376.80, Florida Statutes, and Section 24-26 of the Code of Miami-Dade County, Florida and subject only to the defenses set forth in Sections 24-26(4):
 - (i) The owner or operator of a brownfields site on the effective date of the Brownfields Site Rehabilitation Agreement;
 - (ii) Any person who, at the time of disposal of any hazardous substances or petroleum product, owned or operated a brownfields site at which such hazardous substance or petroleum product was disposed of;
 - (iii) Any person who, by contract agreement, or otherwise, arranges for disposal or treatment, or arranges with a transporter for transportation or disposal or treatment, of a hazard-

- ous substance or petroleum product owned or possessed by such person or by any other party or entity at a brownfields site;
- (iv) Any person who accepts or has accepted any hazardous substance or petroleum product for transportation or disposal or treatment at a brownfields site; or
- (v) Any person who has caused, let, suffered, permitted, or allowed to be caused, let, suffered, or permitted, any nuisance or sanitary nuisance at a brownfields site.
- (4) In any private cause of action brought pursuant to this subsection to recover reasonable assessment or remediation costs or both, it shall not be necessary to plead and prove negligence. It shall only be necessary to plead and prove the existence of a Brownfields Site Rehabilitation Agreement, that a release or discharge of a hazardous substance or petroleum product has occurred at the brownfields site which is the subject of said Brownfields Site Rehabilitation Agreement, and that reasonable assessment or remediation costs, or both, have been incurred by the person filing the action in accordance with the Brownfields Site Rehabilitation Agreement. The only defenses to such a private cause of action shall be those specified in Sections 376.308, 376.3078, and 376.82(4), Florida Statutes.
- (5) In any private cause of action brought pursuant to this subsection, the prevailing, party shall be entitled to recover reasonable attorney fees, expert witness fees and expenses, and costs.
- (6) This subsection shall be liberally construed and shall be retroactively applied to protect the public health, safety, and welfare and to accomplish the purposes of this Section.
- (7) For the purposes of this subsection the terms "disposal," "release," and "hazardous substance" shall have the same meaning as those terms are defined in the Comprehensive Response, Compensation, and Liability Act, 42 U.S.C. $\S~9601,$ et seq.
- (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

DIVISION 3. ENFORCEMENT

Sec. 24-27. Nuisance prohibited.

No person shall cause, or allow to be caused, any nuisance or sanitary nuisance as defined in Section 24-5 and/or 24-28 herein. In addition to all other remedies the Director may have, the Director is authorized to seek, in the appropriate court, injunctive relief, both of a temporary and permanent nature, against any person causing or allowing to be caused, any such nuisance. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-28. Nuisances injurious to health (sanitary nuisances).

- (1) The following conditions existing, permitted, maintained, kept or caused by any individual, municipal organization or corporation, governmental or private, shall constitute a sanitary nuisance:
 - (a) Untreated or improperly treated or disposed of human waste, garbage, offal, dead animals or dangerous waste materials.
 - (b) Improperly built or maintained septic tanks, water closets or privies.
 - (c) Discharging, or allowing the discharge of septic tank pump-out wastes into streams, or surface waters or underground aquifers or into ditches, drainage structures or on the ground surface.
 - (d) Supplying potable water without providing disinfection by a public water supply system.
 - (e) Air pollution which is harmful to human beings, animal life, or plant life.
 - (f) Water pollution which is harmful to human beings, animal life, or plant life.
 - (g) Ground pollution which is harmful to human beings, animal life, or plant life.
 - (h) Objectionable odors which are harmful to human beings or animal life.

(2) The Director or the Director's designee is authorized to investigate any condition or alleged nuisance in any place within the geographical limits of Miami-Dade County, and if such condition is determined to constitute a sanitary nuisance, the Director or the Director's designee shall serve notice upon the proper party or parties to remove, abate, or correct the said nuisance within twenty-four (24) hours or such other reasonable time as the Director or the Director's designee may determine.

It shall be the duty of said Director, Environmental Resources Management, to institute proceedings in the appropriate court against all persons failing to comply with notices to remove, abate or correct said nuisance conditions.

(3) It shall be unlawful for any person to cause, maintain or allow to be caused or maintained any sanitary nuisance as defined in Section 24-5 herein. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-29. Enforcement; procedure, remedies.

It shall be unlawful for any person to violate any of the provisions of this chapter, any lawful rules and regulations promulgated under this chapter, any lawful order of the Director or the Director's designee, or any condition, limitation or restriction which is part of an operating permit. It shall be the duty of all County and municipal officials and employees to enforce the provisions of this chapter. No building permit shall be issued for the installation of any improvements or facilities governed by the provisions of this chapter without the prior approval of the Director or the Director's designee. In addition to any other remedies provided by this chapter, the Director shall have the following judicial remedies available to the Director for violations of this chapter, any lawful rule or regulation promulgated under this chapter, any lawful order of the Director or the Director's designee, or any condition, limitation or restriction which is part of an operating permit:

(1) The Director may institute a civil action in a court of competent jurisdiction to establish liability and to recover damages for any injury to the air, waters, or prop-

erty, including animal, plant, and aquatic life, within the geographical limits of Miami-Dade County caused by such violation.

- (2) The Director may institute a civil action in a court of competent jurisdiction to impose and recover a civil penalty for each violation in an amount of not more than twenty-five thousand dollars (\$25,000.00) per offense. However, the court may receive evidence in mitigation. Each day during any portion of which such violation occurs constitutes a separate offense.
- (3)The Director may institute a civil action in a court of competent jurisdiction to seek injunctive relief to enforce compliance with or prohibit the violation of this chapter, any lawful rules or regulations promulgated under this chapter, any lawful order of the Director or the Director's designee, or any condition, limitation or restriction which is part of an operating permit; and to seek injunctive relief to prevent injury to the air, waters, and property, including animal, plant, and aquatic life within the geographical limits of Miami-Dade County, and to protect human health, safety, and welfare caused or threatened by any violation.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-30. Penalties generally.

If any person shall fail or refuse to obey or comply with, or violates any of the provisions of this chapter, or any lawful rule or regulation promulgated hereunder, or any lawful order of the Director or the Director's designee, or any condition, limitation or restriction which is part of an operating permit; issued or rendered under and pursuant to the provisions of this chapter, such person, upon conviction of such offense, shall be punished by a fine not to exceed five hundred dollars (\$500.00), or, in the case of a violation of Section 24-42.4 of this Code, by a fine not to exceed two thousand (\$2,000) per day, or by imprisonment in accordance with the penalties set forth in Section 125.69 of the Florida Statutes,

or by imprisonment not to exceed sixty (60) days in the County Jail, or both in the discretion of the court. Each day of continued violation shall be considered as a separate offense.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-31. Civil liability; joint and several liability; attorneys' fees.

- (1) Whoever commits a violation of this chapter or any lawful rule or regulation promulgated under this chapter is liable to Miami-Dade County for any damage caused to the air, ground, waters, or property, including animal, plant, or aquatic life, within the geographical limits of Miami-Dade County and for reasonable costs and expenses of Miami-Dade County in tracing the source of the discharge, in controlling and abating the source and the pollutants, and in restoring the air, waters, and property, including animal, plant, and aquatic life, within the geographical limits of Miami-Dade County in accordance with the provisions of this chapter, and furthermore is subject to the judicial imposition of a civil penalty for each offense in an amount of not more than twenty-five thousand dollars (\$25,000.00) per offense. Each day during any portion of which such violation occurs constitutes a separate offense. Nothing herein shall give the Director the right to bring an action on behalf of any private person.
- (2) Whenever two (2) or more persons pollute the air, ground or waters of the County in violation of this chapter or any lawful rule or regulation promulgated under this chapter or any order of the Director so that the damage is indivisible, each violator shall be jointly and severally liable for such damage and for the reasonable cost and expenses of the County incurred in tracing the source of the discharge, in controlling and abating the source and the pollutants, and in restoring the air, waters, ground and property, including the animal, plant and aquatic life of the County in accordance with the provisions of this chapter. However, if said damage is divisible and may be attributed to a particular violator or violators, each violator is liable only for that damage attributable to his violation.

- (3) In assessing damages for fish killed, the value of the fish is to be determined in accordance with a table of values for individual categories of fish which has been promulgated by the Florida Department of Environmental Protection.
- (4) All the judicial remedies in this chapter are independent and cumulative.
- (5) Each mangrove tree unlawfully trimmed, cut or altered shall constitute a separate violation of this chapter.
- (6) Whenever a violation of this chapter occurs or exists, or has occurred or existed, any person, individually or otherwise, who has a legal, beneficial, or equitable interest in the facility or instrumentality causing or contributing to the violation, or who has a legal, beneficial, or equitable interest in the real property upon which such violation occurs or exists, or has occurred or existed, shall be jointly and severally liable for said violation regardless of fault and regardless of knowledge of the violation. This provision shall be construed to impose joint and severable liability, regardless of fault and regardless of knowledge of the violation, upon all persons, individually or otherwise, who, although said persons may no longer have any such legal, beneficial or equitable interest in said facility or instrumentality or real property, did have such an interest at any time during which such violation existed or occurred or continued to exist or to occur. This provision shall be liberally construed and shall be retroactively applied to protect the public health, safety, and welfare and to accomplish the purposes of this chapter.
- (7) Any person violating any provision of this chapter shall immediately correct the violation and restore the air, water, ground and property, including but not limited to animal, plant, and aquatic life, affected by said violation in accordance with the provisions of this chapter.
- (8) Owners of real property shall be liable for the sums expended by the County pursuant to Section 24-7(27) when the violation of this chapter occurred or continued to exist or appeared imminent upon the real property aforesaid, regardless of fault and regardless of knowledge of the aforesaid violation. All sums expended by the

- County pursuant to Section 24-7(27) of this Code shall constitute and are hereby imposed as special assessments against the real property aforesaid, and until fully paid and discharged or barred by law, shall remain liens equal in rank and dignity with the lien of County ad valorem taxes and superior in rank and dignity to all other liens, encumbrances, titles and claims in, to or against the real property involved. All such sums shall become immediately due and owing to the County upon expenditure by the County and shall become delinquent if not fully paid within sixty (60) days after the due date. All such delinquent sums shall bear a penalty of fifteen (15) percent per annum. Unpaid and delinquent sums, together with all penalties imposed thereon, shall remain and constitute special assessment liens against the real property involved for the period of five (5) years from due date thereof. Said special assessment liens may be enforced by the Director by any of the methods provided in Chapter 85, Florida Statutes, or, in the alternative, foreclosure proceedings may be instituted and prosecuted by the Director pursuant to the provisions of Chapter 173. Florida Statutes, or the collection and enforcement of payment thereof may be accomplished by any other method provided by law. All sums recovered by the County pursuant to this provision shall be deposited by the County into the fund from which said sums were expended.
- (9) Upon the rendition of a judgment or decree by any of the courts of this state against any person and in favor of the Director under any of the provisions of this chapter, the trial court, or, in the event of an appeal in which the Director prevails, the appellate court shall adjudge or decree against said person and in favor of the Director a reasonable sum as fees or compensation for the Director's attorney prosecuting the suit in which the recovery is had. Where so awarded, compensation or fees of the attorney shall be included in the judgment or decree rendered in the case. This provision shall apply to all civil actions, legal or equitable, filed after the effective date of this ordinance by the Director pursuant to this chapter. Cessation of a nuisance, sanitary nuisance or of any other violation of any of the provisions of this chapter whatsoever, prior to rendition of a judgment or of a temporary or

final decree, or prior to execution of a negotiated settlement, but after an action is filed by the Director under any of the provisions of this chapter, shall be deemed the functional equivalent of a confession of judgment or verdict in favor of the Director for which attorneys' fees shall be awarded by the trial court as set forth hereinabove.

(10) Each tree that is not exempt under this chapter and is unlawfully effectively destroyed or removed shall constitute a separate violation of this chapter for which liability shall attach in accordance with the provisions of Section 24-31 and Section 24-49(4), (5), and (6). In addition, the owner and operator of any motor vehicle that destroys or effectively destroys any nonexempt tree due to its negligent operation shall be jointly liable for the replacement cost. Trees destroyed or effectively destroyed by an Act of God shall not constitute a violation of this chapter.

(11) In assessing damages for tree(s) or understory unlawfully removed, the value of the tree(s) or understory shall be based upon the cost of the tree(s) or understory and all costs associated with planting. At a minimum, the value of the tree(s) or understory, including the cost of planting, shall be two (2) times the current wholesale price of the tree(s) or understory based upon the largest available size or actual size of the tree(s) or understory removed, whichever is smaller, as set forth in recognized nursery publications.

(12) Whenever a mangrove tree is unlawfully trimmed, cut or altered, any person who authorized, permitted, suffered, or allowed said violation or whose agent, employee, servant, or independent contractor caused or contributed to the violation or who has a legal, beneficial or equitable interest in the real property upon which such violation occurs or exists, shall be jointly and severally liable for said violation regardless of fault and regardless of knowledge of the violation. This provision shall be construed to impose joint and several liability, regardless of fault and regardless of knowledge of the violation, upon all persons, individually or otherwise, who, although said persons may no longer have a legal, beneficial or equitable interest in said real property or may no longer have a relationship with such agent, employee, servant or independent contrac-

tor, did have such an interest or relationship at any time during which such violation existed or occurred or continued to exist or occur. This provision shall be liberally construed and shall be retroactively applied to protect the mangrove tree resources of Miami-Dade County and to accomplish the purposes of this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

DIVISION 4. TRUSTS AND FEES

Sec. 24-32. Collection of fees.

The Miami-Dade County Department of Environmental Resources Management shall charge and collect fees at the rates established by separate administrative order, which shall not become effective until approved by the Board of County Commissioners. To preclude duplication of collection responsibility, fees to be collected for services of the Public Works Department and the Department of Environmental Resources Management for one (1) and the same project may be jointly collected if and as designated within the administrative order.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-33. Refund of fees.

If a person, firm or corporation to whom a permit has been issued decides to cancel the work for which a permit fee has been collected by the Department of Environmental Resources Management, the person, firm or corporation shall be entitled to a refund. Refunds for permit fees previously collected shall be made by the Finance Department, but must be requested prior to the beginning of any work and no later than the date on which the permit expires. No refunds shall be made on permit fees of ten dollars (\$10.00) or less. In lieu of a refund, a credit for the amount of the permit fee in excess of the ten dollars (\$10.00) may be given to the person, firm, or corporation which may be applied to the charge for a subsequent permit of equal or greater amount.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-34. Service fee payable to County.

Each water or sewer utility shall collect from its customers and pay to the County a County service fee equal to seven dollars and fifty cents (\$7.50) per each one hundred dollars (\$100.00) of the receipts of said utility derived from its water and/or sewer utility operations conducted within the County to cover the cost of providing certain environmental services to and certain environmental regulation of said water or sewer utilities. Receipts from bulk water and sewerage service to other water or sewer utilities shall be excluded from the imposition of the County service fee provided for herein. Said service fee shall be due and payable to the County annually and shall be based upon receipts from water and/or sewerage service for the period from the first of October through the thirtieth of September of the following year. The fee shall be paid to Miami-Dade County no later than the first of December of each year for the period ending September 30 of that year. The first such period shall be October 1, 1980, through September 30, 1981, and the first fee payment shall be paid to the County on or before December 1, 1981. Failure to pay said service fee to the County on or before each December 1 shall obligate the utility to pay to the County a late charge. Said late charge shall be one and one-half (11/2) percent of the unpaid balance of the fee for each month or part of each month that the fee remains unpaid.

Each water and sewer utility shall collect from its customers the service fee imposed upon said utility by this section, including but not limited to those utilities whose rates are not regulated by the Miami-Dade County Water and Sewer Board. Said County service fee imposed by this section shall be deemed a pass-through cost as defined by Section 32-64(b)(3) of the Code of Miami-Dade County, but no hearing shall be required of any water and sewer utility before the Miami-Dade County Water and Sewer Board, nor shall the approval of the Miami-Dade County Water and Sewer Board be necessary for the imposition of this fee by the utility upon its customers. Approval of this provision by the County Commission shall constitute approval of the necessary rate increase for the Miami-Dade Water and Sewer Department pursuant to Chapter 32A.

Payment of the fee to the County shall be accompanied by a statement verified by the utility showing its receipts upon which such fee is computed. This statement shall be in such form as the Director shall prescribe and shall be subject to audit by the County.

The service fee payable hereunder shall be deposited in a separate County fund and shall be used exclusively by the Department to pay for the costs of the following environmental services to and environmental regulation of said water and sewer utilities:

- Monitoring and evaluating water and sewerage systems of said water and sewer utilities.
- (2) Responding to and attempting to resolve citizen complaints against said water and sewer utilities.
- (3) Investigation, preparation, and prosecution of enforcement actions, pursuant to Chapter 24 of this Code, to protect the groundwater, surface water and drinking water.
- (4) Ambient monitoring of groundwater and surface water.
- (5) Special studies of groundwater, drinking water, and surface water when deemed necessary by the Director to protect the groundwater, surface water and drinking water.
- (6) Water supply protection, planning and programming, including without limitation, municipal solid waste landfill closure, environmental remediation at landfill sites, and land acquisition for purposes of water supply protection.
- (7) Laboratory analyses of groundwater, surface water, drinking water, waste water, and other effluents affecting water quality.

No part of said fund shall be used for purposes other than the aforesaid.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-35. Separate County enforcement fund.

The following sums recoverable by the County shall be deposited in a separate County fund:

- (1) The compensatory and punitive damages recoverable by the County pursuant to Section 24-29(1) of the Code of Miami-Dade County.
- (2) The civil penalties recoverable by the County pursuant to Section 24-31(2) of the Code of Miami-Dade County.
- (3) The compensatory damages, punitive damages, costs, expenses and civil penalties recoverable by the County pursuant to Section 24-31(1) of the Code of Miami-Dade County.
- (4) The sums recoverable by the County pursuant to Section 24-31(2) of the Code of Miami-Dade County.
- (5) The sums recoverable by the County as reimbursement pursuant to Section 24-20(2) of the Code of Miami-Dade County.
- (6) Notwithstanding subsections (1) through (5) hereinabove, any sums recoverable by the County pursuant to any of the foregoing provisions of Chapter 24 of the Code of Miami-Dade County which qualify for deposit in the Biscayne Bay Environmental Enhancement Trust Fund shall be deposited in said Biscayne Bay Environmental Enhancement Trust Fund.
- (7) Notwithstanding subsections Sections 24-35(1) through (6) hereinabove, any sums recoverable by the County pursuant to any of the foregoing provisions of Chapter 24 of the Code of Miami-Dade County which qualify for deposit in the Tree Trust Fund shall be deposited in said Tree Trust

This fund may only be used to pay for the following:

- (a) Tracing, controlling and abating of air pollution, water pollution, nuisances and sanitary nuisances in the County.
- (b) Enforcement of this chapter.

- (c) Restoration of the air, waters, property, animal life, aquatic life, and plant life of the County to their former condition.
- (8)Reimbursement of sums given to the County by the State of Florida or the United States of America, or both, as reimbursement for expenditures by the County to trace, control and abate air pollution, water pollution, nuisances and sanitary nuisances in the County and to restore the air, waters, property, animal life, aquatic life and plant life of the County to their former condition. Said reimbursement to the State of Florida or the United States of America, or both, from this fund shall not in any case exceed the amount of monies actually recovered and collected by the County from the persons liable for the particular air pollution, water pollution, nuisances and sanitary nuisances and furthermore shall not include any monies recovered by the County from said persons liable as compensatory damages, punitive damages or civil penalties. Said reimbursement of sums by the County to the State of Florida or the United States of America, or both, shall be upon such terms and conditions deemed appropriate and approved by the Board of County Commissioners.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-36. Pollution Prevention Trust Fund.

- (1) The Pollution Prevention Trust Fund is created for use in developing, promoting and conducting environmental workshops, expositions, symposia, conferences and other forms of public information for the purpose of educating industry, government and the public about pollution prevention. The Finance Director is hereby authorized and directed to establish the Pollution Prevention Trust Fund and to receive and disburse monies in accordance with the provisions of this section.
- (2) The Pollution Prevention Trust Fund shall receive monies from the following sources:
 - (a) All revenues or fees collected by the Department from exhibitors, attendees, and sponsors participating in a pollution prevention event.

- (b) All monies accepted by Miami-Dade County in the form of federal, state, or other governmental grants, allocations, or appropriations, as well as foundation or private grants and donations, for the conducting of pollution prevention environmental education workshops, expositions, symposia, conferences and other forms of public information.
- (c) Such additional allocations as may be made by the Board of County Commissioners from time to time for the purposes set forth herein.
- (d) All interest generated from the sources identified in Section 24-36(2)(a), (b) and
 (c) hereinabove, except where monies received have been otherwise designated or restricted.
- (3) The Pollution Prevention Trust Fund shall be maintained in trust by the Finance Director for the Board of County Commissioners solely for the purposes set forth herein, in a separate and segregated fund of the County which shall not be commingled with other County funds until disbursed for an authorized purpose pursuant to Section 24-36(4).
- (4) The procurement of goods and services by the Department which are funded from the Pollution Prevention Trust Fund, shall be exempt from the formal bidding procedures and the provisions of Miami-Dade County Administrative Orders 3-2 and 3-4. Disbursements therefor shall not exceed twenty-five thousand dollars (\$25,000.00) per vendor, per event and shall only be made for the following purposes:
 - (a) Development, promotion and conducting of aforementioned Pollution Prevention educational activities as approved by the Director or the Director's designee.
 - (b) Costs associated with said educational activities including, but not limited to, facility rental, equipment rental, professional and trade labor services, speakers' services, travel expenses, printing and mailing expenses, insurance, administrative costs, and any other goods or services necessary.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-37. Wetlands Trust Fund.

- (1) The Wetlands Trust Fund is created for use in acquiring, restoring, enhancing, managing or monitoring (or any combination of the above) wetlands within Miami-Dade County as well as any associated hammock and pineland communities. Monies also may be disbursed for such purposes for wetlands located outside of Miami-Dade County so long as they benefit wetland ecosystems in Miami-Dade County. The Finance Director is hereby authorized and directed to establish the Wetlands Trust Fund and to receive and disburse monies in accordance with the provisions of this section.
- (2) The Wetlands Trust Fund shall receive monies from the following sources:
 - (a) All revenues collected by the Department pursuant to Section 24-48.5(2)(e).
 - (b) All monies accepted by Miami-Dade County in the form of federal, state, or other governmental grants, allocations, or appropriations, as well as foundation or private grants and donations, for the acquisition, restoration, enhancement, management or monitoring of wetlands as provided for in Section 24-37(4).
 - (c) Such additional allocations as may be made by the Board of County Commissioners from time to time for the purposes set forth herein.
 - (d) All interest generated from the sources identified in Section 24-37(2)(a), (b) and (c) hereinabove, except where monies received have been otherwise designated or restricted.
- (3) The Wetlands Trust Fund shall be maintained in trust by the Finance Director for the Board of County Commissioners solely for the purposes set forth herein, in a separate and segregated fund of the County which shall not be commingled with other County funds until disbursed for an authorized purpose pursuant to Section 24-37(4).

- (4) Disbursements from the Wetlands Trust Fund shall only be made for the following purposes:
 - (a) Acquisition, including by eminent domain, restoration, enhancement, management or monitoring of wetland properties located within Miami-Dade County.
 - (b) All costs associated with each such acquisition including, but not limited to, appraisals, surveys, title search work, real property taxes, documentary stamps and surtax fees, and other transaction costs.
 - (c) Costs of administering the activities enumerated in Section 24-37(4)(a) and (b), hereinabove, will be funded from the proceeds of the Wetlands Trust Fund until such time as the fund is closed.
- (5) Disbursements from the Wetlands Trust Fund for the acquisition of eligible properties shall require approval by the Board of County Commissioners after a public hearing on the proposed acquisition. A notice of the time and place of said public hearing shall be published in a newspaper of general circulation in Miami-Dade County a minimum of seven (7) days prior to the public hearing. Said notice shall include the location and a brief statement of the reason for the proposed acquisition.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-38. Miami-Dade Stormwater Compensation Trust Fund.

- (1) The Stormwater Compensation Trust Fund is hereby created for use in land acquisition and constructing, managing, operating or maintaining stormwater management areas within the Bird Drive Everglades Wetland Basin, and Basin B and the North Trail Basin. The Finance Director is hereby authorized and directed to establish the Stormwater Compensation Trust Fund and to receive and disburse monies in accordance with the provisions of this section.
- (2) The Stormwater Compensation Trust Fund shall receive monies from the following sources:
 - (a) All revenues collected by the Department pursuant to Section 24-48.2(I)(B)(1)(h) of the Code of Miami-Dade County, Florida.

- (b) All monies accepted by Miami-Dade County in the form of federal, state, or other governmental grants, allocations, or appropriations, as well as foundation or private grants and donations that are made for the purposes of acquiring land or constructing, managing, operating or maintaining stormwater management areas.
- (c) Such additional allocations as may be made by the Board of County Commissioners from time to time for the purposes set forth in this section.
- (d) All interest generated from the sources identified in Section 24-38(2)(a), (b) and
 (c) of the Code of Miami-Dade County, Florida, except where monies received have been otherwise designated or restricted.
- (3) The Stormwater Compensation Trust Fund shall be maintained by the Finance Director for the Board of County Commissioners solely for the purposes set forth herein, in a separate fund of Miami-Dade County, which shall not be commingled with other county funds until disbursed for an authorized purpose pursuant to Section 24-38(4) of the Code of Miami-Dade County, Florida.
- (4) The Director shall only make disbursement from the Stormwater Compensation Trust Fund for the following purposes:
 - (a) Acquisition, including by eminent domain, construction, management, operation or maintenance of stormwater management areas within the Bird Drive Everglades Wetland Basin, the North Trail Basin and Basin B as defined in Section 24-5 of the Code of Miami-Dade County, Florida.
 - (b) All costs associated with each such acquisition including, but not limited to, appraisals, surveys, title search work, real property taxes, documentary stamps and surtax fees, and other transaction costs.
 - (c) Costs of administering the activities enumerated in Section 24-38(4)(a) and (b) of the Code of Miami-Dade County, Florida, shall be funded from the Stormwater Compensation Trust Fund.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-39. Tree Trust Fund and Tree Forest Resources Advisory Committee.

- (1) *Creation of the Tree Trust Fund.* There is hereby created a Tree Trust Fund, the purpose of which is to acquire, protect and maintain natural forest communities in Miami-Dade County and to plant trees on public property.
- (2) Creation of the Tree and Forest Resources Advisory Committee. The Tree and Forest Resources Advisory Committee is hereby established for the purpose of providing the Board of County Commissioners with recommendations regarding the Tree Trust Fund, and recommendations to the Director regarding the establishment of Departmental policies relating to Ordinance Number 89-8.
 - Composition and qualifications of members. The Committee shall be composed of thirteen (13) members which shall be appointed by the Board of County Commissioners. The Director or the Director's designee shall submit recommendations for appointments to the Miami-Dade County Manager. Members of the Committee shall be residents of Miami-Dade County who possess outstanding reputations for civic pride, interest, integrity, responsibility, and business or professional ability. Appointments shall be made by the County Commission on the basis of experience or interest in the fields of conservation, botany, horticulture, landscape architecture, agriculture, land use, land planning, or land development. The Director or the Director's designee shall serve as executive secretary to the Committee. The process of appointment and other requirements of Ordinance 80-136 (Chapter 2, Article I B, Sections 2-11.36 through 2-11.40 of this Code) shall be followed.
 - (b) Terms of office and organization. In order that the terms of office of all appointed members of the Committee shall not expire at the same time, the initial appointments to the Committee shall be as follows: seven (7) members shall be appointed for a term of one (1) year, and six (6)

- members shall be appointed for a term of two (2) years. Thereafter, all members shall be appointed for a term of two (2) years. Appointments to fill any vacancy on the Committee shall be for the remainder of the unexpired term of office. The members of the Committee shall elect a chairman and such other officers as may be deemed necessary or desirable, who shall serve at the will of the Committee. Appointed members shall serve without compensation but shall be reimbursed for necessary expenses incurred in the performance of their official duties, in accordance with County policy, upon approval of the County Manager. A majority vote of a quorum shall be necessary to take any action. Seven (7) members shall constitute a quorum.
- Meetings and authority. The Committee shall hold a minimum of one (1) publiclyadvertised meeting per year. The Committee shall have the authority to make recommendations to the Board of County Commissioners concerning any matter relating to the tree trust fund. The Committee shall also have the authority to make recommendations to the Director regarding Departmental policies relating to Ordinance Number 89-8, and shall review and approve the quantitative evaluation form which the Department shall use for evaluating natural forest communities. In addition, upon request, the Committee shall have the authority to make recommendations to the Environmental Quality Control Board concerning variance requests made pursuant to this Ordinance Number 89-8, natural forest community site additions or deletions, and natural forest community boundary line modifications being proposed by the Director or the Director's designee.
- (3) Disbursement and maintenance of the Tree Trust Fund. Monies obtained for the Tree Trust Fund shall be disbursed for the acquisition, maintenance, management and protection of natural forest communities, or for planting trees on public property. Such monies may be used as a matching

fund contribution towards the acquisition of natural forest communities in Miami-Dade County in association with other public land acquisition programs, such as, but not limited to, the State of Florida Conservation and Recreational Lands Trust Fund. Said trust fund shall be kept and maintained in trust by the Board of County Commissioners solely for the purposes set forth in this section in a separate and segregated fund of the County which shall not be commingled with other County funds until disbursed for an authorized purpose pursuant to this section. Disbursement from the tree trust fund shall require approval by resolution of the Board of County Commissioners, provided, however, that any funds received pursuant to the conditions of any tree removal permit shall be used as required by the permit conditions without the necessity of approval, appropriation, or action of any kind by the Board of County Commissioners. Prior to approving disbursements, the Board of County Commissioners shall consider the recommendations of the County Manager and the Tree and Forest Resources Advisory Committee. The County Manager, prior to making any such recommendations, shall consider the recommendations of the Department pertaining to the proposed disbursement(s) for the acquisition of natural forest communities or planting of trees on public property. The Finance Director is hereby authorized to establish the Tree Trust Fund and to receive and disburse monies in accordance with the provisions of this section.

- (4) Source of monies for the Tree Trust Fund. Said Tree Trust Fund shall consist of the following monies:
 - (a) All monies collected by the Department for environmental damages to tree or forest resources and environmental mitigation for the loss of tree or forest resources which are obtained through civil lawsuits, consent agreements or after-the-fact tree removal permits, except penalties and administrative costs.
 - (b) All monies offered to and accepted by Miami-Dade County for the Tree Trust Fund in the form of federal, State, or other governmental grants, allocations or appropriations, as well as foundation or private grants and donations, shall be

- disbursed strictly in accordance with terms and conditions of the grant, allocation, appropriation or donation and shall be earmarked accordingly.
- (c) Contributions in lieu of, or in conjunction with, the replacement planting provisions of Section 24-49.4(2). The Department shall collect funds designated for the Tree Trust Fund when the replacement planting requirements of Section 24-49.4(2) cannot be met, and in accordance with Section 24-49.2(II)(5).
- (5) *Interest*. Unless otherwise restricted by the terms and conditions of a particular grant, gift, appropriation or allocation, all interest earned by the investment of all monies in the Tree Trust Fund shall be disbursed by resolution of the Board of County Commissioners for any project authorized consistent with Section 24-39. Trust fund monies shall be invested only in accordance with the laws pertaining to the investment of County funds.
- (6) Decisions to grant or deny tree removal permits shall be made without consideration of the existence of this fund or offers of donations of monies thereto.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-40. Biscayne Bay Environmental Enhancement Trust Fund.

There is hereby created a Biscayne Bay Environmental Enhancement Trust Fund, the monies of which shall be disbursed only for the environmental enhancement of Biscayne Bay and its foreshore, consistent with the objectives adopted by this Board by Resolution R-1610-79, as may be amended from time to time; the prioritized list of projects adopted by this Board by Resolution R-1609-79, as may be amended from time to time; and with the forthcoming comprehensive Biscayne Bay management plan.

(1) Definitions:

(a) *Excess monies* shall be defined as those monies which are necessary to enhance the particular area(s) of Biscayne Bay and the foreshore en-

- vironmentally damaged or degraded, and which remain in the trust fund after all monies from a particular action, claim, assessment, grant, appropriation, allocation, permit condition or donation have been disbursed.
- Environmental enhancement shall be defined as restoration or improvement of natural and indigenous habitats within Biscayne Bay or its foreshore through the establishment, restoration or improvement of biological communities in order to increase the net habitat value of the bay. Environmental enhancement may also be defined as those alterations in hydrodynamics, water and sedimentary chemistry that may be necessary to establish or reestablish natindigenous communities within Biscayne Bay or its foreshore. Further, it is presumed that those enhancement activities contemplated by the forthcoming comprehensive Biscayne Bay management plan, the prioritized list of projects (except studies) as adopted by Resolution R-1609-79, as may be amended from time to time; and those projects consistent with the objectives adopted by Resolution R-1610-79, as may be amended from time to time: are for the environmental enhancement of Biscayne Bay and its foreshore and qualify for funding from this trust fund.
- (c) *Mitigation* includes any of the following:
 - (i) Avoiding the impact altogether by not taking a certain action or parts of an action;
 - (ii) Minimizing impacts by limiting the degree or magnitude of the action or its implementation;
 - (iii) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

- (iv) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
- (v) Compensating for the impact by replacing or providing substitute resources or environments.
- (2) Said trust fund shall be kept and maintained in trust by the Board of County Commissioners for the purposes set forth in this section in a separate and segregated fund of the County which shall not be commingled with other County funds until disbursed for an authorized purpose pursuant to this section.
- (3) Said trust fund shall consist of the following monies and shall be disbursed in accordance with the following requirements:
 - (a) All monies available to or recovered by the County from enforcement and damage actions and claims against persons who have environmentally damaged or degraded Biscayne Bay and its foreshore:
 - (i) Such monies shall be first disbursed for the environmental enhancement of the particular area(s) of Biscayne Bay and its foreshore damaged or degraded unless enhancement in the particular area(s) is clearly shown to be not possible. In the event of the latter, such monies shall be disbursed for environmental enhancement of other area(s) of Biscayne Bay and its foreshore.
 - (ii) Any excess monies derived from such enforcement and damage actions and claims may be disbursed for environmental enhancement of other areas of Biscayne Bay and its foreshore as authorized and approved by resolution of the Board of County Commissioners.

- (b) All monies available to and received by Miami-Dade County from environmental mitigation assessments from all private persons and all governmental bodies, units, agencies, authorities and departments, including, but not limited to, Miami-Dade County, for environmental damage or degradation to Biscayne Bay and its foreshore:
 - (i) Such monies shall be disbursed for environmental enhancement of Biscayne Bay and its foreshore as authorized and approved by resolution of the Board of County Commissioners. However, if mitigation activities are specified as conditions of any permit, then said mitigation funds shall be used as required by the permit conditions, without the necessity of the Board of County Commissioners' approval, appropriation, or action of any kind.
- (c) All monies offered to and accepted by Miami-Dade County for the environmental enhancement of Biscayne Bay and its foreshore in the form of federal, State, and other governmental grants, allocations, and appropriations as well as foundation and private grants and donations:
 - (i) Such monies shall be disbursed for the environmental enhancement of Biscayne Bay and its foreshore strictly in accordance with terms and conditions of the grant, allocation, appropriation, or donation and shall be earmarked accordingly.
 - (ii) Any excess monies derived from such grant, allocation, appropriation, or donation shall be disbursed or allocated in accordance with the terms and conditions, if any, of such grant, allocation, appropriation, or donation. If no such terms or con-

- ditions attach to such excess, then such excess, if any, shall be disbursed for the environmental enhancement of Biscayne Bay and its foreshore as authorized and approved by resolution of the Board of County Commissioners.
- Unless otherwise specified herein, no disbursements whatsoever shall be made from the Biscayne Bay Environmental Enhancement Trust Fund until and unless authorized and approved by resolution of the Board of County Commissioners. Prior to authorizing and approving said disbursements, the Board of County Commissioners shall receive and consider the recommendations of the County Manager. The County Manager, prior to making any such recommendations, shall receive and consider the recommendations of the Department pertaining to the proposed particular disbursement for environmental enhancement of Biscavne Bay and its foreshore. The Finance Director is hereby authorized to establish the Biscayne Bay **Environmental Enhancement Trust Fund** and to receive monies therefor in accordance with provisions of this section and shall disburse monies from said trust fund only upon authorization pursuant to resolution of the Board of County Commissioners.
- (5) Unless otherwise restricted by the terms and conditions of a particular grant, gift, appropriation, allocation, or permit condition, all interest earned by the investment of all monies in the trust fund shall be disbursed by resolution of the Board of County Commissioners for any project authorized by the Board which will environmentally enhance Biscayne Bay and its foreshore. Trust fund moneys shall be invested only in accordance with the laws pertaining to the investment of County funds.
- (6) No moneys or interest accrued in such trust fund shall be disbursed for environmental studies of Biscayne Bay or its

foreshore unless required by the terms and conditions of a particular grant, donation, appropriation, allocation, or permit condition.

(7) Decisions to grant or deny permits for any activities within Biscayne Bay or its foreshore shall be made without consideration of the existence of this trust fund. Each application for any permit must be evaluated independently of the existence of this fund or offers of donation of moneys thereto.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

ARTICLE II. AIR QUALITY

Sec. 24-41. Prohibitions against air pollution.

No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere from any single source of emission whatsoever, any air contaminant for more than three (3) minutes in any hour which at the emission point is:

(1) Equal to or greater than the density that is designated as number 2 on the Ringelmann Chart as published in the U.S. Bureau of Mines Information Circular No. 7718. Other standards may be used to measure smoke density which give results equivalent or comparable to those obtained using said chart, if such

- standards of measurement are approved by and acceptable to the Director, Environmental Resources Management.
- (2) Of such opacity as to obscure an observer's view to a degree equal to or greater than number 2 on the Ringelmann Chart.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-41.1. Prohibitions against motor vehicles as sources of air pollution.

- (1) Prohibited Conditions: It shall be unlawful after the effective date of this section for the owner of a motor vehicle to operate, permit or allow to be operated a motor vehicle which:
 - (a) Emits air contaminants as dark as or darker in shade than that designated as number 1 on the Ringelmann Chart or of such an opacity equal to or greater than twenty (20) per cent for longer than five (5) consecutive seconds; or
 - (b) Has had any of its emission control devices, as installed at the time of manufacture, removed, disconnected and/or disabled; or
 - (c) Is powered by any fuel that may defeat the design purpose of the motor vehicle's emission control devices, including but not limited to leaded gasoline used in a motor vehicle designed to be powered by unleaded gasoline.
- (2) Emission Limiting Standards Applicable to Gasoline-Powered Motor Vehicles:
- (a) Light duty vehicles (passenger vehicles with net weight of 5,000 pounds or less):

	Hydrocarbons, PPM Exhaust	Carbon Monoxide, % Exhaust
Manufacturer's Model Year	Emission Vehicle at Idle	Emission Vehicle at Idle
1975—1977	500	5.0
1978—1979	400	4.0
1980	300	3.0
1981+	220	1.2

(b) Light duty trucks, vans, and passenger vehicles (gross vehicle weight of 6,000 pounds or less):

	Hydrocarbons,	PPM	Exhaust	Carbon	Monoxide,	%	Exhaust
Manufacturer's Model Year	Emission Vehicle	at Idle		Emission	Vehicle at	Idle	
1975—1977	500			6.0			

	Hydrocarbons, PPM Exhaust	Carbon Monoxide, % Exhaust
Manufacturer's Model Year	Emission Vehicle at Idle	Emission Vehicle at Idle
1978—1979	450	5.0
1980	300	3.0
1981—1984	250	2.0
1985+	220	1.2

(c) Light duty trucks, vans, and passenger vehicles (gross vehicle weight of 6,001 pounds to 10,000 pounds):

	Hydrocarbons, PPM Exhaust	Carbon Monoxide, % Exhaust
Manufacturer's Model Year	Emission Vehicle at Idle	Emission Vehicle at Idle
1975—1977	750	6.5
1978—1979	600	5.5
1980	400	4.5
1981—1984	300	3.0
1985+	220	1.2

- (3) *Motor Vehicles Exempted:* The provisions of this section shall not apply to off-highway farm, forest and construction equipment being moved from one (1) work location to another.
 - (4) Inspection:
 - (a) Compliance shall be verified through an inspection program established by the Department. Vehicle emission levels shall be tested in accordance with applicable criteria contained in Chapter 62-242 of the Florida Administrative Code, as amended from time to time.
 - (b) Whenever evidence has been obtained or received establishing that a violation of this section has been committed, the Director or Director's designee, shall issue a notice to correct the violation or a citation to cease the violation and cause the same to be served upon the violator by personal service or certified mail. Such notice or citation shall set forth the nature of the violation and specify a reasonable time within which the violation shall be rectified or stopped, commensurate with the circumstances.
 - (c) Such notice or citation shall specify a reasonable time and place for a reinspection of the motor vehicle to confirm that the violation has been corrected. "Reason-

- able time" herein means the shortest practicable time to rectify or stop the violation. If a determination has been made by the Director or the Director's designee that a violation of the provisions of this section may result in adverse health impact in a public area, the owner/operator of the vehicle in violation shall be required to correct the violation by immediately removing the vehicle from the affected public area.
- (d) Further, said vehicle shall not be allowed to resume operation within the affected public area until it demonstrates full compliance with the provisions of this section.
- (e) If notice to correct the violation or citation to cease the violation is not obeyed within the time set forth therein, the Director or the Director's designee shall have the power and authority to issue an order requiring the violator to restrict, cease or suspend operation of the motor vehicle causing the violation until the violation is corrected. Any order issued by the Director or the Director's designee hereunder may be enforced by suit brought by the Director in the appropriate court of competent jurisdiction.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.2. Dust and fumes.

(1) No person shall cause, let, permit, suffer or allow the emission in any one (1) hour from any source whatsoever, dust and fumes in total quantities in excess of the amounts shown in the following table:

DUST AND FUMES TABLE

Process Wt./hr.(lbs.)	Maximum Weight Disch./hr.(lbs.)	Process Wt./hr.(lbs.)	Maximum Weight Disch./hr.(lbs.)
50	.24	900	2.62
100	.46	950	2.72
150	.66	1000	2.80
200	.852	1100	2.97
250	1.03	1200	3.12
300	1.20	1300	3.26
350	1.35	1400	3.40
400	1.50	1500	3.54
450	1.63	1600	3.66
500	1.77	1700	3.79
550	1.89	1800	3.91
600	2.01	1900	4.03
650	2.12	2000	4.14
700	2.24	2100	4.24
750	2.34	2200	4.34
800	2.43	2300	4.44
850	2.53	2400	4.55
2500	4.64	5500	7.03
2600	4.74	6000	7.37
2700	4.84	6500	7.71
2800	4.92	7000	8.05
2900	5.02	7500	8.39
3000	5.10	8000	8.71
3100	5.18	8500	9.03
3200	5.27	9000	9.36
3300	5.36	9500	9.67
3400	5.44	10000	10.0
3500	5.52	11000	10.63
3600	5.61	12000	11.28
3700	5.69	13000	11.89
3800	5.77	14000	12.50
3900	5.85	15000	13.13
4000	5.93	16000	13.74
4100	6.01	17000	14.36
4200	6.08	18000	14.97
4300	6.15	19000	15.58
4400	6.22	20000	16.19
4500	6.30	30000	22.22
4600	6.37	40000	28.3
4700	6.45	50000	34.3

Process Wt./hr.(lbs.) Maximum Weight Disch./hr.(lbs.)		Process Wt./hr.(lbs.)	Maximum Weight Disch./hr.(lbs.)
4800	6.52	60000	40.0
4900	6.60	or more	
5000	6.67		

(2) To use this table take the process weight rate; then find this figure on the table; opposite is the maximum number of pounds of contaminants which may be discharged into the atmosphere in any one (1) hour.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.3. Sulfur dioxide.

- (1) Ambient air quality standards. No person, firm, corporation, or other entity shall cause, let, permit, suffer or allow any emission of sulfur dioxide which would exceed any of the following standards in any part of Miami-Dade County:
 - (a) Annual arithmetic mean—25 micrograms per cubic meter (0.007 parts per million);
 - (b) Twenty-four-hour concentration—110 micrograms per cubic meter (0.040 parts per million), not to be exceeded more than once per year;
 - (c) Three-hour concentration—350 micrograms per cubic meter (0.130 parts per million), not to be exceeded more than once per year.
- (2) Emission standards. No person, firm, corporation or other entity shall cause, let, permit, suffer or allow the emission of sulfur dioxide from any stationary fossil fuel fired combustion source located in Miami-Dade County and exceeding the following standards:
 - (a) Source with more than two hundred fifty million (250,000,000) Btu per hour heat input:
 - (i) New sources subsequent to the effective date of this section:
 - 0.8 pound per million Btu heat input when liquid fuel is burned;
 - 2. 1.2 pounds per million Btu heat input when solid fuel is burned.

- (ii) Existing sources no later than one (1) year after the effective date of this section:
 - 1. 1.1 pounds per million Btu heat input when liquid fuel is burned;
 - 2. 1.5 pounds per million Btu heat input when solid fuel is burned.
- (b) New and existing stationary fossil fuel fired combustion sources with two hundred fifty million (250,000,000) or less Btu per hour heat input:
 - (i) 1.1 pounds per million Btu heat input, when liquid fuel is burned;
 - (ii) 1.5 pounds per million Btu heat input, when solid fuel is burned.
- (c) Notwithstanding any other requirement of this section, fossil fuel fired steam generating plants with stack heights less than four hundred (400) feet above ground level shall not cause, let, permit, suffer or allow the emission of sulfur dioxide to exceed 0.55 pound per million Btu heat input. In addition, any such fossil fuel fired steam generating plants with a maximum heat input greater than two hundred fifty million (250,000,000) Btu per hour heat input shall limit the use of fuel oils to start up only, and shall burn one hundred (100) percent natural gas during all other phases of operation.

New sources approved after the effective date of this section shall comply with the provisions herein. Existing sources approved on or before the effective date of this section shall comply with the provisions of this section no later than one (1) year after effective date of this section.

- (3) Sampling and testing.
- (a) All persons shall, upon request of the Department, provide continuous auto-

matic monitoring, testing and records of contaminants being emitted from a source;

- (b) All persons shall provide facilities for continuously determining the input process weight or input heat when such factors are the basis for limiting standards;
- (c) Any person, firm, corporation or other entity responsible for the emission of air pollutants from any source shall, upon request of the Department, provide in connection with such sources and related source operations, such sampling and testing facilities as may be necessary for the proper determination of the nature and quantity of air pollutants which are, or may be emitted as a result of such operation;
- (d) When the Department, upon investigation, has good reason to believe that the provisions of this section concerning emission of pollutants are being violated, it may require the person, firm, corporation or other entity responsible for the source of pollutants to conduct tests which will identify the nature and quantity of pollutant emissions from the source and to provide the results of said tests to the Department. These tests shall be carried out under the supervision of the Department, and at the expense of the person responsible for the source of pollutants;
- (e) All analyses and tests shall be conducted in a manner specified by the Department. Results of analyses and tests shall be calculated and reported in a manner specified by the Department;
- (f) Analyses and tests for compliance may be performed by the Department at the cost of the person responsible for the emission of air pollutants.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.4. Open burning.

No person shall ignite, cause to be ignited, permit to be ignited or suffer, allow or maintain any open outdoor fire except as provided in Section 24-41.5.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-41.5. Exceptions to prohibition against open burning.

The following fires are excepted from the provisions of this chapter:

- (1) Fires used only for noncommercial cooking of food for human beings or for recreational purposes.
- (2) Any fire set or permitted by the Director in the performance of official duty, if such fire is set or permission given for the purpose of weed abatement, the prevention of a fire hazard, including the disposal of dangerous materials when there is no safe alternate method of disposal, or in the instruction of public employees in the methods of fighting fires, which fire is, in the opinion of such official, necessary.
- (3) Fires set for the purpose of instruction in the methods of fighting fires, provided prior permission has been granted by a public officer in the performance of official duty and by the Director.
- (4) An agricultural fire set by or permitted by the Director if such fire is for the purpose of disease and pest prevention, or for frost protection.
- (5) Smokeless flares or safety flares for the combustion of waste gases.
- (6) A fire set or permitted by the Director of the Department of Environmental Resources Management, Miami-Dade Fire Rescue Department, and under his control for the purpose of nonrecurrent clearing of debris from land, agricultural and silviculture.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.6. Storage and handling of petroleum products.

- (1) The provisions of this section shall apply to the owners and operators of all loading facilities, motor vehicle fuel delivery vessels and motor vehicle fuel service stations dispensing, distributing or storing gasoline, gasohol or other petroleum distillates having a Reid vapor pressure of one and five-tenths (1.5) pounds per square inch absolute or greater under actual storage conditions. For the purpose of this section, any petroleum distillate having a Reid vapor pressure of four (4.0) pounds per square inch or greater shall be included in the term "gasoline."
- (2) It shall be unlawful for any person to place, store or hold in any stationary tank, reservoir or other container of more than forty thousand (40,000) gallons capacity any gasoline, gasohol or any petroleum distillate unless such stationary tank, reservoir, or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with one (1) of the following vapor loss control devices, properly installed, in good working order and in operation:
 - (a) A floating roof, consisting of a pontoon type or double-deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and tank wall. The control equipment provided for in this paragraph shall not be used if the gasoline, gasohol or petroleum distillate has a Reid vapor pressure of eleven (11.0) pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling ports shall be vapor-tight except when gauging or sampling is taking place.
 - (b) A vapor recovery system capable of collecting and processing the hydrocarbon vapors and gases produced in order to prevent their emission to the atmosphere. All tank gauging and sampling ports shall be maintained in a vapor-tight condition except when gauging or sampling is taking place.

- (c) Other equipment of equivalent efficiency, provided that plans for such equipment are submitted to and approved by the Director or the Director's designee.
- (3) It shall be unlawful for any person to dispense or to permit, cause, allow, let or suffer the dispensing of gasoline, gasohol or any petroleum distillate into any motor vehicle fuel tank or into any motor vehicle fuel delivery vessel from any loading facility unless such loading facility is equipped with a vapor collection system or its equivalent, properly installed, and operational, as approved by the Director or the Director's designee. When dispensing gasoline, gasohol or other petroleum distillates through the hatches of a motor vehicle fuel delivery vessel with a loading arm equipped with such vapor collection system, a pneumatic, hydraulic or other mechanical device shall be installed to create a vapor-tight seal between the loading arm and the hatch. For all other loading of gasoline, gasohol and other petroleum distillates effected through means other than hatches, delivery lines shall be equipped with fittings which create vapor-tight connections and which close automatically when disconnected. The vapor collection system required herein shall be one (1) of the following:
 - (a) A vapor-liquid absorption system with a minimum recovery efficiency of ninety (90) percent by weight of all the hydrocarbon vapors and gases entering into such collection system.
 - (b) A variable vapor space tank, compressor, and fuel gas system of sufficient capacity to receive all hydrocarbon vapors and gases entering into such collection system or displaced from the motor vehicle delivery vessel.
 - (c) Another system of equivalent efficiency to the vapor collection systems described in (1) and (2) above, provided that plans for such systems are submitted to and approved by the Director or the Director's designee.
- (4) It shall be unlawful for any person to construct or operate, or to permit, cause, allow, let or suffer the construction or operation of a motor vehicle fuel service station after December 14,

1990 without said station being completely equipped with balanced or vacuum assist systems or equivalent systems approved by the Director or the Director's designee, with a minimum design efficiency of a ninety-five (95) percent recovery rate.

- (5) It shall be unlawful for any person to operate, or to permit, cause, allow, let or suffer the operation of a motor vehicle fuel service station utilizing a balanced or vacuum assist system or approved equivalent system for the control of gasoline or gasohol vapors resulting from motor vehicle fueling operations without conspicuously posting operating instructions for the system in the motor vehicle fuel dispensing area. The instructions shall clearly describe the correct method to dispense fuel to motor vehicles with the vapor recovery nozzles utilized at the station.
- (6) It shall be unlawful for any person to utilize, or to permit, cause, allow, let or suffer the utilization of any vapor recovery system not operating in accordance with plans approved by the Director or the Director's designee.
- (7) Notwithstanding the foregoing provisions of this section, the following persons shall not be required to comply with the requirements of this section until December 14, 1993.
 - (a) Any person who is operating a motor vehicle fuel service station with all the required operating permits pursuant to Section 24-18 of the Code of Miami-Dade County, Florida on December 14, 1990.
 - (b) Any person who has obtained, on or before December 14, 1990, the written approval of the Director or the Director's designee for the construction of a new motor vehicle fuel service station and has a certificate of occupancy.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.7. Incinerator burning.

No person shall burn any combustible refuse in any incinerator in Miami-Dade County except in a multi-chamber incinerator as described in this chapter, or in equipment found by the Director in advance of such use to be equally effective for the purpose of air pollution control as an approved multi-chamber incinerator. The maximum discharge of particulate matter shall not exceed two-tenths grains per standard cubic foot of dry gas corrected to fifty (50) percent excess air. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.8. Oil-effluent water separator.

A person shall not use any compartment of any single or multiple compartment oil-effluent water separator which compartment receives effluent water which contains two hundred (200) gallons a day or more of any petroleum product or mixture of petroleum products from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with one (1) of the following vapor loss control devices, properly installed, in good working order and in operation:

- (1) A solid cover with all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices shall be gastight except when gauging or sampling is taking place.
- (2) A floating roof, consisting of a pontoon type or double-deck roof resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and container wall. All gauging and sampling devices shall be gastight except when gauging or sampling is taking place.
- (3) A vapor recovery system, consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gastight except when gauging or sampling is taking place.
- (4) Other equipment of equal efficiency, provided plans for such equipment are submitted to and approved by the Director or the Director's designee. For the purpose of

this section, "kerosene" is defined as any petroleum product which, when distilled by ASTM standard test Method D 86-56, will give a temperature of four hundred one (401) degrees Fahrenheit or less at the ten (10) percent point recovered.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.9. Reduction of animal matter.

A person shall not operate or use any article, machine, equipment or other contrivance for the reduction of animal matter unless all gases, vapors and gas-entrained effluents from such an article, machine, equipment or other contrivance are:

- (1) Incidental at temperatures of not less than one thousand six hundred (1,600) degrees Fahrenheit for a period of not less than three-tenths second; or
- (2) Proceed in a manner determined by the Director to be equally, or more, effective for the purpose of air pollution control than (1) above.

A person incinerating or processing gases, vapors, or gas-entrained effluents pursuant to this section shall provide, properly install and maintain in calibration, in good working order and in operation, devices as specified by the Director for indicating temperature, pressure or other operating conditions.

For the purpose of this section, "reduction" is defined as any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrating.

The provisions of this section shall not apply to any article, machine, equipment or other contrivance used exclusively for the processing of food for human consumption.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.10. Sampling and testing.

A person responsible for the emission of air contaminants from any source shall, upon request of the Director, provide in connection with such sources and related source operations, such sampling and testing facilities exclusive of instruments and sensing devices as may be necessary for the proper determination of the nature, extent, quantity, and degree of air contaminants which are, or may be, emitted as a result of such operation.

1) Such facilities may be either permanent or temporary at the discretion of the person responsible for their provision and shall be suitable for the use of methods and equipment specified by the Director, who shall indicate in writing the required size, number and location of sampling holes; the size and location of the sampling platform; and the utilities for operating the sampling and testing equipment.

The facilities shall comply with all applicable laws and regulations concerning safe construction and safe practice in connection with such facilities.

- (2) When the Director has good reason to believe that the provisions of this chapter concerning emission of contaminants are being violated, the Director may require the person responsible for the source of contaminants to conduct tests which will show the contaminant emissions from the source and to provide the results of said tests to the Director. These tests shall be carried out under the supervision of the Director or the Director's designee and at the expense of the person responsible for the source of contaminants.
- (3) All analyses and tests shall be calculated and reported on the basis of dry gas at standard conditions as defined herein.
- (4) Analyses and tests for compliance may be performed by the staff of the Director at the cost of the operator.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.11. Refrigerants.

(1) It shall be unlawful for any person, after September 26, 1991, to recharge or cause, let, allow, permit, or suffer the recharging of refrigerant into any refrigeration system without properly using approved recycling or recovery equipment and without an operating permit pursuant to Section 24-18 of this Code.

- (2) It shall be unlawful for any person, after September 26, 1991, to release or cause, let, allow, permit or suffer the releasing of any refrigerant from any refrigeration system into the ambient air of the Earth.
- (3) It shall be unlawful for any person, after September 26, 1991, to sell, offer for sale or cause, let, allow, permit or suffer the sale or offering for sale of any kind of refrigerant in any container with a capacity of less than twenty (20) pounds.
- (4) It shall be unlawful for any person, after September 26, 1991, to sell or distribute or to offer to sell or distribute any kind of refrigerant to any person who has not obtained an operating permit pursuant to Section 24-18 of this Code.
- (5) It shall be unlawful for any person, after September 26, 1991, to sell or distribute or offer to sell or distribute any refrigerant without having obtained an operating permit pursuant to Section 24-18 of this Code.
- (6) Recovered refrigerant which cannot be reused or recycled shall be disposed in a manner approved in writing by the Director or the Director's designee.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.12. Sale and manufacture of products which use an ozone-depleting compound as a propellant or source of energy.

It shall be unlawful for any person after September 26, 1991, to sell, offer for sale or to manufacture or to cause, let, allow, permit or suffer the sale, offering for sale, or the manufacture of any Class I and Class II ozone-depleting compound utilized as a propellant or source of energy.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.13. Fire extinguishing systems using halon.

- (1) Except as required by the South Florida Fire Prevention Code, as same may be amended from time to time, or as required by State law, rule or regulation, it shall be unlawful after September 26, 1991, for any person to release or cause, let, allow, permit, or suffer the releasing of any halon from a fire extinguishing system during the training of personnel or the testing of the fire extinguishing system.
- (2) It shall be unlawful for any person, after September 26, 1991, to repair, service or maintain or to cause, let, allow, permit or suffer the repairing, servicing or maintenance of any fire extinguishing system without properly using approved recycling or recovery equipment.
- (3) Recovered halon which cannot be reused or recycled shall be disposed of in a manner approved in writing by the Director or the Director's designee.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.14. Certain products prohibited.

It shall be unlawful after September 26, 1991, to sell, offer for sale, distribute or manufacture or cause, let, allow, permit, or suffer the sale, offering for sale, distribution or manufacture of any plate, bowl (excluding lids), cup (excluding lids), or open tray which contains any Class I ozone-depleting compound or which has been manufactured by the use of a Class I ozone-depleting compound as a blowing agent.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.15. Adoption by reference of Federal exceptions.

The exceptions set forth in Section 604(d), (e), (f), and (g) and in Section 605(d) of the Federal Clean Air Act Amendments of 1990 are adopted by reference as if said exceptions were fully set forth in this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-41.16. Spraying of substances containing asbestos.

It shall be unlawful within Miami-Dade County, for any person, firm or corporation, to cause or to permit the spraying of any substance containing asbestos, as defined in Section 24-5, in or upon any building, structure, column, frame, floor, ceiling or other portion, part or member thereof, during its construction, reconstruction, alteration or repair; provided, however, that such enclosed factories, buildings or structures in which the fabrication or manufacture of products containing asbestos is carried on shall not be subject to this provision.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

ARTICLE III. WATER AND SOIL QUALITY

DIVISION 1. WATER QUALITY, WASTEWATER AND SANITARY SEWER PRETREATMENT STANDARDS

Sec. 24-42. Prohibitions against water pollution.

(1) PROHIBITIONS AGAINST DISCHARGE. It shall be unlawful for any person to throw, drain, run or otherwise discharge into any of the

waters of this County, or to cause, permit or suffer to be thrown, run, drained, allowed to seep, or otherwise discharged into such water any organic or inorganic matter which shall:

- (a) Breach the values set forth in Section 24-42(2);
- (b) Cause water pollution as herein defined; or
- (c) Cause a nuisance or sanitary nuisance as herein defined.
- (2) EFFLUENT STANDARDS FOR MIAMI-DADE COUNTY. All sewage treatment plants and industrial waste treatment plants (except those discharging to approved ocean outfalls) shall effect ninety (90) percent treatment or better at the defined sampling point (24-44.2(1)). However, in no case shall the following effluent standards be exceeded (except where the standard is noted to be a minimum).

Chemical, Physical, or Biological Characteristic

Dissolved oxygen Suspended solids

Biochemical oxygen demand

Floating solids

рН

Settleable solids Oil and grease

Odor-producing substances

Temperature

Sources permitted after July 1, 1972

Fresh water Salt water

Turbidity
Chlorides
Chromium
Hexavalent
Total

Standard

Not less than 2.0 mg/l

40 mg/l

30 mg/l

None visible to the naked eye

6.0 - 8.5

Not greater than 0.1~mg/l on Imhoff cone 1~hr. test

30 mg/l

None attributable to sewage or industrial wastes

92°F

(June—September) 92°F (October-May) 90°F

29 NTU above background

 500 mg/l^1

.5 mg/l 1.0 mg/l Chemical, Physical, or Biological Characteristic

Copper Cyanides Color

Foam Chlorine

LAS Mercury Lead Arsenic Phenol Iron Zinc Sulfides

Coliform organisms (MPN 100 ml) Other compounds

Synergistic action

¹In waters other than fresh water, waste shall not increase natural background more than ten (10) percent.

- (3) DISCHARGES AFFECTING WATER QUALITY AND PROHIBITION OF POSITIVE DRAINAGE. It shall be unlawful for any person to dewater or to discharge sewage, industrial wastes, cooling water and solid wastes, or any other wastes into the waters of this County, including but not limited to surface water, tidal salt water estuaries, or ground water in such quantities, and of such characteristics as:
 - (a) May cause the receiving waters, after mixing with the waste streams, to be of poorer quality than the water quality standards set forth in Section 24-42(4);

Standard

.5 mg/l 0.01 mg/l

Not more than 10 units above normal background of the receiving water

Effluent shall not cause foaming in the stream Minimum residual level of .5 mg/l after a $\frac{1}{2}$ hour contact time at peak flow, where the nature of the waste requires disinfection

6.0 mg/l
None detectable
0.05 mg/l
.05 mg/l
0.001 mg/l
.3 mg/l
1.0 mg/l
0.2 mg/l

1,000 total 0 Fecal

Other toxic or undesirable compounds than those listed above may occur in individual waste streams. Limits for these components may be specified by the Director based on the latest scientific knowledge concerning toxicity and adverse effects on the intended water use.

Whenever scientific evidence indicates that a combination of pollutants exert a greater effect than the individual pollutants, the Director may, on the basis of these findings, lower the herein established limits to the level necessary to prevent damage to the waters of the County.

- (b) To cause water pollution as defined in Section 24-5; or
- (c) To cause a nuisance or sanitary nuisance as herein defined.

It shall be unlawful for any County or municipal officer, agent, employee or board to approve, grant, or issue any permit, or permit, allow, let or suffer the approval or issuance of any permit, which authorizes positive drainage without the prior written approval of the Director or the Director's designee. The Director or the Director's designee shall issue a written approval only if the Director or the Director's designee determine, after re-

- viewing data submitted by the applicant, that one (1) or more of the following conditions exist at the subject site:
- (d) Inadequate size, shape or topographic characteristics of the site to provide full onsite disposal of stormwater.
- (e) Extremely poor soil seepage capacity which prevents full on-site disposal of stormwater.
- (f) An existing groundwater contamination plume under or in the vicinity of the subject site which will be adversely impacted by full on-site stormwater disposal.

(4) WATER QUALITY STANDARDS FOR MIAMI-DADE COUNTY:

Chemical, Physical or Biological Characteristic than 500 ppm chlorides) (water containing more than 500 ppm chlorides) (Groundwater Dissolved oxygen (mg/l) 5 ppm during at least 10 hours per 24-hour period, never less than 4 ppm, unless acceptable data indicate that the natural background dissolved oxygen is lower than the values established herein. Biochemical oxygen demand (mg/l) Shall not exceed a value which would cause dissolved oxygen to be depressed below values listed under dissolved oxygen and in no case shall be great enough to produce nuisance conditions.	
Dissolved oxygen (mg/l) 5 ppm during at least 10 hours per 24-hour period, never less than 4 ppm, unless acceptable data indicate that the natural background dissolved oxygen is lower than the values established herein. Biochemical oxygen de- mand (mg/l) Shall not exceed a value which would cause dis- solved oxygen to be depressed below values listed under dissolved oxygen and in no case shall be	
never less than 4 ppm, unless acceptable data indicate that the natural background dissolved oxygen is lower than the values established herein. Biochemical oxygen de-mand (mg/l) Shall not exceed a value which would cause dissolved oxygen to be depressed below values listed under dissolved oxygen and in no case shall be	
indicate that the natural background dissolved oxygen is lower than the values established herein. Biochemical oxygen demand (mg/l) Biochemical oxygen demand (mg/l) Shall not exceed a value which would cause dismand (mg/l) solved oxygen to be depressed below values listed under dissolved oxygen and in no case shall be	
oxygen is lower than the values established herein. Biochemical oxygen de-mand (mg/l) Shall not exceed a value which would cause dissolved oxygen to be depressed below values listed under dissolved oxygen and in no case shall be	
Biochemical oxygen demand (mg/l) Shall not exceed a value which would cause dissolved oxygen to be depressed below values listed under dissolved oxygen and in no case shall be	
mand (mg/l) solved oxygen to be depressed below values listed under dissolved oxygen and in no case shall be	
under dissolved oxygen and in no case shall be	
great enough to produce nuisance conditions.	
pH 6.0—8.5 ¹ 6.0—8.5 ¹	
Floating solids, settleable None attributable to sew- None attributable to sew-	
solids, sludge deposits age, industrial wastes or age, industrial wastes, or	
other wastes. other wastes.	
Oil and grease (mg/l) 15 ² 15 ² 15 ²	
Odor-producing sub- None attributable to sewage, industrial wastes, or —	
stances other wastes. Threshold odor number not to exceed	
24 at 60°C as a daily average.	
Temperature	
Sources permitted prior Shall cause no environmental damage.	
to July 1, 1972	
Sources permitted after 3° above ambient. (June—September) 2° —	
July 1, 1972 above ambient. (Octo-	
ber—May) 4° above am-	
bient.	
Turbidity 29 NTU above background	
Ammonia (mg/l) .5 ppm as N .5 ppm as N .5 ppm as N	
Chlorides (mg/l) 500^3 3 500^3	
Chromium (mg/l) total .05 .05	
Copper (mg/l) 0.4 0.4 0.4	
Cyanides (mg/l) None detectable None detectable None detectable	
Detergents (mg/l) 0.5 Insufficient to cause foam- 0.5	
ing	
Fluoride (mg/l) 1.4 as F 10 as F 1.4 as F	
Lead (mg/l) 0.95 0.35 0.05	
Phenol (mg/l) 0.001 0.005 0.001	
Zinc (mg/l) 1.0 1.0	
Sulfides (mg/l) 0.2 1.0 0.2	

	Fresh Water:eol(water	Tidal Salt Water		
Chemical, Physical or		(water containing more		
	than 500 ppm chlorides)		Groundwater	
Coliform organisms		$1,000^5$	50	
(MPN/100 ml)				
Mercury	None detectable	None detectable	None detectable	
Iron (mg/l)	0.3	0.3	0.3	
Arsenic (mg/l)	0.05	0.05	0.05	
Specific conductance	500 micromhos per cm (fresh water). Not more than 100% above background,			
	in waters other than fresh.			
Dissolved solids	Not to exceed 500 mg/l for monthly average or 1000 mg/l at any time.			
Radioactive substances	Gross beta activity (in known absence of strontium 90 and alpha emitters),			
	not to exceed 1000 micro-microcuries at any time.			
Other compounds	Other toxic or undesirable compounds than those listed above may occur in			
	individual waste streams. Limits for these components may be specified by			
	the Director based on the latest scientific knowledge concerning toxicity and			
	adverse effect of the intended water use.			
Synergistic action	Whenever scientific evidence indicates that a combination of pollutants exert			
	a greater effect than the individual pollutants, the Director may, on the basis			
	of these findings, lower the herein established limits to the level necessary to			
	prevent damage to the waters of the County.			

¹Shall not cause the pH of the receiving waters to vary more than 1.0 unit. When the natural background pH lies outside the limits established, the introduction of a waste shall not displace the pH of the receiving waters more than 0.5 pH units from these standards.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-42.1. Tertiary treatment requirements.

All new sewage treatment plants and industrial liquid waste treatment facilities, except those discharging to approved ocean outfalls or deep disposal wells, shall provide for nutrient removal and the following:

- (1) Ninety-five (95) percent removal of the influent biochemical oxygen demand (BOD) concentration which will result in an effluent concentration which shall not exceed 15.0 mg/l.
- (2) Ninety-five (95) percent removal of the influent total suspended solids (TSS) con-

centration which will result in an effluent concentration which shall not exceed 15.0 mg/l.

- (3) Effluent discharged to surface waters shall not exceed 3.0 mg/l of methylene blue active substance (MBAS).
- (4) Effluent discharged to surface waters shall not exceed 1.0 mg/l of phosphorous (P).
- (5) All other applicable standards in Section 24-42(2) shall be met.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

²Shall not be visible, defined as iridescence, or cause taste or odors.

³Waste shall not increase natural background more than 10 percent.

⁴Maximum MPN/100 ml in a surface water used as a drinking water supply shall be 100.

 $^{^{5}}$ Maximum MPN/100 ml in a tidal water from which shellfish are harvested for human consumption shall be 70

Sec. 24-42.2. Sanitary sewer system collection and transmission systems.

- (1) Existing gravity sanitary sewer requirements.
 - Each publicly or privately owned or oper-(a) ated sanitary sewer collection system shall be evaluated in order to identify and reduce infiltration and inflow into the sanitary sewer collection system. The person responsible for the sewer system's operation shall implement a sewer system evaluation survey (SSES) and, if required, a rehabilitation program, incorporating the provisions and requirements set forth in the U.S. EPA's Sewer System Infrastructure Analysis and Rehabilitation Handbook (October 1991, EPA/625/6-91/030), designed to identify and reduce sewer system infiltration and inflow to a level which meets the standards set forth in Section 24-42.2(1)(d). Such evaluation activities shall be conducted in a manner so that the total length of the gravity sewer lines and associated manholes in the sanitary sewer collection system is evaluated during the first five-year period of the program, and every ten-year period thereafter. Alternatively, the person responsible for the sewer system's operation shall, within forty-five (45) days after the effective date of this section, submit to the Director or the Director's designee for the Director's or the Director's designee's review and approval a report which provides a detailed description of a sewer system evaluation survey and rehabilitation program which incorporates the provisions and requirements set forth in the U.S. EPA's Sewer System Infrastructure Analysis and Rehabilitation Handbook (October, 1991 EPA/626/6-91/030) and which, when implemented, provides effective and substantial compliance with the requirements of this section of the Code. Said report shall include, in addition to any of the above requirements, decision making criteria, procedures and protocols for prioritization of the evaluation of gravity sewer lines and associated manholes, and
- for the selection of rehabilitation methods to be used. Upon its approval, the program shall be implemented in a manner so that the sewer system evaluation survey is conducted on the total length of the gravity sewer lines and associated manholes during the first five-year period of the program and every ten-year period thereafter. For purpose of compliance with either alternative, infiltration and inflow evaluations and rehabilitation work performed between July 1, 1992 and the effective date of this section can be credited towards the first five-year requirements provided the person responsible for the sewer system's operation submits to the Director or the Director's designee, for the Director's or the Director's designee's review and approval, a report detailing the work performed and the results obtained as required under Section 24-42.2(1)(f)(iv).
- Those portions of a sewage lateral connection which are the responsibility of the private property owner as identified by policy or ordinance of the publicly-owned or operated sanitary sewer collection system, or when no such identification exists, the portions of lateral located upon privately owned real property, are the responsibility of the private real property owner who shall insure the proper operation, maintenance and repair of said portions of the sewage lateral connection. Where an evaluation pursuant to Section 24-42.2(1)(a) above indicates that a privately owned portion of a sewage lateral connection is a source of infiltration or inflow, or both, to a publicly or privately owned or operated sanitary sewer, the owner or operator of the sanitary sewer collection system shall report to the Director or the Director's designee the source of the infiltration or inflow within thirty (30) days from the date of discovery of said discharges. The Director or the Director's designee shall commence enforcement actions, if required, to cause the cessation of the infiltration or inflow.

- Notwithstanding any other provision in this section, all publicly owned or operated sanitary sewer collection systems shall participate in a County-wide, regional rainfall dependent peak flow management study. Said peak flow management study shall, at a minimum, perform the following functions: (a) characterize infiltration and inflow of water into the sanitary sewer collection system; (b) predict peak flows to each pump station in the sanitary sewer collection system; and (c) assess each pump station's ability to manage peak flows with the back-up pump out-of-service. Upon implementation of a peak flow management study the person responsible for the operation of the publicly owned or operated sanitary sewer collection system shall submit to the Director or the Director's designee the results of said study along with a plan of corrective actions and schedule of implementation for each and every pump station within the sanitary sewer collection system which was identified as not capable of managing peak flows with the back-up pump out-of-service.
- (d) The sewer system infiltration and inflow rehabilitation programs shall be sufficient to insure that sewer system infiltration and inflow into the rehabilitated sanitary sewer collection system shall be less than five thousand (5,000) gallons per inch pipe diameter per day per mile of pipe and laterals, or complies with best management practices as required by the U.S. EPA's Sewer System Infrastructure Analysis and Rehabilitation Handbook (October 1991, EPA/625/6-91/030).
- (e) In the event that implementation of the initial sewer system infiltration and inflow rehabilitation programs fail to achieve the performance standards established in this section, the person responsible for the system's operation may, in lieu of performing additional rehabilitation, submit a cost-benefit analysis which analyzes the feasibility of performing additional rehabilitation to achieve said performance

- standards. If the Director or the Director's designee determines that there is no technically feasible, economically reasonable means of compliance, then no further rehabilitation shall be required.
- (f) All persons operating a publicly or privately owned or operated sanitary sewer system shall provide the following reports to the Director or the Director's designee.
 - The daily average pump station operating time and the multiple and variable speed daily average pump station power consumption, as applicable, for each pump station in the sanitary sewer system shall be reported to the Director or the Director's designee on a monthly basis no later than the seventh day after the end of the preceding monthly reporting period. The report shall be in such form as prescribed by the Director or the Director's designee. The report shall include an explanation for any single event, Act of God, or other documentable reason which leads to excessive pump station operating time or power consumption. These can be cause for exclusion of such data from the nominal average pump operating time calculations.
 - The existence of stormwater discharges into any publicly or privately owned or operated sanitary sewer collection system shall be reported to the Director or the Director's designee within thirty (30) days from the date of discovery of said discharges by the person responsible for the operation of said system. The status of corrective actions to eliminate stormwater discharges into any sanitary sewer collection system shall be reported by the Director or the Director's designee semiannmally, January 1 and July 1 of each year, to the person responsible for the operation of said system.
 - (iii) An annual report to the Director or the Director's designee which sets

forth a map and a list of all sewer service areas and sewer subsystems including the total length (in feet) of gravity sewer lines according to pipe diameter and type of material and number of manholes in each service area. This information shall be submitted only if there have been changes in the service areas.

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and maintenance procedures to optimize transmission capacity within the collection system; and ii) evaluate the impact of infiltration and inflow rehabilitation programs, proposed system modifications, upgrades and expansions to the transmission capacity and performance of the collection system. The design and development of the model required herein shall be approved by the Director or the Director's designee prior to implementation.

- (5) Maintenance.
- (a) All publicly or privately owned or operated sanitary sewer collection systems shall maintain their respective systems in a manner so as to prevent or minimize the possibility of overflows.
- (b) All publicly or privately owned and operated sanitary sewer collection systems shall have a written maintenance plan including, but not limited to, inspection procedures preventative maintenance schedules, corrective maintenance procedures and reporting procedures.
- (6) Spare parts. All publicly owned or operated sanitary sewer collection systems shall, maintain an inventory of spare parts or suppliers and vendors necessary to prevent sustained sewage spills, overflows and surcharge conditions resulting from equipment malfunction or deterioration. Certain critical parts may be secured from vendors or other systems on an as-needed basis provided, however, that the overall system integrity is maintained.
- (7) Exemptions. Notwithstanding the foregoing, any publicly owned and operated sanitary sewer collection system which operates a federal or state permitted wastewater treatment facility and which discharges wastewater to the County's regional system on an emergency basis only, will not be required to comply with the provisions set forth in Section 24-42.2(1) through (6).

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-42.3. Certification of sanitary sewer system collection, transmission and treatment capacity.

(1) Notwithstanding any provision of this Code, no county or municipal officer, agent, employee or board shall approve, grant or issued any building permit, certificate of use and occupancy (except for changes in ownership) or municipal occupational license (except for changes in ownership) for any land use served or to be served by a publicly or privately owned or operated sanitary sewer collection system until the county or municipal officer, agent, employee or board has obtained the prior written unconditional approval or prior written conditional approval of the Director or the Director's designee. Notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any land use served or to be served by a publicly or privately owned or operated sanitary sewer collection system until the person has obtained the prior written unconditional approval or the prior written conditional approval of the Director or the Director's designee.

- (a) The Director or the Director's designee shall issue the Director or the Director's designee's unconditional written approval only if the Director or the Director's designee finds that there will be adequate transmission capacity and adequate treatment capacity at the time that the land use is to be connected to an operable and available publicly or privately owned or operated sanitary sewer collection system or at the time that the existing land use will discharge additional sewage flow.
- (b) If the Director or the Director's designee determines that there is not adequate treatment capacity or adequate transmission capacity, or both, the Director or the Director's designee shall issue the Director or the Director's designee's conditional written approval only if the Director or the Director's designee determines that the following requirements are met:
 - (i) The person(s) responsible for the operation of the publicly or privately owned treatment works has obtained all local, state and federal environmental approvals for the construction of additional wastewater treatment capacity;

- (ii) The person(s) responsible for the operation of the publicly or privately owned or operated sanitary sewer collection system(s) has obtained the written approval of the Director or the Director's designee, and all other local, state and federal environmental approvals for plan(s) of corrective action designed to provide adequate transmission capacity; and
- (iii) The person seeking the written conditional approval submits an executed estoppel document, in such form as prescribed by the Director or the Director's designee and recorded in the public records of Miami-Dade County, Florida, at the expense of the person seeking the written conditional approval. Said estoppel document shall contain, at a minimum, the following requirements:
 - The person obtaining a building permit pursuant to a conditional written approval issued by the Director or the Director's designee shall not apply for a certificate of use and occupancy or municipal occupational license, nor shall the facilities being constructed under said building permit be connected to the publicly or privately owned or operated sanitary sewer collection system, until all of the conditions set forth in (i) and (ii) above have been complied with, that the construction pursuant to (i) above has been completed and certified and that the plan(s) of corrective action pursuant to (ii) above has been implemented, completed and certified.
- (c) Notwithstanding any of the foregoing provisions in (b) above, the Director or the Director's designee shall not issue a written conditional approval if:
 - (i) A previously implemented approved plan for corrective action designed to

- provide adequate transmission capacity pursuant to (b)(ii) above failed to achieve adequate transmission capacity.
- (2) Any and all conditional or unconditional written approvals issued by the Director or the Director's designee pursuant to the provisions of (1) above shall remain valid and in full force and effect for a period not to exceed one (1) year from the date of issuance of such written approval. Notwithstanding the foregoing, if the person(s) seeking such written approval applies for a building permit within said one-year period and obtains such building permit and commences construction of the project, as defined by Section 304.3(b) of the South Florida Building Code, within one hundred eighty (180) days of issuance of the building permit, the conditional or unconditional written approval issued by the Director or the Director's designee shall remain valid and in full force and effect. However, if any of the requirements set forth herein are not met, the written conditional or unconditional written approval issued by the Director or the Director's designee and any building permit issued pursuant to such approval, shall be rendered null and void and be of no further force and effect.
- (3) Notwithstanding any of the foregoing, no county or municipal officer, agent, employee or board shall approve, grant or issue any building permit for any land use served or to be served by a public water main or public sanitary sewer unless and until the owner or operator of said public water main or public sanitary sewer has issued the owner's or operator's written approval of said service.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-42.4. Sanitary sewer discharge limitations and pretreatment standards

- (1) *Definitions*. The following definitions shall be applicable only to the provisions of Section 24-42.4:
 - (a) *Pollutant* shall mean dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, muni-

- tions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural wastes discharged into water.
- (b) Categorical industrial user shall mean a facility subject to regulation by a national categorical pretreatment standard.
- (c) *Industrial user* shall mean a nondomestic source of pollutants which discharges into a publicly owned treatment works.
- (d) Interference shall mean a discharge which, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the publicly owned treatment works (POTW), its treatment process or operations; or its sludge process, use, or disposal; and therefore causes a violation of the POTW's discharge permits or prevents sewage sludge use or disposal in compliance with federal, State or County regulations.
- (e) New source shall mean any building, structure, facility or installation, the construction of which commenced after the promulgation of Pretreatment Standards under Section 307(c) of the Federal Clean Water Act and in accordance with the definition provided in 40 CFR 403.3, Federal Pretreatment Regulations, from which there is or may be a discharge of pollutants.
- (f) Pass-through shall mean a discharge that alone or in combination with other discharges exits the publicly owned treatment works (POTW) in quantities and concentrations to cause a violation of the POTW's discharge permits.
- (g) Pretreatment shall mean the reduction in the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a publicly owned treatment works. This reduction or alteration can be obtained by a physical, chemical, or biological process;

- by process changes; or by other means, except by diluting the concentration of the pollutants unless allowed by an applicable pretreatment standard.
- (h) Federal pretreatment standards shall mean any regulation containing pollutant discharge limits promulgated by the United States Environmental Protection Agency in accordance with Sections 307(b) and (c) of the Federal Clean Water Act, which applies to industrial users. This term includes the prohibited discharge limits established pursuant to 40 CFR 403.5, Federal Pretreatment Regulations.
- (i) Significant industrial user (SIU) shall mean an industrial user which is:
 - (i) Any categorical industrial user, or
 - (ii) Any industrial user which discharges twenty-five thousand (25,000) gallons or more of process wastewater per day (excluding sanitary, noncontact cooling, and boiler blowdown wastewater), or contributes a process wastewater which makes up five (5) percent or more of the dry weather average hydraulic or organic capacity of the publicly owned treatment works, or
 - (iii) Is designated as such on the basis that it has a reasonable potential to adversely affect the publicly owned treatment works operation or to violate a pretreatment standard or requirement.
- (j) Slug discharge shall mean any discharge of a non-routine, episodic nature, including, but not limited to, an accidental spill or a non-customary batch discharge, as defined in 40 CFR 403.8(f)(2)(5).
- (2) General Pretreatment Standards and Local Limits.
 - (a) It shall be unlawful for any person to throw, drain, run or otherwise discharge into a sewer designed to carry storm wa-

ter, or to cause, permit, allow or suffer to be thrown, run, drained, allowed to seep, or otherwise discharged into such sewer:

- (i) Domestic sewage, industrial waste, liquid waste or other waste.
- (ii) Cooling water without the written approval of the Director or the Director's designee. The Director or the Director's designee shall issue a written approval if it is determined that the cooling water does not breach the values set forth in Section 24-42.1 of this Code.
- (b) It shall be unlawful for any person to throw, drain, run or otherwise discharge into a sanitary sewer, or to cause, permit, allow or suffer to be thrown, run, drained, allowed to seep, or otherwise discharged into such sewer any storm water.
- (c) The provisions of this section shall not be construed as precluding the installation of a combined system which has been approved by the Director or the Director's designee, and the appropriate State agency, and any such installation shall be subject to all applicable State and County regulations.
- (d) It shall be unlawful for any person to throw, drain, run or otherwise discharge into a sanitary sewer, or to cause, permit, allow or suffer to be thrown, run, drained, allowed to seep, or otherwise discharged into such sewer any of the following substances:
 - (i) Any gasoline, naphtha, fuel oil or other flammable or explosive liquid,

Chemical, Physical or Biological Characteristic

Biochemical oxygen demand

Total suspended solids

Oil and grease EPA Method 1664 (Hexane Extractable Materials) Total Recoverable Petroleum Hydrocarbons EPA Method 1664 (Silica Gel Treated Hexane Extractable Materials) solid or gas; any pollutants which may create a fire or explosion hazard in the POTW, including waste streams with a closed cup flash point of less than one hundred forty (140) degrees Fahrenheit or sixty (60) degrees Centigrade using the test methods in 40 CFR 261.21.

- (ii) Any waters or wastes containing any pollutant, a toxic or poisonous substance in sufficient quantity or flow rate to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant or deteriorate quality of the sewage sludge to prevent sludge use or disposal.
- (iii) Any pollutant in amounts which alone or in combination with other discharges will cause obstruction to the flow in the POTW.
- (iv) Any substance that will pass through the sewage treatment plant and exceed State or Federal requirements for the receiving water.
- (v) Any water or waste which contains substances which may solidify and become viscous at temperatures between thirty-three (33) degrees Fahrenheit and one hundred fifty (150) degrees Fahrenheit (10—65 degrees Centigrade).
- (vi) Any effluents in excess of the following local limits:

Standards

145 lbs/day at a concentration not to exceed 200 mg/l unless allowed by the POTW 145 lbs/day at a concentration level not to exceed 200 mg/l unless allowed by the POTW

100.0 mg/l

50.0 mg/l

Chemical, Physical or Biological Characteristic

Ammonia (un-ionized)

Temperature

рH

Arsenic Cadmium

Chromium (Total)

Copper Lead Mercury Molybdenum Manganese Nickel Selenium Silver Thallium Zinc

Cyanides, total

Poly chlorinated biphenyls

Benzene

Carbon Tetrachloride 1.2-c-Dichloroethylene Tetrachloroethylene Trichloroethylene Vinyl Chloride

Standards

100.0 mg/l

150°F and shall not cause the plant influent to exceed 104°F (40°C) or inhibit biological activity 5.5—11.5, and shall not cause damage to or create a hazard to structures, equipment, or personnel of

the POTW

0.325 mg/l 0.187 mg/l 7.6 mg/l 0.5 mg/l0.7 mg/l0.01 mg/l

0.4 mg/l1.9 mg/l 0.39 mg/l0.65 mg/l 0.6 mg/l

0.0005 mg/l6.8 mg/l 0.5 mg/l0.008 mg/l 0.2 mg/l

0.22 mg/l 3.75 mg/l 0.125 mg/l0.16 mg/l 0.08 mg/l

- (vii) In lieu of the local limits set forth in Section 24-42.4(2)(vi) of this ordinance, the Director or the Director's designee may utilize equivalent standards as calculated pursuant to the Guide to Protect POTW Workers from Toxic & Radioactive Gases and Vapors (EPA#812-B-92-001, June 1992), the Guidance Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program (EPA # 833-B-87-202, December 1987), and the Guidance Manual for Developing Best Management Practices (BMP)(EPA# 833-B-93-004, October 1993).
- (viii) If compliance with the local limits set forth in Section 24-42.4 (2)(d)(vi), is not sufficient to prevent violations

of Section 24-42.4(2)(d)(i) through Section 24-42.4(2)(d)(v) above, the Director or the Director's designee shall determine the local limits, as calculated pursuant to the Guide to Protect POTW Workers from Toxic & Radioactive Gases and Vapors (EPA) #812-B-92-001, June 1992), the Guidance Manual on the Development and Implementation of Local Discharge Limitations under Pretreatment Program (EPA # 833-B-87-202 December 1987), and the Guidance Manual for Developing Best Management Practices (BMP)(EPA) #833-B-93-004, October 1993), which shall be included in the facilities operating permit.

It shall be unlawful for any person to discharge any pollutant, including slug discharges, to sani-

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tary sewers which pollutant may inhibit or disrupt the POTW's treatment process or operations; or which may inhibit or disrupt the POTW's sludge process, sludge use, or sludge disposal; or which causes a violation of the POTW's state or local discharge permits or prevents sewage sludge use or sewage sludge disposal in compliance with state or county regulations without first notifying the Director or the Director's designee in writing prior to the discharge. If prior notification is not possible because of circumstances beyond the control of the person responsible for such discharge then said discharge shall be reported to the Director or the Director's designee at the earliest practicable time after discovery of the discharge.

(3) Categorical Pretreatment Standards. It shall be unlawful for any industrial user to discharge any pollutant in violation of the Federal Pretreatment Standards set forth in 40 CFR 403.6. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-42.5. Bypassing unlawful.

Where a waste treatment facility has been provided, it shall be unlawful to by-pass the facility or any portion thereof and to discharge untreated or inadequately treated wastes to the waters the facility was designed to protect. In the event of an emergency, the user may temporarily utilize a by-pass. It shall be the user's responsibility to immediately notify the Director or the Director's designee. Such notification shall not relieve the user from civil liability under this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-42.6. Reserved.

Editor's note—Section 3 of Ord. No. 08-55, adopted May 5, 2008, repealed § 24-42.6, prohibition against use of hard detergents, in its entirety. Former § 24-42.6 derived from Ord. No. 04-214, adopted Dec. 2, 2004.

Sec. 24-42.7. Reserved.

Editor's note—Section 4 of Ord. No. 08-55, adopted May 5, 2008, repealed § 24-42.7, detergents, in its entirety. Former § 24-42.7 derived from Ord. No. 04-214, adopted Dec. 2, 2004.

DIVISION 2. WELLFIELD PROTECTION, DOMESTIC WELL SYSTEMS AND POTABLE WATER STANDARDS

Sec. 24-43. Protection of public potable water supply wells.

The provisions of this section which impose upon land uses within the West Wellfield Interim protection area regulations which are more restrictive than those regulations applicable to the other public utility potable water supply wellfields in Miami-Dade County shall be deemed interim in nature. Said more restrictive regulations shall be reviewed by such technical review task force(s) or committee(s) as provided by the Board of County Commissioners or its designee upon recommendation of the Director. The Director shall submit to the Board of County Commissioners progress reports, as necessary, pertaining to said review, and recommendations necessary to protect the public health, safety and welfare arising out of said review shall be presented to the Board of County Commissioners. The Miami-Dade County Conflict of Interest and Code of Ethics Ordinance (Section 2-11.1 of this Code) shall not be applicable to task forces or committees provided for in this section.

- (1) Legislative intent. The intent and purpose of this section is to safeguard the public health, safety and welfare by providing scientifically established standards for land uses within the cones of influence thereby protecting public potable water supply wells from contamination.
- (2) Short title; applicability; construction. This section shall be known as the "Potable Water Supply Well Protection Ordinance."

 The provisions of this section shall be effective in the incorporated and unincorporated areas of Miami-Dade County and shall be liberally construed to effect the purposes set forth herein.
- (3) Maps of cones of influence, the Northwest Wellfield protection area, the West Wellfield Interim protection area, and the South Miami Heights Wellfield Complex protection area. The Director or the Director's designee, shall maintain maps of cones of

influence of public utility potable water supply wells, map(s) of the Northwest Wellfield protection area, map(s) of the West Wellfield Interim protection area, and the map(s) of the South Miami Heights Wellfield Complex wellfield protection area dated November, 2005. The cone of influence maps dated December 30, 1980, as may be amended from time to time, prepared by the Department are incorporated herein by reference hereto. Any changes, additions or deletions to said maps shall be approved by the Board of County Commissioners by ordinance. The cone of influence maps of the Northwest Wellfield dated December 30, 1980, as amended effective May 31, 1985, shall hereinafter be referred to as the Northwest Wellfield protection area map(s). The Northwest Wellfield protection area map(s) dated May 31, 1985, the West Wellfield Interim protection area map(s) dated February 28, 1989 and the map(s) of the South Miami Heights Wellfield Complex wellfield protection area dated November. 2005, as all of same may be amended from time to time, prepared by the Department, are incorporated herein by reference hereto. Any changes, additions or deletions to said Northwest Wellfield protection area map(s), West Wellfield Interim protection area map(s) or South Miami Heights Wellfield Complex wellfield protection area map(s) shall be approved by the Board of County Commissioners by ordinance. The Director, or the Director's designee, shall maintain the DERM Technical Report: "Development of a Groundwater Model to Determine Wellfield Protection Zones for the Miami-Dade County, Florida, South Miami Heights Wellfield Complex". The wellfield protection zones of the South Miami Heights Wellfield Complex have been established using the procedures and input parameters set forth in the aforesaid Technical Report dated, November, 2005. The aforesaid Technical Report dated, November, 2005, a copy of which is attached hereto, is hereby incorporated by reference, as same may be

- amended from time to time. Any changes, additions or deletions to the aforesaid Technical Report dated November, 2005 shall be approved by the Board of County Commissioners by ordinance.
- Septic tanks, sanitary sewers, storm water disposal, liquid waste storage, disposal or treatment and violations of this chapter within wellfield protection area. Notwithstanding any provisions of this Code, no County or municipal officer, agent, employee or board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any land use served or to be served by a septic tank, sanitary sewer, storm water disposal method, or liquid waste storage, disposal or treatment method, and which is within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the basic wellfield protection area of any public utility potable water supply well, until the County or municipal officer, agent, employee or Board has obtained the prior written approval of the Director or the Director's designee. Furthermore, not withstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any land use served or to be served by septic tank, sanitary sewer, storm water disposal method, or liquid waste storage, disposal or treatment

method, and which is within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the basic wellfield protection area of any public utility potable water supply well, until the person has obtained the prior written approval of the Director or the Director's designee. The Director or the Director's designee shall issue the Director's or the Director's designee's written approval only if the Director or the Director's designee finds that all septic tanks, septic tank drain fields, storm water disposal methods and liquid waste storage, disposal or treatment methods will be installed upon the property as far away as is reasonably possible from all potable water supply wells, and:

Septic tanks. That the septic tank (a) sewage loadings will not exceed the number of gallons per day for each unsubmerged acre of land as set forth in Tables A-1, A-2, A-3 and A-4, except that neither the Director nor the Director's designee shall issue the Director's or the Director's designee's written approval for any land use served or to be served by a septic tank within the Northwest Wellfield protection area unless the septic tank was installed prior to September 30, 1983, or within the West Wellfield Interim protection area unless the septic tank was installed prior to the effective date of this ordinance [Ordinance No. 89-80], or that the land use served or to be served by a septic tank within the Northwest Wellfield protection area or within that portion of the West Wellfield Interim protection area which is west of the Urban Development Boundary of the Comprehensive Development Master Plan as may be amended from time to time, is residential or is an ancillary rockmining use necessary for extracting and processing subsurface materials and which residential or ancillary rockmining use shall not exceed a maximum sewage loading of seventy (70) gallons per day per acre and which septic tanks shall be located within an area of twenty-one thousand seven hundred eighty (21.780) square feet of unsubmerged land, or that the property served or to be served by septic tanks is residential, uses a public water supply, has not been the subject of any zoning action (district boundary change, unusual use, use variance, or equivalent municipal zoning action) or any platting action (final plat, waiver of plat, or equivalent municipal platting action) after March 13, 1981. and is in compliance with Section 24-43.1, or that the owner of the property served or to be served by septic tanks is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to June 1, 1983, for property within the basic wellfield protection area of any public utility potable water supply well, or, in the case of property within the Northwest Wellfield protection area obtained prior to September 30, 1983, or, in the case of property within the West Wellfield Interim protection area obtained prior to the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex obtained prior to the effective date of this ordinance, or, in the case of property not within the basic wellfield protection area but within the maximum day pump-

age wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield and Southwest Wellfield, obtained prior to February 1, 1985, or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield and Hialeah Wellfield, obtained prior to December 12, 1986, which permit has been valid and continuously in full force and effective since its issuance, or that the owner of the property is applying for a certificate of use and occupancy or municipal occupational license for a land use served or to be served by a septic tank installed prior to March 13, 1981 for property within the basic wellfield protection area of any public utility potable water supply well, or, in the case of property within the Northwest Wellfield protection area installed prior to September 30, 1983, or, in the case of property within the West Wellfield Interim protection area installed prior to the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex obtained prior to the effective date of this ordinance or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, and Southwest Wellfield, installed prior to February 1, 1985, or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield and Hialeah Wellfield, installed prior to December 12, 1986, which uses a public water supply and which is in compliance with Section 24-43.1.

- Notwithstanding the provisions of Section 24-43(4)(a), there shall be required within the Northwest Wellfield protection area, within the West Wellfield Interim protection area, within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, and within the maximum day wellfield protection area of all public utility potable water supply wells a minimum separation equivalent to ten (10) days travel time between any potable water supply well (other than a public utility potable water supply well) and any septic tank or septic tank drainfield.
- Sanitary sewers. That the sewage loading into sanitary sewers will not exceed the number of gallons per day for each unsubmerged acre of land as set forth in Table B-1, or that the property served or to be served by sanitary sewers is residential, uses a public water supply, has not been the subject of any zoning action (district boundary change, unusual use, use variance, or equivalent municipal zoning action) or any platting action (final plat, waiver of plat, or equivalent municipal platting action) after March 13, 1981, and is in compliance with Section 24-42.4, or that the owner of the property served or to be served by sanitary sewers is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to June 1, 1983, for property within the basic wellfield protection area of any public utility potable water supply well, or, in the case of property within the North-

west Wellfield protection area, obtained prior to September 30, 1983, for property within the Northwest Wellfield protection area, or, in the case of property within the West Wellfield Interim protection area, obtained prior to the effective date of this ordinance, or for property within the outer wellfield protection zone of the South Miami Heights Wellfield Complex obtained prior to the effective date of this ordinance, or, in the case of property not within the basic wellfield protection area, but within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield and Southwest Wellfield, obtained prior to February 1, 1985, or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield and Hialeah Wellfield, installed prior to December 12, 1986, which permit has been valid and continuously in full force and effect since its issuance.

Notwithstanding the provisions of Section 24-43(4)(b), all sanitary sewers installed within the Northwest Wellfield protection area, or within the West Wellfield Interim protection area, or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply well, after June 13, 1986, shall comply with the following standards:

Residential land use—No gravity sanitary sewer shall have an exfiltration rate greater than fifty (50) gallons per inch pipe diameter per mile per day. Sewer lateral lines located in the public right-of-way shall be a minimum of six (6) inches in diameter.

Nonresidential land use—No gravity sanitary sewer shall have an exfiltration rate greater than twenty (20) gallons per inch pipe diameter per mile per day. Sewer lateral lines located in the public right-of-way shall be a minimum of six (6) inches in diameter.

Sanitary sewer force mains—All sanitary sewer force mains installed within the Northwest Wellfield protection area, within $_{
m the}$ West Wellfield Interim protection area, or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply

well, shall be constructed of either ductile iron or reinforced concrete pressure sewer pipe. No such ductile iron sanitary sewer force main shall, exfiltrate at a rate greater than the allowable leakage rate specified in American Water Works Association Standard C600-82 at a test pressure of one hundred (100) pounds per square inch. No such reinforced concrete pressure sanitary sewer force main shall exfiltrate at a rate greater than one-half (1/2) the allowable leakage rate specified for ductile iron pipe in American Water Works Association Standard C600-82 at a test pressure of one hundred (100) pounds per square inch.

(ii) Notwithstanding the provision of Section 24-43(4)(b), all gravity sanitary sewers with invert elevations above the average surrounding water table elevation and all sanitary sewer force mains shall be tested to ensure compliance with the aforementioned exfiltration rate standards.

A registered professional engineer shall provide written certification of the exfiltration rate for all manhole/gravity sewer pipe systems installed, in equivalent gallons per inch pipe diameter per mile of pipe per day (twenty-four (24) hours), and the exfiltration rate for all sanitary sewer force mains in gallons per hour per one thousand (1,000) feet of sanitary sewer force main installed. Existing gravity sanitary sewers with pipe diameters of eight (8) inches

or more shall be visually inspected by television every five (5) years by the responsible utility or property owner to ensure both structural and pipe joint integrity. Existing manholes shall be visually inspected for both structural and incoming pipe connection integrity every five (5) years.

Certified test and inspection results and repair logs shall be submitted to the Department within thirty (30) days after completion of the particular test, inspection, or repair.

(c) Storm water disposal methods. That the storm water disposal methods utilized or to be utilized will be limited as set forth in Table C-1.

Furthermore, land uses adjacent to the Snapper Creek extension canal and secondary canals directly connected to the Snapper Creek extension canal shall provide an earth berm, or alternative structure as approved by the Director or the Director's designee, which shall be constructed upon the perimeter of all canals to prevent overland storm water runoff from entering the canal. The berm shall be constructed adjacent to the canal top of slope on the landward side. Said berm shall extend one (1) foot above the canal bank elevation. The landward slope of the berm shall have a gradient not steeper than one (1) foot vertical to four (4) feet horizontal. The canalward slope shall not be steeper than the canal slope. The construction of berming and backsloping shall be subject to the approval of the Director or the Director's designee.

(d) Liquid waste storage, disposal or treatment methods other than septic tanks utilized for the disposal, discharge, storage or treatment of domestic sewage; sanitary sewer lift

stations; and public sanitary sewers. That liquid waste storage, disposal or treatment methods (other than septic tanks utilized for the disposal, discharge, storage or treatment of domestic sewage; sanitary sewer lift stations; and public sanitary sewers); shall be prohibited within the Northwest Wellfield protection area, the West Wellfield Interim protection area, the outer wellfield protection zone of the South Miami Heights Wellfield Complex, the average day pumpage wellfield protection areas of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, and Hialeah Wellfield, and the basic wellfield protection area of any public utility potable water supply well unless, in the case of property within the Northwest Wellfield protection area, said liquid waste storage, disposal or treatment method was installed prior to September 30, 1983, or, unless, in the case of property within the West Wellfield Interim protection area, said liquid waste storage, disposal or treatment method was installed prior to the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights wellfield complex installed prior to the effective date of this ordinance, or, unless, in the case of property within the average day pumpage wellfield protection area but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield and Southwest Wellfield, said liquid waste storage, disposal or treatment method was installed prior to February 1, 1985, or, in the case of property not within the basic wellfield protection area but within the average day pumpage wellfield protec-

- tion area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, and Hialeah Wellfield, said liquid waste, storage, disposal or treatment method was installed prior to December 12, 1986, unless in the case of property within the basic wellfield protection area of any public utility potable water supply well, said liquid waste storage, disposal or treatment method was installed prior to June 13, 1986.
- Violations of this chapter. That the (e) septic tank, sanitary sewer, storm water disposal method or liquid waste storage, disposal or treatment method utilized or to be utilized will serve an existing land use within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, and Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply well and which is required by the Director or the Director's designee to correct violation(s) of this chapter. Notwithstanding the foregoing, the Director or the Director's designee shall not issue the Director's or the Director's designee's written approval unless the Director or the Director's designee determines that the land use will comply with all the provisions of this chapter and that the following water pollution prevention and abatement measures and practices shall be provided:
 - (i) Monitoring and detection of water pollution caused by hazardous materials, and

- (ii) Secondary containment of water pollution caused by hazardous materials, and
- (iii) Inventory control and record keeping of hazardous materials, and
- (iv) Storm water management of water pollution caused by hazardous materials, and
- (v) Protection and security of facilities utilized for the generation, storage, usage, handling, disposal or discharge of hazardous materials.
- Prohibition of hazardous materials within wellfield protection areas. Notwithstanding any provisions of this Code, no County or municipal officer, agent, employee or Board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any nonresidential land use, other than a bona fide agricultural land use, a bona fide rockmining use (lake excavation), a public sewer facilities use, or a public water supply facilities use, within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, John E. Preston Wellfield, or Hialeah Wellfield or within the basic wellfield protection area of any public utility potable water supply well, without obtaining the prior written approval of the Director or the Director's designee. The Director or the Director's designee shall issue the Director's or the Director's designee's written approval only

if the Director or the Director's designee determines that the nonresidential land use is in compliance with Sections 24-43(5)(a), 24-43(5)(b) or 24-43(5)(c).

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any nonresidential land use, other than a bona fide agricultural land use, a public sewer facilities use, or a public water supply facilities use, within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply well, and which uses, generates, handles, disposes of, discharges or stores hazardous materials, until the person has obtained the prior written approval of the Director or the Director's designee.

Pursuant to the foregoing, the Director or the Director's designee shall issue his written approval only if the Director or the Director's designee determines that all potential sources of pollution will be installed upon the property as far away as is reasonably possible from all potable water supply wells; hazardous materials will not be used, generated, handled, disposed of, discharged or stored on that portion of the property within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the basic wellfield protection area of any public utility potable water supply well; and hazardous wastes will not be used, generated, handled, disposed of, discharged or stored on that portion of

the property within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the average day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield.

Notwithstanding the foregoing, fuels and lubricants required for rockmining operations (lake excavations, concrete batch plants, rock crushing and aggregate plants) within the Northwest Wellfield protection area or within the West Wellfield Interim protection area; electrical transformers serving nonresidential land uses; small quantity generators of hazardous wastes as defined in this chapter, within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the average day pumpage wellfield protection area but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, Hialeah Wellfield, and the South Miami Heights Wellfield Complex and existing land uses required by the Director or the Director's designee to correct violations of this chapter; shall not be prohibited when the water pollution prevention and abatement measures and practices set forth in Sections 24-43(5)(a)(i), (ii), (iii), (iv) and (v) will be provided and the Director or the Director's designee has approved same.

Notwithstanding the foregoing, the use, handling or storage of factory prepackaged products intended primarily for domestic use or consumption determined by the Director or the Director's designee to be hazardous materials shall not be prohibited; provided, however, that the requirements of Sections 24-43(5)(a)(vi), (vii), (viii) and (ix) are fulfilled.

(a) The owner of the property has submitted to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that hazardous materials shall not be used, generated, handled, disposed of, discharged or stored on that portion of the property located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the basic wellfield protection area of any public utility potable water supply well; and that hazardous wastes shall not be used, generated, handled, disposed of, discharged or stored on that portion of the property within the average day pumpage wellfield protection area but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex.

Furthermore, the aforesaid covenant shall provide that fuels and lubricants required for rockmining operations (lake excavations, concrete batch plants, rock crushing and aggregate plants) within the Northwest Wellfield protection area or within the West Wellfield Interim protection area; electrical transformers serving nonresidential land uses: small quantity generators of hazardous wastes as defined in this chapter, within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the average day pumpage wellfield protection area but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield. Southwest Wellfield. Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John

- E. Preston Wellfield, and Hialeah Wellfield and existing land uses required by the Director or the Director's designee to correct violations of this chapter; shall not be prohibited when the following water pollution prevention and abatement measures and practices will be provided:
- (i) Monitoring and detection of water pollution caused by hazardous materials, and
- (ii) Secondary containment of water pollution caused by hazardous materials, and
- (iii) Inventory control and record keeping of hazardous materials, and
- (iv) Storm water management of water pollution caused by hazardous materials, and
- (v) Protection and security of facilities utilized for the generation, storage, usage, handling, disposal or discharge of hazardous materials.

Said water pollution prevention and abatement measures and practices shall be subject to the approval of the Director or the Director's designee.

Furthermore, the aforesaid covenant shall provide that use, handling or storage of factory pre-packaged products intended primarily for domestic use or consumption determined by the Director or the Director's designee to be hazardous materials shall not be prohibited, provided, however, that:

- (vi) The use, handling or storage of said factory prepackaged products occurs only within a building, and
- (vii) The nonresidential land use is an office building use (or equivalent municipal land use) or a

- business district use (or equivalent municipal land use) engaged exclusively in retail sales of factory prepackaged products intended primarily for domestic use or consumption, and
- (viii) The nonresidential land use is served or is to be served by public water and public sanitary sewers, and
- (ix) Said building is located more than thirty (30) days' travel time from any public utility potable water supply well.

Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property, or

If the Director or the Director's designee determines that the owner of the property is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to June 1, 1983, for property within the basic wellfield protection area of any public utility potable water supply well, or, in the case of property within the Northwest Wellfield protection area, obtained prior to September 30, 1983, or, in the case of the West Wellfield Interim protection boundary, obtained prior to the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex obtained prior to the effective date of this ordinance, or, in the case of property within the average day pumpage wellfield protection area, but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield or Southwest

Wellfield, obtained prior to February 1, 1985 or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield, obtained prior to December 12, 1986 and which permit has been valid and continuously in full force and effect since its issuance, or

- (c) If the Director or the Director's designee determines:
 - That the application for a building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) is for the replacement, modification or limited expansion of an existing facility, provided in no case shall such replacement, modification or limited expansion cause, permit, let, suffer or allow the use, generation, handling, disposal, discharge or storage of hazardous materials on the property to be increased by more than fifty (50) percent over the use, generation, handling, disposal, discharge or storage of hazardous materials which existed on the property on September 30, 1983, for properties within the Northwest Wellfield protection area, or which existed on the property on the effective date of this ordinance [Ord. No. 89-80] for properties within the West Wellfield Interim protection

- area, or which existed on March 13, 1981 for properties within the basic wellfield protection area of any public utility potable water supply well, and
- That the proposed replacement, modification or limited expansion of the existing facility will substantially reduce the existing risk of pollution from the hazardous materials to the closest public utility potable water supply well. In determining whether there will be a substantial reduction of the existing risk of pollution as aforesaid, the Director or the Director's designee shall consider the following factors and shall render written findings as to the Director's or the Director's designee's assessment of each:
 - 1. Whether the proposed replacement, modification or limited expansion of the facility will provide adequate and increased monitoring and detection of pollution which may be or which has been caused by the hazardous materials on the property.
 - 2. Whether the proposed replacement, modification or limited expansion of the facility will provide adequate and increased secondary containment of pollution which may be or which has been caused by the hazardous materials on the property.
 - 3. Whether the proposed replacement, modification or limited expansion will provide adequate and increased inventory control and record keeping of hazardous materials on the property.

- 4. Whether the proposed replacement, modification or limited expansion will provide adequate and increased storm water management of pollution which may be or which has been caused by the hazardous materials on the property.
- 5. Whether the proposed replacement, modification or limited expansion will provide adequate and increased protection and security of the facilities utilized for the generation, storage, usage, handling, disposal, or discharge of hazardous materials on the property.

The Director or the Director's designee shall determine that there will be a substantial reduction of the existing risk of pollution from the hazardous materials to the closest public utility potable water supply well only if the Director or the Director's designee makes affirmative findings as to all of the aforesaid factors, and

(iii) That the owner of the property has submitted to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that the hazardous materials to be used, generated, handled, disposed of, discharged or stored on the property after the proposed replacement, modification or limited expansion is approved by the Director or the Director's designee, pursuant to this section, shall not be more hazardous than the hazardous materials used, generated, han-

dled, disposed of, discharged or stored on the property at the time of the aforesaid approval and which furthermore shall require written notice by the owner of the property to the Department of any change in the kind of hazardous materials on the property after the aforesaid approval. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property.

- 6) Applicability of travel time ranges within wellfield protection areas. The Director or the Director's designee shall utilize the following procedures when making a determination under Tables A-1, A-2, A-3, A-4 or B-1:
 - (a) Property wholly located within one (1) travel time range having restrictions shall be governed by the restrictions under that travel time range.
 - (b) Property within two (2) or more travel time ranges having restrictions shall be governed by the total sewage loading for the property. The total sewage loading shall be derived by adding the sewage loading within each travel time range and dividing the resultant amount by the gross acreage for the property.
 - (c) Property within both restricted and unrestricted travel time ranges shall be governed in accordance with Section 24-43(6)(b) herein except that portion of the property outside of the restricted travel time ranges shall be excluded from averaging the applicable restrictions as aforesaid. However, all septic tanks, septic tank drainfields, storm water disposal methods and liquid waste storage,

disposal and treatment methods shall be installed upon the property as far away as is reasonably possible from all potable water supply wells.

Excavations. Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant, or issue any permit, of any kind whatsoever, certificate of completion, platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any excavation within the Northwest Wellfield protection area, or within the West Wellfield Interim protection area, or the basic wellfield protection area of any public utility potable water supply well, or within one-quarter (1/4) of a mile of the perimeter of the Miami-Dade County 58th Street landfill, United Sanitation landfill, or the resources recovery facility until the County or municipal officer, agent, employee or Board has obtained the prior written approval of the Director or the Director's designee.

Furthermore, notwithstanding any provision of this Code, no person shall cause, allow, let, permit or suffer any excavation within the Northwest Wellfield protection area, or within the West Wellfield Interim protection area, or within the basic wellfield protection area of any public utility potable water supply well until the person has obtained the prior written approval of the Director or the Director's designee.

The Director or the Director's designee shall issue his written approval only if the Director or the Director's designee determines that the excavation will comply with the following:

(a) The property upon which the excavation has occurred or will occur and that portion of the property which has not been excavated or will not be excavated shall be provided with protection and security measures to prohibit the handling, disposal of, dis-

charge or storage of hazardous materials, solid waste, or liquid waste in the excavation or on the property which has not been excavated or will not be excavated. Said protection and security shall be subject to the approval of the Director or the Director's designee.

Furthermore, the owner of the property upon which the excavation has occurred or will occur and that portion of the property which has not been excavated or will not be excavated shall submit to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that protection and security measures shall be provided subject to the approval of the Director or the Director's designee. Said covenants shall be executed by the owner of the property upon which the excavation has occurred or will occur and that portion of the property which has not been excavated or will not be excavated in form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property upon which the excavation has occurred or will occur and the property which has not been excavated or will not be excavated, and

(b) The excavation will not be located within thirty (30) days' travel time from any public utility potable water supply well or within thirty (30) days' travel time from potable water supply wells as set forth on the West Wellfield Interim protection area map(s) and the excavation will not exceed a depth of forty (40) feet below existing grade within the basic

wellfield protection area of any public utility potable water supply well, or

(c) The excavation will not be located within thirty (30) days' travel time from any public utility potable water supply well and there exists property without excavation which will provide an additional thirty (30) days' travel time between the excavation and any public utility potable water supply well.

Furthermore, the owner of the property upon which the excavation is to occur shall submit to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that the property without excavation aforesaid will not be subject to excavation at any time. Said covenants shall be executed by the owner of the property without excavation aforesaid and in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property upon which the excavation is to occur, or

- (d) The excavation has a valid excavation permit or equivalent municipal permit for excavation and a valid Class IV permit, if required by Article IV of this chapter, which was obtained prior to September 30, 1983, which permits have been valid and continuously in full force and effect since their issuance.
- (8) Pipelines for hazardous materials. Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board, after July 13, 1984 shall approve, grant or issue any permit of any kind whatsoever for the installation, modification, or expansion of that

portion of any pipeline used or to be used for the transmission or storage of any hazardous materials and which portion is within the Northwest Wellfield protection area or the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield or Southwest Wellfield or within the basic wellfield protection area of any public utility potable water supply well or, in the case of that portion of any pipeline not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield, after December 12, 1986, or, in the case of that portion of any pipeline within the West Wellfield Interim protection area, after the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex after the effective date of this ordinance.

Furthermore, notwithstanding any provision of this Code, no person shall install, construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be installed, constructed, utilized, operated or occupied any pipeline or portion of any pipeline used or to be used for the transmission or storage of any hazardous materials within the Northwest Wellfield Protection Area or the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield or Southwest Wellfield or within the basic wellfield protection area of any public utility potable water supply well, after July 13, 1984, unless said person installed, constructed, utilized, operated or occupied said pipeline used or to be used for the transmission or storage of hazardous materials before July 13, 1984, or, in the case of the West Wellfield Interim protection area, no person shall install, construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be installed, constructed, utilized, operated or occu-

pied any pipeline or portion of any pipeline used or to be used for the transmission or storage of any hazardous materials within the West Wellfield Interim protection area after the effective date of this ordinance [Ordinance No. 89-80] or, in the case of that portion of any pipeline within the outer wellfield protection zone of the South Miami Heights Wellfield Complex after the effective date of this ordinance unless said person installed, constructed, utilized, operated or occupied said pipeline used or to be used for the transmission or storage of hazardous materials prior to the effective date of this ordinance, unless said person installed, constructed, utilized, operated or occupied said pipeline used or to be used for the transmission or storage of hazardous materials prior to the effective date of this ordinance [Ordinance No. 89-80].

Furthermore, notwithstanding any provision of this Code, no person shall install, construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any pipeline or portion of any pipeline used or to be used for the transmission or storage of any hazardous materials within the maximum day pumpage wellfield protection area but not within the basic wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield after the effective date of this subsection [December 12, 1986], unless said person installed, constructed, utilized, operated or occupied said pipeline used or to be used for the transmission or storage of hazardous materials before the effective date of this subsection [December 12, 1986].

(9) Water conservation restrictions for the protection of the Northwest Wellfield. The Director or the Director's designee shall evaluate the data from a groundwater elevation monitoring program and a groundwater quality monitoring program for the Northwest Wellfield which programs shall be conducted by the Department or a contractor designated by the County. If the Director or the Director's designee, after evaluating the aforesaid monitoring data, determines that a reduction in wellfield pumpage is necessary to prevent contamination of the Northwest Wellfield, the Director or the Director's designee shall impose water conservation restrictions in the unincorporated and incorporated areas of Miami-Dade County. These water conservation restrictions shall consist of one (1) of, or any combination of, the following:

- (a) Ordering public utilities owning or operating public water systems to reduce water system pressure.
- (b) Mandatory water conservation restrictions similar to the applicable water use restrictions set forth in the rules of the South Florida Water Management District, Chapter 40E-21, Florida Administrative Code, as may be amended from time to time.

The duration of these water conservation restrictions shall be determined by the Director or the Director's designee after periodic evaluation of wellfield pumpage data and pertinent monitoring program data. The water conservation restrictions in effect may be subsequently changed or rescinded by the Director or the Director's designee after such periodic evaluation.

(10) Land uses within the Northwest Wellfield protection area and West Wellfield Interim protection area. Notwithstanding any provision of this Code, no County officer, agent, employee or board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), platting action (final plat, waiver of plat) or zoning action (district boundary change, unusual use, use variance, new use, similar use) for anv land use within the Northwest Wellfield protection area, or within the West Wellfield Interim protection area, without obtaining the prior written approval of the Director or the Director's designee. Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any land use within the Northwest Wellfield protection area or within the West Wellfield Interim protection area without obtaining the prior written approval of the Director or the Director's designee.

The Director or the Director's designee shall issue his written approval only if:

- The Director or the Director's designee determines that the property is within the Northwest Wellfield protection area or within the West Wellfield Interim protection area and the existing land use(s) for the property or the land use(s) requested for the property is one (1) or more of the land uses set forth in Table E-1 and the land use(s) is not a land use found exclusively in the following Miami-Dade County zoning classifications or that the zoning classification requested is not one (1) or more of the following Miami-Dade County zoning classifications:
 - (i) BU-3 (excluding those land uses permitted by BU-1, BU-1A or BU-2),
 - (ii) IU-1,
 - (iii) IU-2.
 - (iv) IU-3,
 - (v) IU-C, or
- (b) The Director or the Director's designee determines that the land use is not listed in Table E-1, the land use(s) is not set forth as a permitted use, special exception, unusual use or conditional use in Chapter 33 of this Code, the land use(s) is not a land use(s) found exclusively in the zoning classifications listed in Sections 24-43(10)(a)(i), (ii), (iii), (iv), (v), above the land use(s) is comparable to a land use(s) set forth in

Table E-1, and the land use(s) will not have an adverse environmental impact on groundwater quality in the North Wellfield protection area and within the West Wellfield protection area. Notwithstanding the foregoing, the Director or the Director's designee shall not determine that the land use is comparable to land use(s) set forth in Table E-1 if the land use is permitted in one (1) or more of the following Miami-Dade County zoning classifications and if the land use is not permitted in one (1) or more Miami-Dade County zoning classifications which are less restrictive than the following BU-3; IU-1; IU-2; IU-3; and IU-C.

- i) In determining whether a land use is comparable to one (1) or more land use(s) set forth in Table E-1, the Director or the Director's designee shall consider the following factors:
 - The materials used, handled and stored, and the products and wastes produced;
 - 2. The activities, processes and methods which are employed and utilized;
 - 3. The machinery and other facilities utilized and maintenance requirements of said machinery and facilities:
 - 4. Uses commonly attendant to or associated with the primary use.
- (ii) In determining whether a land use does not or will not have an adverse environmental impact on the groundwater quality in the Northwest Wellfield protection area or within the West Wellfield protection area, the Director or the Director's designee shall consider the following factors:
 - 1. The land use will not be detrimental to the public

health, welfare and safety and will not create a nuisance and will not materially increase the level of water pollution within the Northwest Wellfield protection area or within the West Wellfield Interim protection area;

- 2. The use, generation, handling, disposal of, discharge or storage of hazardous materials will not occur within the Northwest Wellfield protection area or within the West Wellfield Interim protection area;
- 3. The only liquid waste (excluding stormwater) which will be generated, disposed of, discharged, or stored within the Northwest Wellfield protection area or within the West Wellfield Interim protection area shall be domestic sewage discharged to a public sanitary sewer or septic tank;
- Stormwater runoff shall be retained on the property and disposed of through infiltration drainage systems supplemented with seepage drainage systems, or
- (c) The Director or the Director's designee, determines that: The property is within the Northwest Wellfield protection area or within the West Wellfield Interim protection area; the owner of the property is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to December 12, 1986, in the case of the Northwest Wellfield protection area,

or August 6, 1989, in the case of the West Wellfield Interim protection area, which permit has been valid and continuously in full force and effect since its issuance; the property is served or will be served by a public water main and public sanitary sewer no later than the date that the original certificate of use and occupancy or original municipal occupational license is issued; and the property is in compliance with Sections 24-43(4), (5) and (6) of this Code and was in compliance with Sections 24-43(4). (5) and (6) of this Code no later than the date of issuance of the aforesaid valid building permit.

TABLE E-1

Allowable Land Uses Within the Northwest Wellfield Protection Area and Within the West Wellfield Interim Protection Area

Land Use

Abstract title

Accounts, bookkeeping

Actuaries

Advertising office only; no printing

Agricultural use

Alcoholic beverage district, sales

Amusement, game room

Animals, birds, and tropical fish, retail only

Antique shops

Apparel sales, rentals

Apartment house

Appliance and fixture sales (no service)

Appraisers (no merchandise)

Archery range

Art gallery

Art goods and bric-a-brac shops

Artist studios

Auction sales (no hazardous materials)

Auditoriums

Bait and tackle shop

Bakeries, retail

Bakeries, wholesale

Banks

Barbecue restaurants, stands, pits (wood for cooking) drive-in theaters

Barbershop

Bars

Baseball field

Bath and massage parlors

Bathing beaches

Bicycle sales (no service) Billiard parlor/pool hall

Bindery (books, publications, etc.)

Bingo

Boat piers, docks

Book store (new and used)

Bottled gas storage (liquefied petroleum gas and natural gas only)

Bowling alleys

Box lunches—Wholesale and retail with delivery trucks (no truck maintenance)

Broadcasting studios (radio and TV, including transmitting station and tower, incidental electrical generation by LP or natural gas only)

Business machines sales (typewriters, calculators, etc.) (no service)

Camps

Card club/public

Card shops Carpet sales Caterers

Churches

Cigar making and sales

Cigarette vending Clubs (private)

Coin laundries (no dry cleaning ma-

chines)
Coin shop

Cold storage warehouses and pre-

cooling plants

Colleges (no hazardous materials)

Computer service

Concrete, cement, clay products— Storage and sales (no vehicle maintenance; no on-site fuel storage)

Confectionery (and ice cream stores)

Conservatories

Convent

Convention halls Costuming shops Curio stores

Dance halls, schools, academies

Day camp

Day care, nursery Department store

Dependent children (home for)

Drive shop

Docks, piers—Boat

Dog obedience training, training

tracks, schools
Dormitories

Drapery stores, drapery making Dressed poultry and sea food stores

Drive-through banks and restau-

rants

Drug store

Dry cleaning (no cleaning on pre-

mises)

Dynamite storage Electric substations

Electrolysis office (removal of hair

by electrolytic process) Employment agencies

Entrance gates Escort service

Farms

Fire station (no hazardous materi-

als)

Fishing camps

Fish houses, market, smoking

Fish, tropical, aquariums (retail sales

only)

Flea market Florist shops Flower importers

Food distribution (no on-site vehicle

maintenance)
Food sales
Foster home
Fraternities

Fruit packing, fruit stores, fruit

stands

Furniture sales, rental and storage (no restoration, no manufacturing)

Furriers (sales and storage)

Garment manufacturing (no dyeing)
Gas (natural gas, LP gas including distribution system and bottling

plant)

Gift stores Glass blowing

Golf course, clubhouse Golf driving range Grocery store Gun shop

Haberdashery Hall for hire Handball court Health spa

Homes for dependent children

Hotels, motels Houses of worship Ice cream stores

Ice manufacturing, distributing (emergency electrical generation by

LP or natural gas only) Import-export office Insurance office

Interior decorators office, showroom

Jai alai

Jewelry sales (no manufacturing)
Judo and karate instructions

Key shop

Kindergartens, day care

Lake excavation

Laundries (all types, no dry clean-

ing)

Leather goods stores (retail)

Libraries (public)

Limestone quarrying, rock crushing and aggregate plants ancillary to section in connection with limestone quarrying (no on-site fuel storage except that the use of fuels and lubricants and LP and natural gas

storage are permitted)

Liquefied petroleum (LP) gas

Liquor package stores

Livery stable Lodges (private)

Lounges

Luggage sales

Lunches (packaging, catering)

Mail order office
Massage parlor
Meat market
Men's store
Messenger office
Milk store (drive-in)
Miniature golf course

Mission
Mobile homes

Mobile homes, sales (no manufacturing or repair; and no motor homes or

recreational vehicles)

Monastery

Motel

Modeling (agencies, schools)

Motion picture studio (no film devel-

oping)

Motion picture theatre, indoor and

outdoor

Motion pictures and equipment, sales and rental (no equipment servicing,

no film developing)

Moving and storage company (no on-

site vehicle maintenance)
Municipal recreation building

Museums, public
Music stores, teaching

Newsstand
Night club
Notions sales
Office building
Office, professional
Open air theaters
Optical stores
Package stores

Palmistry

Paneling (wall/retail sales)

Paper salvage

Park or playground, public or pri-

vate

Parking lot, parking garage (no auto pound, no tow yard, no on-site vehicle repair)

Passenger stations (railroad, bus)

Pawn shops (swap shops)

Pet shops, retail sales only (in air

conditioned building)
Pharmaceuticals (retail)

Photographic studio (no developing,

no printing)

Pillow renovating

Plant sales (no propagation)

Plaster products

Plasterers, storage area

Police station
Pool rooms
Post office

Pottery (retail sales only/no manu-

facturing)
Private clubs

Produce or fruit market

Professional and semiprofessional offices (no medical laboratory or clinic) Public art galleries, museums Racquet ball clubs

Radio, broadcasting station, studio, transmitting station/tower (emergency electrical power by LP or natural gas only)

Railroad and bus passenger stations (no freight terminal, no vehicle maintenance)

Real estate office Recording studios Recreational facilities

Rentals (household equipment, appliances, tools, hardware, etc.) (no

hazardous materials)

Residential uses

Restaurants, including outdoor pa-

tios and service Retirement villages Rifle, pistol range Rock and sand yards Rock yards (crushing)

Saloons and bars

Savings and loan associations Schools (no hazardous materials)

Seafood stores

Secondhand stores (inside only)
Shoe store (no manufacturing)

Shooting gallery

Shooting range, trap and skeet Shopping center (no hazardous ma-

terials)

Showrooms, salesrooms (no hazard-

ous materials) Skating rink Sororities

Souvenir stores Sporting goods store Stationery stores

Storage warehouse (no hazardous ma-

terials)

Swap shops Swimming pools

Synagogues

Tailor shops

Tattoo parlor

Telegraph stations (emergency electrical power by LP or natural gas only)

Telephone answering service

Telephone exchange

Television (broadcasting studio)

Tennis courts

Textile sales

Theaters

Tile sales (no manufacturing)

Tourist attractions (no hazardous materials)

Trading post

Trailer park

Travel agency

Upholstery shop

Utilities: Public and private water production, treatment and distribution facilities; and sewage except that wastewater treatment plants are not permitted (emergency electrical power by LP or natural gas only)

Vegetable stands

Wall paper, paneling (retail sales)

Warehouses (storage of food, fodder, apparel, and other nonhazardous materials)

Watchman's quarters

Water tanks or towers

Water treatment plants (emergency electrical power by LP or natural gas only)

Wearing apparel stores (sales, rentals)

Wholesale salesrooms and attendant storage rooms (no hazardous materials)

(11) Prohibition of resources recovery and management facility within wellfield protection areas. Notwithstanding any provision of this Code, no County or municipal

officer, agent, employee or Board shall approve, grant, modify or issue any permit (except for renewal of valid operating permits, issued pursuant to this chapter, no later than March 12, 1987), certificate of use and occupancy (except for changes in ownership), platting action (final plan, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any resource recovery and management facility within the Northwest Wellfield protection area or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply well after December 12, 1986, unless said resource recovery and management facility was in operation and had obtained all other applicable permits prior to June 25, 1986 and obtained a valid operating permit issued pursuant to this chapter no later than March 12, 1987 or, in the case of a resource recovery and management facility within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, was in operation and had obtained all other applicable permits prior to the effective date of this ordinance.

Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant, modify or issue any permit (except for renewal of valid operating permits issued pursuant to this chapter, renewed no later than ninety (90) days after the effective date of this ordinance [Ordinance No. 89-80]), certificate of use and occupancy (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent

municipal zoning action) for any resource recovery and management facility (unless the facility's primary purpose is to collect paper, glass, plastics or aluminium for transport out of the West Wellfield Interim protection area or the facility provides composting for on-site organic plant materials at plant nurseries) within the West Wellfield Interim protection area after the effective date of this ordinance [Ordinance No. 89-80], unless said resource recovery and management facility was in operation and had obtained all other applicable permits prior to the effective date of this ordinance [Ordinance No. 89-80] and obtained a valid operating permit issued pursuant to this chapter no later than ninety (90) days after the effective date of this ordinance [Ordinance No. 89-801.

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any resource recovery and management facility within the Northwest Wellfield protection area or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield,

or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply well after December 12, 1986, unless said resource recovery and management facility was in operation and had obtained all other applicable permits prior to June 25, 1986 and obtained a valid operating permit pursuant to this chapter, no later than March 12, 1987 or, in the case of a resource recovery and management facility within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, was in operation and had obtained all other applicable permits prior to the effective date of this ordinance.

Notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any resources recovery and management facility within the West Wellfield Interim protection area after the effective date of this ordinance [Ordinance No. 89-80], unless said resource recovery and management facility was in operation and had obtained all other applicable permits prior to the effective date of this ordinance [Ordinance No. 89-80] and obtained a valid operating permit pursuant to this chapter, no later than ninety (90) days after the effective date of this ordinance [Ordinance No. 89-801.

TABLE A-1 Residential Property Served by Septic Tank and Using Public Water Supply

Travel Time in Days or Distance	Maximum Allowable Sewage Load-	Maximum Allowable Sewage Load-
in Feet from Property to Nearest	ing for Property Not Having Indig-	ing for Property Having Indige-
Public Utility Potable Water Sup-	enous Sandy Substrata (Gallons	nous Sandy Substrata (Gallons
ply Well	Per Day Per Unsubmerged Acre)	Per Day Per Unsubmerged Acre)
More than 100 days but not ex-	850	As allowed by Section 24-43.1
ceeding 210 days		
More than 30 days but not exceed-	600	850
ing 100 days		
More than 10 days but not exceed-	350 with minimum of 24 inches in	600 with minimum of 24 inches of
ing 30 days	Class II silica sand under	Class II silica sand or indigenous
	drainfield	sand under drainfield

Travel Time in Days or Distance	Maximum Allowable Sewage Load- Maximum Allowable Sewage Load-
in Feet from Property to Nearest	ing for Property Not Having Indig- ing for Property Having Indige-
Public Utility Potable Water Sup-	enous Sandy Substrata (Gallons nous Sandy Substrata (Gallons
ply Well	Per Day Per Unsubmerged Acre) Per Day Per Unsubmerged Acre)
More than 100 feet but not exceed-	140 with minimum of 24 inches of 350 with minimum of 24 inches of
ing 10 days	Class II silica sand under Class II silica sand or indigenous
	drainfield sand under drainfield
100 feet or less	0 0

TABLE A-2 Residential Property Served by Septic Tank and Not Using Public Water Supply

Maximum Allowable Sewage Load- Maximum Allowable Sewage Load
ing for Property Not Having Indig-ing for Property Having Indig
enous Sandy Substrata (Gallons nous Sandy Substrata (Gallon
Per Day Per Unsubmerged Acre) Per Day Per Unsubmerged Acre
750 with minimum of 24 inches of 750 with minimum of 24 inches
Class II silica sand under Class II silica sand or indigenou
drainfield sand under drainfield
600 with minimum of 24 inches of 750 with minimum of 24 inches
Class II silica sand under Class II silica sand or indigenou
drainfield sand under drainfield
350 with minimum of 24 inches of 600 with minimum of 24 inches
Class II silica sand under Class II silica sand or indigenou
drainfield sand under drainfield
140 with minimum of 24 inches of 350 with minimum of 24 inches
Class II silica sand under Class II silica sand or indigenou
drainfield sand under drainfield
0

TABLE A-3 Nonresidential Property Served by Septic Tank, Using Public Water Supply, and Not Using, Generating, Handling, Disposing, Discharging or Storing Hazardous Materials

TABLE INSET:

Travel Time in Days or Distance	Maximum Allowable Sewage Load-	Maximum Allowable Sewage Load-
in Feet from Property to Nearest		
		nous Sandy Substrata (Gallons)
	Per Day Per Unsubmerged Acre)	
More than 100 days but not ex-	•	1,500
ceeding 210 days		,
More than 30 days but not exceed-	600	850
ing 100 days		
More than 10 days but not exceed-	350 with minimum of 24 inches of	600 with minimum of 24 inches
ing 30 days	Class II silica sand under	Class II silica sand or indigenous
	drainfield	sand under drainfield
More than 100 feet but not exceed-	140 with minimum of 24 inches of	350 with minimum of 24 inches of
ing 10 days	Class II silica sand under	Class II silica sand or indigenous
	drainfield	sand under drainfield
100 feet or less	0	0

TABLE A-4 Nonresidential Property Served by Septic Tank, Not Using Public Water Supply, and Not Using, Generating, Handling, Storing, Disposing or Discharging Hazardous Materials

Travel Time in Days or Distance	Maximum Allowable Sewage Load	- Maximum Allowable Sewage Load-
		- ing for Property Having Indige-
		s nous Sandy Substrata (Gallons)
ply Well	Per Day Per Unsubmerged Acre)	Per Day Per Unsubmerged Acre)
More than 100 days	750 with minimum of 24 inches of	f 750 with minimum of 24 inches of
	Class II silica sand unde	Class II silica sand or indigenous
	drainfield	sand under drainfield
More than 30 days but not exceed-	600 with minimum of 24 inches of	f $ 750$ with minimum of 24 inches of
ing 100 days	Class II silica sand unde	r Class II silica sand or indigenous
	drainfield	sand under drainfield
More than 10 days but not exceed-	350 with minimum of 24 inches of	f 600 with minimum of 24 inches of
ing 30 days	Class II silica sand unde	r Class II silica sand or indigenous
	drainfield	sand under drainfield
More than 100 feet but not exceed-	140 with minimum of 24 inches of	f 350 with minimum of 24 inches of
ing 10 days	Class II silica sand unde	r Class II silica sand or indigenous
	drainfield	sand under drainfield
100 feet or less	0	0

TABLE B-1 Residential Property Served by Sanitary Sewers; Nonresidential Property Served by Sanitary Sewers and Not Using, Generating, Handling, Disposing, Discharging or Storing Hazardous Materials

	T	T
Travel Time in Days or Distance	Maximum Allowable Sewage Load-	Maximum Allowable Sewage Load-
in Feet from Property to Nearest	ing for Property Not Having Indig-	ing for Property Having Indige-
Public Utility Potable Water Sup-	enous Sandy Substrata (Gallons	nous Sandy Substrata (Gallons
ply Well	Per Day Per Unsubmerged Acre)	Per Day Per Unsubmerged Acre)
More than 30 days	No additional restrictions	No additional restrictions
More than 10 days but not exceed-	1600	No additional restrictions
ing 30 days		
More than 100 feet but not exceed-	850	1600
ing 10 days		
100 feet or less	0	0

TABLE C-1 Allowable Storm Water Disposal Methods for Residential and Nonresidential Property

Travel Time in Days or Distance in Feet from	
Property to Nearest Public Utility Potable Water	
Supply Well	Allowable Methods for Storm Water Disposal
More than 30 days but not exceeding 210 days	Infiltration or seepage or overflow outfalls only
More than 10 days but not exceeding 30 days	Infiltration or seepage only
More than 100 feet but not exceeding 10 days	Infiltration only
100 feet or less	None

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 06-125, § 3, 9-12-06; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-43.1. Liquid waste disposal and potable water supply systems.

- (1) The intent and purpose of this section is to safeguard the public health, safety, and welfare by regulating liquid waste storage, disposal and treatment methods other than sanitary sewers and any source of potable water supply.
- (2) No person shall discharge or cause, allow, permit, let or suffer to be discharged any liquid waste or other substance of any kind whatsoever into a septic tank other than domestic sewage.
- (3) Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any residential land use served or to be served by a septic tank or any source of potable water supply until the County or municipal officer, agent, employee or Board affirmatively determines that the residential land use will comply with one (1) or more of the requirements as set forth in Sections 24-43.1(3)(a), (b), (c), (d), (e), and (f) and Section 24-43.2(1) of this Code, and, additionally, that the property is not within a feasible distance for a public water main or public sanitary sewers.

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any residential land use served or to be served by a septic tank or any source of potable water supply until the County or municipal officer, agent, employee or Board affirmatively determines that the residential land use will comply with one (1) or more of the requirements set forth in Sections 24-43.1(3)(a), (b), (c), (d), (e) and (f) and Section

24-43.2(1) of this Code, and, additionally, that the property is not within a feasible distance for a public water main or public sanitary sewers.

- (a) Where public water is used:
 - (i) The minimum lot size for a singlefamily residence shall be fifteen thousand (15,000) square feet of unsubmerged land;
 - (ii) The minimum lot size for a duplex residence shall be twenty thousand (20,000) square feet of unsubmerged land;
 - (iii) The maximum sewage loading for all other residential uses shall be one thousand five hundred (1,500) gallons per day per unsubmerged acre; or
- (b) Where public water is not used:
 - (i) The minimum lot size for a singlefamily residence shall be twenty thousand three hundred twenty-eight (20,328) square feet of unsubmerged land;
 - (ii) The minimum lot size for a duplex residence shall be twenty-nine thousand forty (29,040) square feet of unsubmerged land;
 - (iii) The maximum sewage loading for all other residential uses shall be seven hundred fifty (750) gallons per day per unsubmerged acre; or
- In the case of a property owner who has requested to use a tract of land for a single-family residence or duplex residence but which tract of land fails to comply with the minimum lot size requirements of Section 24-43.1(3)(a)(i) or Section 24-43.1(3)(a)(ii) hereof and a public right-of-way containing an available and operative public water main or easement containing an available and operative public water main abuts said tract of land, the Director or the Director's designee has issued his written approval for the use of a septic tank for such single-family residence or duplex residence. The Director or the Director's designee shall issue his

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written approval only if he finds that said tract of land was created by deed prior to January 1, 1958, or was created by plat approved by the governmental authorities having jurisdiction prior to January 1, 1972, provided that said tract of land, as created by the originally recorded plat or originally recorded deed, has continuously remained in the same form as set forth in the originally recorded plat or deed, or

- (d) The Director or the Director's designee has issued his written approval for any residential land use served or to be served by a public water main and a septic tank. The Director or the Director's designee shall issue his written approval only if he finds the following:
 - (i) That extension of public sanitary sewers to serve the property from the nearest available point of connection to an available public sanitary sewer is not within a feasible distance for public sanitary sewers, and
 - (ii) That more than fifty (50) percent of an area, consisting of a minimum of one-quarter (1/4) mile square extending a minimum of one-eighth (1/8) of a mile radially from the perimeter of the property, contains land uses served by septic tank(s) and a public water supply, and
 - (iii) That the property complies with the minimum lot size requirements and the maximum lot size requirements and the maximum daily domestic sewage flow (sewage loading) requirements of Chapter 10D-6 of the State of Florida Rules of the Department of Health and Rehabilitative Services as same may be amended from time to time, or has obtained a variance from the aforementioned requirements of Chapter 10D-6, and
 - (iv) The property was part of a recorded subdivision which was created by plat or deed but said subdivision has not continuously remained as a le-

- gally recorded subdivision and the size of each proposed lot is the same or larger than the lots set forth in the recorded subdivision, and
- (v) That if the property is located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the basic wellfield protection area of any public utility potable water supply well, the property complies with Section 24-43(4)(a) and Section 24-43(4)(d) of this Code, and
- (vi) That residential land uses other than a single-family residence or a duplex residence shall be in compliance with Sections 24-43.1(3)(a)(iii), or
- (e) The Director or the Director's designee has issued the Director's or the Director's designee's written approval for a platting action (final plat, waiver of plat, or equivalent municipal platting action) for a residential subdivision which was in existence prior to the effective date of this subsection served or to be served by a public water main and septic tanks. The Director or the Director's designee shall issue the Director's or the Director's designee's written approval only if the Director or the Director's designee finds the following:
 - (i) The extension of public sanitary sewers to serve the property from the nearest available point of connection to an available public sanitary sewer is not within a feasible distance for public sanitary sewers, and
 - (ii) The original subdivision was created by deed prior to January 1, 1958, or was created by plat prior to January 1, 1972, provided that said tract of land, as created by the originally recorded plat or deed, has continuously remained in the same form as set forth in the originally recorded plat or deed, and
 - (iii) The individual lots created by the platting action fail to comply with

- the minimum lot size requirements of Sections 24-43.1(3)(a)(i) or Section 24-43.1(3)(a)(ii) hereof, and
- (iv) The proposed subdivision of the originally recorded plat or deed will result in a subdivision containing less than or equivalent number of lots as the original subdivision described in subsection Section 24-43.1(3)(e)(ii), and
- (v) That residential land uses other than a single-family residence or a duplex residence shall be in compliance with Section 24-43.1(3)(a)(iii), or
- (f) The Director or the Director's designee has issued the Director's or the Director's designee's written approval for a platting action (final plat, waiver of plat or equivalent municipal platting action) for a residential subdivision which was not in existence prior to the effective date of this subsection which subdivision is served or to be served by a public water main and septic tanks. The Director or the Director's designee shall issue the Director's or the Director's designee's written approval only if the Director or the Director's designee finds the following:
 - (i) The extension of public sanitary sewers to serve the property from the nearest available point of connection to an available public sanitary sewer is not within a feasible distance for public sanitary sewers, and
 - (ii) The number of lots in the subdivision created by the platting action is derived by dividing the gross area of the property by the minimum lot size for a single-family residence or duplex residence as set forth in Sections 24-43.1(3)(a)(i) and 24-43.1(3)(a)(ii) hereof, and
 - (iii) At least one-fourth (¾) of the lots in the subdivision exceed the minimum lot size requirements set forth in Section 24-43.1(3)(a)(i) and Section 24-43.1(3)(a)(ii) hereof and the remaining three-fourths (¾) of the lots

are equal to or exceed ninety-five (95) percent of the lot size requirement set forth in Sections 24-43.1(3)(a)(i) and Section 24-43.1(3)(a)(ii).

In calculating the square footage of lots in Sections 24-43.1(a), (b), (c), (d), (e) and (f) above, abutting easements and rights-of-way shall be considered to the center lines thereof.

(4) Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant or issue any building permit (except building permits for repair and maintenance of existing facilities), certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any nonresidential land use served or to be served by any source of potable water supply and a septic tank without obtaining the prior written approval of the Director or the Director's designee.

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy, or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any nonresidential land use served or to be served by any source of public water supply and a septic tank without obtaining the prior written approval of the Director or the Director's designee.

The Director or the Director's designee shall issue the Director's or the Director's designee's written approval if the only liquid waste (excluding liquid wastes associated with the processing of agricultural produce in agricultural packing houses and liquid wastes associated with agricultural vehicle or, agricultural equipment maintenance facilities, stormwater and water used within a self-contained water recycling car wash facility, provided said facility does not backwash the recycling filters) which shall be generated, disposed of, discharged, or stored on the property shall be domestic sewage discharged into a septic tank

and additionally, that the property is not within a feasible distance for public water mains and public sanitary sewers, and only:

- After the owner of the property (excluding property upon which an agricultural vehicle or agricultural equipment maintenance facility operates) submits to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that the only liquid waste (excluding liquid wastes associated with the processing of agricultural produce in agricultural packing houses and liquid wastes associated with agricultural vehicle or agricultural equipment maintenance stormwater and water used within a selfcontained water recycling car wash facility, provided said facility does not backwash the recycling filters) which shall be generated, disposed of, discharged, or stored on the property shall be domestic sewage discharged into a septic tank. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded by the Department at the expense of the owner of the property; and
- (b) If the Director or the Director's designee determines that the proposed nonresidential land use is in accordance with the following:
 - (i) Where public water is used the maximum allowable sewage loading shall be one thousand five hundred (1,500) gallons per day per unsubmerged acre, or
 - (ii) Where public water is not used the maximum allowable sewage loading shall be seven hundred fifty (750) gallons per day per unsubmerged acre.

In calculating the square footage of lots in Sections 24-43.1(b)(i) and (ii) above, abutting easements and rights-of-way shall be considered to the center lines thereof; and

- (c) If the Director or the Director's designee determines that the existing nonresidential land use for the property or the nonresidential land use requested for the property is served or to be served by an on site domestic well system and a septic tank and is not one (1) or more of the following nonresidential land uses:
 - Establishments primarily engaged in the handling of food and drink except factory prepackaged products and agricultural crops,
 - (ii) Educational institutions,
 - (iii) Intermediate care facilities,
 - (iv) Health care facilities.

Notwithstanding the above, the Director or the Director's designee shall approve the issuance of a building permit for the repair or maintenance of existing facilities.

(5) The following table shall be utilized by the Director or the Director's designee to determine sewage flows for sanitary sewers and the maximum allowable septic tank sewage loading requirements set forth in this chapter. If the Director or the Director's designee receives competent factual data and information such as actual onsite measured sewage flows or actual metered water bills, the Director or the Director's designee may utilize this data and information to determine sewage flows for sanitary sewers and the maximum allowable septic tank sewage loading requirements set forth in this chapter in lieu of the table below. This table shall not be utilized for the sizing of septic tanks. Sizing of septic tanks shall be in accordance with Florida Statutes regarding septic tanks.

Type of Land Use, Gallons Per Day (GPD)

Residential Land Uses:

Single-family residence: 350 (GPD/unit)

Townhouse residence: 250 (GPD/unit)

Apartment residence: 200 (GPD/

Mobile home residence: 300 (GPD/unit)

Duplex or twin home residence: 250 (GPD/unit)

Commercial Land Uses:

Barbershop: 10/100 (GPD/sq. ft.) Beauty salon or hair boutique: 75 (GPD/chair)

Bowling alley: 100 (GPD/lane)

Dentist's office:

(a) Per dentist: 250 (GPD/dentist)

(b) Per wet chair: 200 (GPD/chair)

Physician's office: 250 (GPD/physician)

Full service restaurant (350 GPD minimum): 50 (GPD/seat)

Bar or cocktail lounge: 15 (GPD/seat)

Fast food restaurant (350 GPD minimum): 35 (GPD/seat)

Take-out restaurant (350 GPD minimum); 50/100 (GPD/sq. ft.)

Hotel or motel: 100 (GPD/room)

Office building: 10/100 (GPD/sq. ft.) Motor vehicle service station: 10/100 (GPD/sq. ft.)

Shopping center (dry uses): 5/100 (GPD/sq. ft.)

Stadium, racetrack, ballpark: 3 (GPD/seat)

Store without food service: 5/100 (GPD/sq. ft.)

Theater:

(a) Indoor auditorium: 3 (GPD/seat)

(b) Outdoor drive-in: 5 (GPD/space)

Camper or trailer park: 150 (GPD/space)

Banquet halls: 25 (GPD/seat)

Car wash:

(a) Recycling-type: 750 (GPD/bay)

(b) Hand-type: 3,500 (GPD/bay)

Coin laundries: 225 (GPD/washer) Country clubs: 25 (GPD/member) Funeral homes: 10/100 (GPD/sq. ft.) Gas station/mini-mart: 450 (GPD/unit)

Health spa/gyms: 35/100 (GPD/sq. ft.)

Veterinarian's office:

(a) Per veterinarian: 250 (GPD/vet)

(b) With kennels: 30 (GPD/cage)

Kennels: 30 (GPD/cage) Marinas: 40 (GPD/slip)

Food preparation outlets (bakeries, meat markets, commissaries) (350 GPD minimum): 50 (GPD/sq. ft.)

Pet grooming:

(a) Store space: 10/100 (GPD/sq. ft.)

(b) Per tub: 75 (GPD/tub)

Industrial Land Uses:

Factory without showers: 10/100 (GPD/sq. ft.)

Factory with showers: 20/100 (GPD/sq. ft.)

Airport: 5 (GPD/passenger); 10 (GPD/employee)

House of worship: 3 (GPD/seat)

Hospital: 250 (GPD/bed)

Convalescent or nursing home: 150 (GPD/bed)

Park:

(a) With toilets only: 5 (GPD/person)

(b) With showers and toilets: 20 (GPD/person)

Other residential institution or facility (including adult congregate living units): 100 (GPD/person)

School:

(a) Day care/nursery: 5 (GPD/student)

- (b) Regular school: 10 (GPD/student)
- (c) With cafeteria add: 5 (GPD/student)
- (d) With showers add: 5 (GPD/student)
- (e) Teachers and staff: 15 (GPD/person)

Public swimming facility: 10 (GPD/person)

Warehouse/industrial speculation building: 20/1000 (GPD/sq. ft.)

Storage warehouse or mini-warehouse: 5/1000 (GPD/sq. ft.)

(6) Notwithstanding any provision of this Code, no County or municipal officer, agent, employee, or Board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any nonresidential land use served or to be served by any liquid waste storage, disposal or treatment method other than public sanitary sewers or any source of potable water supply other than a public water main without obtaining the prior written approval of the Director or the Director's designee.

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any nonresidential land use served by any liquid waste storage, disposal or treatment method other than public sanitary sewers or any source of potable water supply other than a public water main without obtaining the prior written approval of the Director or the Director's designee.

The Director or the Director's designee shall issue his written approval only if:

(a) The Director or the Director's designee determines that the existing nonresidential land use for the property or the nonresidential land use for the property is a nonresidential land use served or to be served by a public water main and is not one (1) or more of the nonresidential land uses permitted under the following Miami-Dade County zoning classifications:

- (i) BU-1A (excluding those land uses permitted by BU-1),
- (ii) BU-2 (excluding those land uses permitted by BU-1),
- (iii) BU-3 (excluding those land uses permitted by BU-1),
- (iv) IU-1,
- (v) IU-2,
- (vi) IU-3,
- (vii) IU-C, or
- (b) The Director or the Director's designee determines that the existing nonresidential land use for the property or the nonresidential land use requested for the property is a nonresidential land use served or to be served by an on site domestic well system and is not an establishment primarily engaged in the handling of food and drink (except factory prepackaged products), educational institutions, intermediate care facilities and health care facilities and is not one (1) or more of the nonresidential land uses permitted under the following Miami-Dade County zoning classifications:
 - (i) BU-1A (excluding those land uses permitted by BU-1 except an establishment primarily engaged in the handling of food and drink (except factory prepackaged products), educational institutions, intermediate care facilities and health care facilities).
 - (ii) BU-2 (excluding those land uses permitted by BU-1 except an establishment primarily engaged in the handling of food and drink (except factory prepackaged products), educational institutions, intermediate care facilities and health care facilities).
 - (iii) BU-3 (excluding those land uses permitted by BU-1 except an establishment primarily engaged in the han-

dling of food and drink (except factory prepackaged products), educational institutions, intermediate care facilities, and health care facilities),

- (iv) IU-1,
- (v) IU-2,
- (vi) IU-3,
- (vii) IU-C,
- (viii) Unusual uses (excluding fruit and vegetable stands (no food or drinks processing) on a seasonal basis; lake excavation; concrete batching plant; concrete block plant; rock crushing and screening plant; filling of rock pits; rock quarries; radio and television towers and transmitting stations; trailers as watchman's quarters), or
- (c) The owner of the property submits to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that prior to the approval, granting or issuance of any building permit, certificate of use and occupancy (except for changes in ownership) or municipal occupational license (except for changes in ownership) the property shall be connected to a public water main and a public sanitary sewer. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenant shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property, or
- (d) An application has been filed for certificate of use and occupancy or municipal occupational license for a land use served or to be served by a public water main and any liquid waste storage, disposal or treatment method approved prior to September 30, 1983, or, an application has been filed for a certificate of use and occupancy or municipal occupational license for a land use served or to be served by an on

- site domestic well system and any liquid waste storage, disposal or treatment method other than public sanitary sewers approved prior to June 13, 1986, or
- The Director or the Director's designee determines that the property is served or to be served by a public water main and is served or to be served by any liquid waste storage, disposal or treatment method other than public sanitary sewers, is in compliance with Sections 24-43.1(4)(a) and (b), and that the existing nonresidential land use for the property or the nonresidential land use requested for the property is one (1) or more of the nonresidential land uses permitted under the Miami-Dade County zoning classifications set forth in Sections 24-43.1(6)(a)(i), (ii), or (iii) above, and the owner of the property has executed a covenant running with the land in favor of Miami-Dade County which provides that the property shall only be used for those nonresidential uses permitted under Miami-Dade County zoning classification BU-1 until such time as the property is connected to public sanitary sewers. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida by the Department at the expense of the owner of the property, or
- (f) The Director or the Director's designee determines that the property is served or is to be served by an on site domestic well system and is served or to be served by any liquid waste storage, disposal or treatment method other than public sanitary sewers, is in compliance with Sections 24-43.1(4)(a), (b) and (c), and that the existing nonresidential land use for the property or the nonresidential land use requested for the property is one (1) or more of the nonresidential land uses permitted under the Miami-Dade County zoning classifications set forth in Sections 24-43.1(6)(b)(i), (ii), or (iii) above, and the owner of the property has executed a

covenant running with the land in favor of Miami-Dade County which provides that the property shall only be used for those nonresidential uses permitted under Miami-Dade County zoning classification BU-1 (excluding establishments primarily engaged in the handling of food and drink, except factory prepackaged products, educational institutions, intermediate care facilities and health care facilities) until such time as the property is connected to a public water main and a public sanitary sewer. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property, or

- The Director or the Director's designee determines that no portion of the property is located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the maximum day wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the basic wellfield protection area of any public utility potable water supply well, that the owner of the property is applying for a land use prohibited by Section 24-43.1(6)(a) above, and:
 - (i) That extension of public sanitary sewers to serve the property from the nearest available point of connection to an available public sanitary sewer is not within a feasible distance for public sanitary sewers, and
 - (ii) That more than fifty (50) percent of an area, consisting of a minimum of one-quarter (¼) mile square extending a minimum of one-eighth (⅓s) of a mile radially from the perimeter of

- the property, contains land uses served by septic tank(s) and public water, and
- (iii) That the property complies with Sections 24-43.1(4)(a) and (b), and
- (iv) That if the nonresidential land use will handle, use, or store hazardous materials on the property then the water pollution prevention and abatement measures and practices set forth in Sections 24-43(5)(a)(i), (ii), (iii), (iv), and (v) of this Code shall be provided. Said water pollution prevention and abatement measures and practices shall be subject to the approval of the Director or the Director's designee, and
- That the owner of the property submits to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which sets forth the nonresidential land uses to be allowed on the property served by septic tank(s). Said covenant shall only include the nonresidential land uses permitted by the existing Miami-Dade County or municipal zoning classification for the property or permitted by the Miami-Dade County or municipal zoning classification requested by the owner of the property and which are determined by the Director or the Director's designee to generate, dispose of, discharge, or store only domestic sewage discharged into a septic tank and not to generate, dispose of, discharge, or store any other liquid waste except storm water or water used within a self-contained water recycling car wash facility, provided said facility does not backwash the recycling filters.

Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be

- recorded by the Department at the expense of the owner of the property, and
- (vi) That the property is served or is to be served by a public water supply, or
- (h) The Director or the Director's designee determines that no portion of the property is located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the maximum day wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the basic wellfield protection area of any public utility potable water supply well, that the owner of the property is applying for a land use prohibited by Section 24-43.1(6)(b)(i), (ii), and (iii) above, and:
 - (i) That extension of a public water main and public sanitary sewer(s) to serve the property from the nearest available point of connection to an available public water main and public sanitary sewers is not within a feasible distance for public water mains and public sanitary sewers.
 - (ii) That the property complies with Sections 24-43.1(4)(a), (b) and (c), and 24-43.1(6)(g)(v), and 24-43.2(1).
 - (iii) That the nonresidential land use will not use, generate, handle, dispose of, discharge or store hazardous materials on the property.
 - (iv) That the nonresidential land use(s) will not have an adverse environmental impact on groundwater quality within the property.
 - In determining whether a land use does not or will not have an adverse environmental impact on the groundwater quality within the property,

the Director or the Director's designee shall consider the following factors:

- The land use will not be detrimental to the public health, welfare and safety and will not create a nuisance and will not materially increase the level of water pollution within the property;
- 2. The use, generation, handling, disposal of, discharge or storage of hazardous materials will not occur on the property;
- 3. The only liquid waste (excluding stormwater) which will be generated, disposed of, discharged, or stored on the property shall be domestic sewage discharged to a public sanitary sewer or septic tank;
- 4. Stormwater runoff shall be retained on the property and disposed of through infiltration drainage systems supplemented with seepage drainage systems, or
- The Director or the Director's designee determines that no portion of the property is located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the maximum day wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the basic wellfield protection area of any public utility potable water supply well, that the property is located within the boundaries of a sanitary sewer improvement district approved by the Board of County Commissioners or a municipal governing body, that the owner of the

property is applying for a land use prohibited by subsection Section 24-43.1(6)(a) above, and

- (i) That the property is served or will be served by a public water supply, and
- (ii) That the property complies with the requirements of Section 24-43.1(4)(b), and
- (iii) That if the nonresidential land use will generate, handle, store or use hazardous waste on the property then the water pollution prevention and abatement measures and practices listed below shall be provided. Said water pollution prevention and abatement measures and practices shall be subject to the approval of the Director or the Director's designee.
 - 1. Monitoring of groundwater, and
 - 2. Secondary containment of hazardous wastes stored on the property, and
 - 3. Disposal of hazardous wastes by a liquid waste transporter with a valid liquid waste transporters operating permit issued by the Director, and
 - 4. Inventory control and recordkeeping of hazardous wastes generated or stored on the property, and
 - 5. Stormwater management.
- (iv) That if the nonresidential land use will generate, handle, use or store liquid wastes (excluding hazardous wastes and domestic sewage) on the property then the best management practices listed below shall be provided. Said best management practices shall be subject to the approval of the Director or the Director's designee.
 - 1. Disposal of liquid wastes, other than domestic sewage, by a liquid waste transporter with a

- valid liquid waste transporter operating permit issued by the Director, and
- 2. Inventory control and record keeping of liquid wastes, other than domestic sewage, generated and stored on the property.
- (i) The Director or the Director's designee determines that the property is located within the maximum day wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the basic wellfield protection area of any public utility potable water supply well, that the property is located within the boundaries of a sanitary sewer improvement district approved by the Board of County Commissioners or a municipal governing body, that the owner of the property is applying for a land use prohibited by Section 24-43.1(6)(a) above, and
 - (i) That the property is served or is to be served by a public water supply, and
 - (ii) That the property complies with Section 24-43.1(4)(b), and
 - (iii) That the property complies with the requirements of Sections 24-43(5)(a), (b), and (c), and
 - (iv) That if the nonresidential land use will handle, generate, store, or dispose of liquid wastes (excluding hazardous wastes), other than domestic sewage discharged to a septic tank, on the property, then the following best management practices shall be provided:
 - 1. Monitoring of groundwater, and

- Secondary containment of liquid wastes stored on the property, and
- 3. Disposal of liquid wastes by a liquid waste transporter with a valid liquid waste transporter operating permit issued by the Director, and
- 4. Inventory control and recordkeeping of liquid wastes other than domestic sewage discharged to a septic tank, and
- 5. Stormwater management.

Said best management practices shall be subject to the approval of the Director or the Director's designee, and

- (7) Notwithstanding any provision of this Code, when an approved public gravity sanitary sewer or approved sanitary sewer force main is available and operative in a public right-of-way or easement abutting the property, the use of any liquid waste storage, disposal or treatment methods shall cease within ninety (90) days of the date that the Director or the Director's designee determines that the approved public sanitary sewer is available and operative. Thereafter, all liquid wastes that are generated, handled, disposed of, discharged or stored on the property shall be discharged to an approved and operative gravity sanitary sewer or approved sanitary sewer force main except those liquid wastes, other than domestic sewage, that are permitted by this chapter to be generated, handled, treated or stored on the property. Notwithstanding the foregoing, graywater may, at the option of the property owner, be discharged to a graywater disposal system approved by the Director or the Director's designee.
- (8) Notwithstanding any provision of this Code, the use of any liquid waste storage, disposal or treatment methods (excluding public sanitary sewers and stormwater disposal methods) for any nonresidential land use within the Northwest Wellfield protection area, within the West Wellfield Interim protection area, the maximum day pumpage wellfield protection areas of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston

Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights wellfield complex or within the basic wellfield protection area of any public utility potable water supply well shall cease within six (6) months from the date that the Director or the Director's designee determines that an approved public gravity sanitary sewer has been made available and operative in any portion of the public right-of-way or easement abutting the property, or the use of any liquid waste storage, disposal or treatment methods (excluding public sanitary sewers and stormwater disposal methods) for any nonresidential land use which exceeds the maximum allowable sewage loading permitted by Section 24-43.1(4)(b) of this Code, shall cease within six (6) months from the date that the Director or the Director's designee determines that an approved public gravity sanitary sewer has been made available and operative in any portion of the public right-of-way or easement abutting the property. Thereafter, all liquid wastes that are generated, handled, disposed of, discharged or stored on the property shall be discharged to an approved and operative gravity sanitary sewer except those liquid wastes, other than domestic sewage, that are permitted by this chapter to be generated, handled, treated or stored on the property.

(9) Interim sewage treatment plants which serve any property within one-quarter (1/4) mile from a public sanitary sewer which ultimately discharges to a regional sewage treatment plant of the Miami-Dade Water and Sewer Department shall cease operation when the aforesaid public sanitary sewer is made operable and available. The sewage flowing to the aforesaid interim sewage treatment plants shall be diverted and transmitted to public sanitary sewers for ultimate discharge to a regional sewage treatment plant of the Miami-Dade Water and Sewer Department. Private interim sewage treatment plants shall cease to operate within six (6) months from the date the said public sanitary sewer is made operable and available. Public interim sewage treatment plants operated by a utility shall cease to operate within two (2) years from the date the said public sanitary sewer is made operable and available. The aforesaid one-quarter (1/4) mile

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distance shall be measured from the closest point of any of the properties served by the aforesaid interim sewage treatment plants and the nearest available point of connection within a public right of way or public easement to the aforesaid public sanitary sewer.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 06-125, § 4, 9-12-06; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-43.2. Regulation of on-site domestic well systems and other water supply wells.

- (1) Regulation of on-site domestic well systems generally.
 - (a) Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any land use served or to be served by an on-site domestic well system without obtaining the prior written approval of the Director or the Director's designee.

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any land use served or to be served by a domestic well system without obtaining the prior written approval of the Director or of the Department of Environmental Resources Management designee.

Pursuant to the foregoing, the Director or the Director's designee shall issue his written approval only if the Director or the Director's designee determines that:

(i) That the existing land use for the property or the land use requested

- for the property is in compliance with Section 24-43.1 of this chapter, and
- (ii) That the installation of a public water main to serve the property from the nearest available point of connection to an available public water main is not within a feasible distance for public water mains, and
- (iii) That the groundwater at the site does not require treatment in order to meet the primary drinking water quality standards specified in Chapter 62-55, Florida Administrative Code, as same may be amended from time to time, and
- (iv) That the groundwater at the site does not contain more than two hundred fifty (250) milligrams per liter (mg/l) of chlorides at a depth of thirty (30) feet from ground elevation.
- (b) No construction may be begun on any project within Miami-Dade County involving the construction of a well capable of withdrawing water without obtaining approval from the Director. No well that withdraws water in excess of five thousand (5,000) gallons per day from groundwater, surface water or any other water or waters of Miami-Dade County may be maintained or operated without a permit. All permit applications shall be filed with the Director on forms provided by the Director and shall include but shall not be limited to the following information:
 - (i) The name and address of the applicant (if the applicant is a corporation include the address of the principal business office);
 - (ii) The date the application is filed;
 - (iii) The source of water supply (if the water is from a lake, spring, river, stream or other source of surface water the name generally given to the source by the people in the vicinity. If the water is from a groundwater source this fact shall be stated on the application);

- (iv) The quantity of water applied for;
- (v) The use to be made of the water and any limitation thereon (the description shall include the nature of the proposed use, the method of withdrawal or division of the water and facts, figures and other information on which the amount of water requested was based);
- (vi) The place where the water is to be used;
- (vii) The location of the well and for surface waters, the point of diversion;
- (viii) The total related land area owned by the applicant;
- (ix) The necessity for the well;
- (x) Any known persons who may be directly affected by the granting of the application;
- (xi) The signature of the applicant or his agent (if the signer is signing in a representative capacity he shall attach proof of his authority—in the case of a corporation, governmental body or public utility the applicant shall attach a certified copy of the authority under which the application is made);
- (xii) Other information as may be requested by the Department.
- (2) Conditions for a well permit.
- (a) In order to obtain a well permit an applicant must show that the intended use:
 - (i) Is a reasonable, beneficial use, and
 - (ii) Will not interfere with any legal use of water existing at the time of the application, including both exempted domestic uses and uses exercised under the authority of a valid permit, and
 - (iii) Is consistent with the public interest.

- (b) In determining whether a use is consistent with the public interest, the Director may consider the following factors:
 - (i) The maximum economic development of the water resources consistent with present and future uses;
 - (ii) The control of such waters for such purposes as environmental protection, drainage, flood control and water storage;
 - (iii) The quantity of water available for application to a reasonable-beneficial use;
 - (iv) Preservation of wasteful, uneconomic, impractical or unreasonable uses of water resources;
 - (v) The preservation and enhancement of water quality of the County and the provisions of the water quality standards and classifications established pursuant to Chapter 24 of the Code of Miami-Dade County;
 - (vi) The County's water resources policy as expressed in Chapter 24 of the Code:
 - (vii) The availability and proximity of public water supply; and
 - (viii) The satisfaction of the requirements of Section 24-43.3 of the Code.
- (c) The Director may reserve water from use by permit applicants in such locations and quantities and for such seasons of the year as may reasonably be necessary to protect the public health, safety or fish and wildlife. Such reservations shall be subject to periodic review and revision in light of changed conditions except that all legal uses of water existing at the time of the reservation shall not be subject to this regulation so long as such uses are not contrary to the public interest. Any applicant aggrieved by an action of the Director or the Director's designee may appeal to the Environmental Quality Control Board under the procedures and standards set forth in Section 24-11 of the Code.

(3) Permits for existing uses. All uses of water in existence before the effective date of this section, unless otherwise exempted from regulation by law, may be continued after the adoption of this permit system. A permit for any existing use shall be issued upon proper application. Failure to apply for a permit for any existing use for one (1) year after the effective date of this ordinance shall constitute an abandonment of the right granted by this section.

Notwithstanding the above, when an approved public water main has been made available and operative in any portion of the public right-of-way or easement abutting the property, the use of any on site domestic well system shall cease and connection shall be made to a public water main within ninety (90) days from the date that the Director or the Director's designee determines that the approved public water main is made available and operative, and

- (a) The existing sewage loading on the property exceeds the maximum allowable sewage loading permitted by Sections 24-43.1(3) or 24-43.1(4)(b) of this Code, or
- (b) The groundwater quality for the property exceeds the potable water standards in Section 24-43.3(2) of this chapter.
- (4) Competing applications.
- (a) If two (2) or more applications, otherwise in compliance with the provisions of this chapter, are pending for a quantity of water that is inadequate for both (or all) or which for any other reason are in conflict, the Director shall have the right to modify or approve the application or applications to best serve the public interest. In considering the relative benefit to be derived by the public from such proposed uses of water the Director may within the same type of use and source consider the following:
 - (i) Public users should be preferred over private users;
 - (ii) Economically more productive uses should be preferred over less productive uses:

- (iii) The purposes expressly declared to be in the public interest in Chapter 24 of the Code should be given primary consideration.
- (b) In the event two (2) or more competing applications which have equally qualified under Section 24-43.2(4)(a) above cannot be reconciled by modification by the Director, the Director shall give preference to:
 - (i) Renewal application, or
 - (ii) If none or all are renewal applications, to the first properly filed application.
- (5) Modification, renewal and transfer of permits. A permittee may apply to the Director for approval of any modification of a permit use. The Director may approve any modification of use which involves a decrease in the quantity of water required. Modification of any other term or terms of a permit may be granted at the discretion of the Director provided that such modification does not effect substantially the public interest.
 - (6) Revocation of permits.
 - (a) Pursuant to a hearing, the Environmental Quality Control Board may upon application by the Director:
 - (i) Revoke any permit for complete nonuse of water supply allowed by the permit for a period of one (1) year or more;
 - (ii) Permanently revoke in whole or in part any permit for any material false statement in the application to continue, to initiate, or to modify a use, or for any material false statement in any report or statement of fact required by the user pursuant to the provisions of this section;
 - (iii) Permanently or temporarily revoke in whole or in part any permit for the willful violation of conditions of the permit;
 - (iv) Revoke in whole or in part for a period not to exceed one (1) year any

- permit for the violation of any provision of Chapter 24 or regulation adopted thereunder;
- (v) Revoke, in whole or in part, any permit where adequate public water becomes available.
- (b) The Director may cancel any permit with the written consent of the permittee.
- (7) Emergency drought conditions. Nothing in this section shall be construed to prohibit the exercise of emergency powers to control the use, withdrawal or diversion of water during periods of emergency water shortage.
- (8) *Violation of section*. It shall be unlawful for any person without a permit to construct, operate or maintain a well as required by this section.
- (9) Effect of denial. When an application for a permit has been denied by the Director and that denial, pursuant to a timely appeal, has not been overruled by the Environmental Quality Control Board a new application for a permit shall not be resubmitted within one (1) year of such final denial unless the applicant can demonstrate a substantial change in conditions or unless the permit applied for is substantially modified and is in compliance with the Director's reason for denial.
 - (10) Definitions.
 - (a) Domestic use shall mean any use of water for individual personal needs or for household purposes such as drinking, bathing, eating, cooking or sanitation.
 - (b) Emergency shall mean that situation where the public health, safety or welfare or the health of animals, fish or aquatic life or of a public water supply or recreational, commercial, industrial, agricultural or other reasonable use of water is immediately in danger or threatened by an insufficient supply, restricted source, deleterious quality or other conditions of the water within the County.
 - (c) Director shall mean the Director of the Department of Environmental Resources Management with powers as provided by Section 24-7 of the Code.

- (d) Groundwater shall mean water beneath the surface of the ground whether or not flowing through known and definite channels.
- (e) Person shall mean any and all persons including but not limited to any individual, firm, association, organization, partnership, business trust, corporation, company, United States of America, the State of Florida and all the municipalities and public agencies thereof located within Miami-Dade County.
- (f) Reasonable-beneficial use shall mean the use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner which is both reasonable and consistent with the public interest.
- (g) Surface water shall mean water upon the surface of the earth whether contained in bounds created naturally or artificially or diffused. Water from a natural spring or well shall be classified as surface water when it exits from the spring or well onto the earth's surface.
- (h) Water or waters of the County shall mean any and all waters on or beneath the surface of the ground including natural or artificial water courses, lakes, ponds or diffused surface water and water percolating, standing or flowing beneath the surface of the ground as well as all coastal waters in the geographic boundaries of Miami-Dade County, Florida.
- (i) Water shortage shall mean that situation within all or part of Miami-Dade County, Florida wherein insufficient water is available to meet the requirements of the permit system or where the conditions are such as to require temporary reduction in the total use within the area to protect water resources from serious harm.
- (j) Well shall mean any excavation that is drilled, cored, bored, washed, driven, dug, jetted or otherwise constructed when the intended use of such excavation is for the location, acquisition, development or arti-

ficial recharge of groundwater or removal of water from beneath the ground. The term well does not include sandpoint wells or any wells for the purpose of obtaining or prospecting for oil, natural gas, minerals or products of mining or quarrying or the inserting of media to dispose of oil brinds or to repressure an oil or natural gas-bearing formation or for storing petroleum, natural gas or other products.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-43.3. Potable water standards.

(1) GENERAL PROHIBITIONS. It shall be unlawful for any person, firm, corporation, private or public utility, to cause, permit or otherwise allow any potable water supply to breach the values set forth in Section 24-43.3(2).

(2) POTABLE WATER STANDARDS FOR MI-AMI-DADE COUNTY.

(a) Bacteriological quality; sampling. Compliance with the bacteriological requirements of these standards shall be based on examinations of samples collected at representative points throughout the distribution system. The frequency of sampling and the location of sampling points shall be established by the Director or the Director's designee after investigation of the source, method of treatment, and protection of the water concerned. In no event shall the frequency be less than as set forth below:

	Minimum Number of
Populations Served	Samples Per Month
25—2,500	2
2,501—3,300	3
3,301—4,100	4
4,101—4,900	5
4,901—5,800	6
5,801—6,700	7
6,701—7,600	8
7,601—8,500	9
8,501—9,400	10
9,401—10,300	11
10,301—11,100	12

	7.6.
D 1 1 C 1	Minimum Number of
Populations Served	Samples Per Month
11,101—12,000	13
12,001—12,900	14
12,901—13,700	15
13,701—14,600	16
14,601—15,500	17
15,501—16,300 16,301—17,200 17,201—18,100 18,101—18,900 18,901—19,800 19,801—20,700 20,701—21,500	18
16,301—17,200	19
17,201—18,100	20
18,101—18,900	21
18,901—19,800	22
19,801—20,700	23
20,701—21,500	24
21,501—22,500	25
22,301—23,200	26
23,201—24,000	27
24,001—24,900	28
24,901—25,000	29
25,001—28,000	30
28,001—33,000	35
33,001—37,000	40
37,001—41,000	45
41,001—46,000	50
46,001—50,000	55
50,001—54,000	60
54,001—59,000	65
59,001—64,000	70
64,001—70,000	75
70,001—76,000	80
76,001—83,000	85
83,001—90,000	90
90,001—96,000	95
96,001—111,000	100
111,001—130,000	110
130,001—160,000	120
160,001—190,000	130
190,001—220,000	140
220,001—250,000	150
250,001—290,000	160
290,001—320,000	170
320,001—360,000	180
360,001—410,000	190
410,001—450,000	200
450,001—500,000	210
500,001—550,000	220
550,001—600,000	230
600,001—660,000	240
660,001—720,000	250

	Minimum Number of
Populations Served	Samples Per Month
720,001—780,000	260
780,001—840,000	270
840,001—910,000	280
910,001—970,000	290
970,001—1,050,000	300
1,050,001—1,140,000	310
1,140,001—1,230,000	320
1,230,001—1,320,000	330
1,320,001—1,420,000	340
1,420,001—1,520,000	350
1,520,001—1,630,000	360
1,630,001—1,730,000	370
1,730,001—1,850,000	380
1,850,001—1,970,000	390
1,970,001—2,060,000	400
2,060,001—2,270,000	410
2,270,001—2,510,000	420
2,510,001—2,750,000	430
2,750,001—3,020,000	440
3,020,001—3,320,000	450
3,320,001—3,620,000	460
3,620,001—3,960,000	470
3,960,001—4,310,000	480
4,310,001—4,690,000	490
4,690,001—	500

- (b) Laboratories in which water examinations are made for required reports shall be subject to inspection at any time by the Director or the Director's designee.
- (c) Bacterial limits. The presence of organisms of the coliform group as indicated by samples examined shall not exceed the following limits:
 - (i) When ten (10) ml standard portions are examined not more than ten (10) percent in any month shall show the presence of the coliform group. The presence of the coliform group in three (3) or more ten (10) ml portions of a standard sample shall not be allowable if this occurs:
 - 1. In two (2) consecutive samples;
 - 2. In more than one (1) sample per month when less than twenty (20) are examined per month; or

3. In more than five (5) percent of the samples when twenty (20) or more are examined per month.

When organisms of the coliform group occur in three (3) or more of the ten (10) ml portions of a single standard sample, daily samples from the same sampling point shall be collected promptly and examined until the results obtained from at least two (2) consecutive samples show the water to be of satisfactory quality.

- (ii) When one hundred (100) ml standard portions are examined, not more than sixty (60) percent in any month shall show the presence of the coliform group. The presence of the coliform group in all five (5) of the one hundred (100) ml portions of a standard sample shall not be allowable if this occurs:
 - 1. In two (2) consecutive samples;
 - 2. In more than one (1) sample per month when less than five (5) are examined per month; or
 - 3. In more than twenty (20) percent of the samples when five (5) or more are examined permonth.

When organisms of the coliform group occur in all five (5) of the one hundred (100) ml portions of a single standard sample, daily samples from the same sampling point shall be collected promptly and examined until the results obtained from at least two (2) consecutive samples show the water to be of satisfactory quality.

- (iii) When the membrane filter technique is used, the arithmetic mean coliform density of all standard samples examined per month shall not exceed one (1) per one hundred (100) ml. Coliform colonies per standard sample shall not exceed 3/50 ml, 4/100 ml, 7/200 ml, or 13/500 ml in:
 - 1. Two (2) consecutive samples;

- 2. More than one (1) standard sample when less than twenty (20) are examined per month; or
- 3. More than five (5) percent of the standard samples when twenty (20) or more are examined per month.

When coliform colonies in a single standard sample exceed the above values, daily samples from the same sampling point shall be collected promptly and examined until the results obtained from at least two (2) consecutive samples show the water to be of satisfactory quality.

- (d) Physical characteristics; sampling. The frequency and manner of sampling shall be determined by the Director or the Director's designee. Under normal circumstances the Director or the Director's designee may require that samples be collected one (1) or more times per week from representative points in the distribution system and examined for turbidity, color, threshold odor, and taste.
- (e) Physical limits. The water shall contain no impurity which would cause offense to the sense of sight, taste, or smell. Under general use, the following limits shall not be exceeded:

Turbidity—5 nephelometric turbidity units

Color—15 units

Threshold odor number—3

(f) Chemical characteristics; sampling. The frequency and manner of sampling shall be determined by the Director or the Director's designee. Under normal circumstances, analyses for substances listed in Section 24-43.3(2)(h) need be made only annually. If, however, there is some presumption of unfitness because of the presence of undesirable elements, compounds, or materials, periodic determinations for the suspected toxicant or material shall be made more frequently and an exhaustive sanitary survey shall be made to

- determine the source of the pollution. Where the concentration of a substance is not expected to increase in processing and distribution, available and acceptable source water analyses performed in accordance with standard methods may be used as evidence of compliance with these standards.
- Chemical limits. The water shall not contain impurities in concentrations which may be hazardous to the health of the consumers. It should not be excessively corrosive to the water supply system. Substances used in its treatment shall not remain in the water in concentrations greater than required by good practice. Substances which may have deleterious physiological effect, or for which physiological effects are not known, shall not be introduced into the system in a manner which would permit them to reach the consumer. Each public water supply utility shall test the finished water produced by each of its water treatment plants on an annual basis for the materials identified as priority pollutants by the United States Environmental Protection Agency as set forth in Schedule A, attached hereto and made a part hereof [but not reproduced at length herein], and such other materials as may be designated by the Director or the Director's designee. Each of the other community water systems shall test the finished water produced by its water treatment system every third year for the aforesaid materials identified as priority pollutants by the United States Environmental Protection Agency, and such other materials as may be designated by the Director or the Director's designee.

The first of the previously mentioned analyses shall be performed, and the results submitted to the Director or the Director's designee, no later than one hundred fifty (150) days after the effective date of Ordinance No. 84-41. Subsequent analyses shall be performed, and the results submitted to the Director or the Director's designee, no later than July first of the respective year.

Analyses conducted to determine compliance with this section shall be made in accordance with an analytical method acceptable to the Director or the Director's designee in accordance with Schedule A, attached hereto and made a part hereof, and at the detection limits achievable using the specific technique. The laboratory performing these tests shall have appropriate experience in these types of drinking water analyses and shall be certified by the State of Florida.

After submittal of the test results to the utilities and community water systems for their review and comments at a public workshop, the Director or the Director's designee shall make available to the public thirty (30) days thereafter an annual publication of the test results. Said publication shall contain the test results of all public water supply utilities and other community water systems in Miami-Dade County including comments regarding the test results by the utilities and community water systems.

(h) The following chemical substances shall not be present in a water supply in excess of the listed concentrations:

Substance	Concentration in mg/l
Arsenic (As)	0.01
Chloride (Cl)	250
Copper (Cu)	1.0
Cyanide (Cn)	0.01
Iron (Fe)	0.3
Manganese (Mn)	0.05
Methylene Blue Active	0.5
Substances (MBAS)	
Nitrate Nitrogen	10
(NO_3-N)	
Phenols	0.001
Sulphate (SO ₄)	250
Total dissolved solids	500
Zinc (Zn)	5

(i) The presence of the following substances in excess of the concentrations listed shall constitute grounds for rejection of raw water supply:

Substance	Concentration in mg/l
Arsenic (As)	0.05
Barium (Ba)	1.0
Cadmium (Cd)	0.01
Chromium (hexavalent)	0.05
(CR VI)	
Cyanide (Cn)	0.2
Lead (Pb)	0.05
Selenium (Se)	0.01
Silver (Ag)	0.05
Mercury (Hg)	0.002
Nitrate (as N)	45

- (j) Analytical methods. Analytical methods to determine compliance with the requirements of these standards shall be those specified in Standard Methods for the Examination of Water and Waste Water, sixteenth edition.
- (k) All public water supply systems shall employ an approved method of disinfection acceptable to the Director or the Director's designee. Such disinfection shall be accomplished continuously in such a manner as to assure the continued feeding of the disinfection agent.
 - Those systems utilizing gas chlorine shall provide duplex systems that will assure the continued application of chlorine to the water even as containers are expended and replaced;
 - (ii) Those systems utilizing chlorine shall maintain a minimum three-tenths (0.3) milligrams per liter as free chlorine throughout its distribution system. In no case shall a chlorine residual in excess of two (2.0) milligrams per liter be maintained in the distribution system;
 - (iii) Utilization of other methods of disinfection acceptable to the Director or the Director's designee shall have established limits set by the Director;
 - (iv) The minimum amount of chlorine to be stored at the water treatment facility or immediately accessible to the facility shall be a thirty-day sup-

ply. In lieu of this requirement the utility may provide to the Director or the Director's designee copies of long term contracts indicating available quantity together with transportation contracts;

- (v) All public water supply systems shall provide to the Director or the Director's designee breakpoint chlorination curves for:
 - 1. All individual wells which are used as a supply of raw water;
 - Composite breakpoint curves for the raw water supply used for average and maximum day demand.
- (1) Every public water supply shall install a suitable measuring device at each source of supply and at the point that water is pumped to the distribution system in order that a record may be maintained of the water produced and treated. The quantities indicated by these measuring devices shall be tabulated daily and recorded.
- (m) When the annual average of the maximum daily air temperatures for the location in which the public water system is situated is the following, the corresponding concentration of fluoride shall not be exceeded:

Temperature (in		
degrees F)	(Degrees C)	Level (mg/l)
50.0—53.7	10.0—12.0	1.8
53.8—58.3	12.1—14.6	1.7
58.4—63.8	14.7—17.6	1.5
63.9—70.6	17.7—21.4	1.4
70.7—79.2	21.5—26.2	1.2
79.3—90.5	26.3—32.5	1.1

(n) Public water supply systems cleaning and disinfection. No person, Board, or municipality charged with the management or control of a public water supply shall put into service any new plant, pumping station, main, standpipe, reservoir, tank, or other pipe or structure through which water is delivered to consumers for pota-

- ble or household purposes, nor resume the use of any such structure, facilities, or main after it has been cleaned, until such structure, facilities or main has been effectively sterilized or disinfected. Provided, that this may not necessarily apply to mains, reservoirs, tanks, or other structures, the waters from which are subsequently treated or purified.
- (o) Adequate pressure shall be maintained in the mains to deliver the water for which they were designed, whether it be for fire, industrial, or domestic use. In no event, however, shall the pressure at the point of delivery to any customer fall below twenty (20) pounds per square inch, nor shall the static pressure exceed one hundred (100) pounds per square inch.
- (p) By-passing unlawful. Where a potable water treatment facility has been provided, it shall be unlawful to by-pass the facility or any part thereof. In the event of an emergency, the supplier may temporarily utilize a by-pass. However, it shall be unlawful to fail to immediately notify the Director or the Director's designee of such an emergency. Such notification shall not be a defense to any civil liability under this chapter.
- (q) When an approved public water main is made available and operative in a public right-of-way or easement abutting the property, any existing individual potable water supply system, device, or equipment shall, within ninety (90) days, be abandoned and the source of potable water for the residence or building shall be from the approved public water supply main.
- (r) Public water supply systems; cross-connections and use of dual supplies.
 - (i) Certain cross-connections prohibited. No officers, Board, corporation, municipality or other persons having the management of a public water supply shall permit any physical connection between the distribution system of such supply and that of any other water supply unless such

- other supply is regularly examined as to its quality by those in charge of the public supply to which the connection is made and is also found to be safe and potable. This provision shall apply to all water distribution systems either inside or outside of any building or buildings.
- (ii) Permissible arrangement where dual supplies are used. If a potable water supply is used as an auxiliary supply delivered to an elevated tank, or to a suction tank, which tank is also supplied with water from a source with which cross-connections are not permitted by Section 24-43.3(2)(r)(i), such tank shall be opened to atmospheric pressure and the potable water supply shall be discharged at an elevation above the high water line of the tank.
- Facilities in actual use and operation as of (g) the date of the enactment of this section which exceed the criteria set forth in any of the provisions of Section 24-43.3 hereof, certified by a competent state or county agency as a present or potential health hazard, shall be designated by the Director as priority public water supply areas. Upon such designation the Miami-Dade County Water and Sewer Department and the County Manager shall initiate proceedings for the creation of a special taxing district for public water system for the elimination of the potable water wells therein or take such other commensurate steps as to assure the elimination of the potable water wells therein, on a timely
- (t) All treatment facilities shall be designed to have a treatment capacity equal to maximum day demand.
- (u) Any cross-connections in the treatment facility or distribution system are to be eliminated upon direction of the Director, Environmental Resources Management. In the event such a cross-connection is maintained by a user after an order to

- disconnect is given by the Director or the Director's designee, the Director or the Director's designee may order the discontinuance of service by the utility to the user until the cross-connection is eliminated.
- (v) No water supply well shall be constructed or used until a written approval from the Director or the Director's designee has been received by the owner and/or driller of the well:
 - (i) The Director or the Director's designee shall be notified by the well driller at least twenty-four (24) hours prior to initiating construction of a permitted well;
 - (ii) In wells where the casing is driven it shall be known as drive pipe, and shall be equipped with couplings allowing for butt joints between lengths of casing. For wells in which the casing is not driven "merchant casing," standard pipes or pipe especially constructed for gravel wall wells will be acceptable;
 - (iii) Where telescoped casing is utilized, an approved watertight seal shall be made where increases or reductions occur in casing size. The initial stage of the telescope casing shall extend a minimum of thirty (30) feet into the groundwater table;
 - (iv) When water is to be obtained from limestone strata, the casing shall extend sufficiently far into unbroken limestone to be seated firmly in it but in no case shall it be less than thirty (30) feet into the aquifer;
 - (v) Wells drilled by the rotary method shall have an annular space sealed by the use of a neat cement grout at the bottom of the hole and to the surface by neat cement or other approved material;
 - (vi) Once the construction of the well is completed it shall be protected at all

- times to prevent entrance of contaminating material until such time as the pump may be placed;
- (vii) The top of the casing shall be so constructed as to exclude any influent but shall not extend less than one (1) foot above the surface of the ground;
- (viii) A concrete pad shall be constructed around the well a minimum of twelve (12) inches thick, two (2) feet horizontal from the casing;
- (ix) Pump houses or pump pits shall be constructed so as to provide for positive drainage. Where such is not possible, sump pumps or an alternative acceptable to the Director or the Director's designee shall be provided. Such systems shall be installed as duplex systems;
- (x) Where provided, well vents shall be adequately protected;
- (xi) In those situations where suction lines from a well casing are indicated, the suction pipe shall be so constructed to prohibit inundation. Minimum requirement shall be twelve (12) inches of clearance between the invert and ground surface;
- (xii) A sampling tap shall be provided on the discharge of the well pump piping or in such a location as to assure a true raw water sample;
- (xiii) The use of dynamite for the construction of wells shall be prohibited;
- (xiv) Dug wells, infiltration galleries and other sources of water supply requiring rearrangement of natural features are hereby prohibited as a source of public water supply;
- (xv) The use of surface water as a raw water source is prohibited;
- (xvi) All wells shall be located on terrain not subject to ponding or flooding. Furthermore, the slope of the ground surface in the vicinity of the well(s)

- shall be away from the well. In level areas, well compacted earth shall be placed around the well so as to elevate the platform, pad or apron;
- (xvii) As far as is practical, wells shall be located on the upstream side of possible sources of pollution;
- (xviii) The minimum separation between a well or wells and possible sources of contamination shall be a function of the drawdown and radius of influence of the well or wells. It shall be the responsibility of the design engineer to present data showing the radius of influence and drawdown together with a sanitary survey of the area influenced by the well. Such a survey shall extend one-half (1/2) mile beyond the radius of influence of the well field. In the cases involving multiple wells the interference among wells shall be determined. It shall be the design engineer's responsibility to show that the top thirty (30) feet of the aguifer is not tapped by the well(s). In no case shall the well be located less than one hundred (100) horizontal feet from any source of contamination. However, the Director or the Director's designee shall have the power to require additional spacing when conditions justify;
- (xix) All wells shall be accessible for such attention as necessary;
- (xx) All wells shall be equipped with an opening suitable for introduction of a disinfecting agent and measurement of drawdown and static water level;
- (xxi) When using chlorine as a disinfecting agent, a quantity, at least equal to the volume of the casing, of a strength of fifty (50) milligrams per liter shall be injected into the well. The solution shall be permitted to stand a minimum of twenty-four (24)

- hours and then pumped out for a sufficient length of time to remove the disinfecting agent;
- (xxii) Once the well has been evacuated in accordance with subsection (21), a series of twenty (20) or more daily samples, twenty (20) series, shall be collected and submitted to the Division of Health laboratory, the well being pumped for a minimum of thirty (30) minutes each day at its proposed capacity just prior to collecting the samples. At the discretion of the Director or the Director's designee the samples may be reduced to duplicate daily samples for a minimum of ten (10) days. Such samples will necessitate pumping for a minimum of thirty (30) minutes as indicated above:
- (xxiii) Interpretation of the laboratory results in the well survey will be made in accordance with applicable parts of the water supply standards;
- (xxiv) Once the series of twenty (20) or more consecutive satisfactory samples have been collected a complete analysis shall be performed of the raw water for both physical and chemical characteristics of the complete analysis shall be furnished to the Director or the Director's designee.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

DIVISION 3. CONTAMINATED SITE CLEANUPS

Sec. 24-44. Clean-up Target Levels (CTLs) and Procedures for Site Rehabilitation Actions (SRAs).

- (1) STATE PROGRAM CONTAMINANT CLEAN-UP TARGET LEVELS (CTLs) AND PROCEDURES.
 - (a) For contaminants subject to Chapter 62-770, F.A.C., the CTLs and SRA proce-

- dures set forth in Chapter 62-777 and 62-770, Florida Administrative Code (F.A.C.) shall apply.
- (b) For sites which have entered into a Brownfields Site Rehabilitation Agreement with the Department or the Florida Department of Environmental Protection pursuant to Chapter 62-785, F.A.C., the CTLs and SRA procedures set forth in Chapter 62-777 and 62-785, F.A.C. shall apply.
- (c) For contaminants subject to Chapter 62-782, F.A.C., the CTLs and SRA procedures set forth in Chapter 62-777 and 62-782, F.A.C. shall apply.
- (d) For lands owned by the state university system, the risk-based clean-up criteria as described in 376.3071, 376.3078, and 376.81, Florida Statutes, shall apply.
- (2) CLEAN-UP TARGET LEVELS (CTLs) AND PROCEDURES FOR SITES OR CONTAMINANTS OTHER THAN THOSE IDENTIFIED IN SECTION 24-44(1).
 - (a) Intent. To protect human health, public safety and environmental resources using risk-based corrective action strategies and to establish the point at which a site rehabilitation action is determined to be accomplished.
 - (b) The acceptable level of protection for the establishment of human health based CTLs shall be a lifetime excess cancer risk level of one in one million (1.0E-06) and a hazard quotient of one (1) or less. In addition, the CTLs shall be established to protect aquatic life and to prevent nuisance conditions as applicable.
 - (c) Applicability. The CTLs set forth in this section are not effluent standards and are not for the purpose of disposal or reuse.
 - The CTLs and SRA procedures set forth in this section shall not apply to those contaminants that are subject to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986, the Re-

source Conservation and Recovery Act, the federal Hazardous and Solid Waste Amendments of 1984, or the Toxic Substance Control Act of 1976.

In addition, the soil CTLs set forth in Section 24-44(2)(f)(v)2. shall not apply to contaminants in soil that are present as a result of the application of registered pesticides that were applied in accordance with state and federal law and the EPA approved applicable registered labels. In making a determination of the applicability of CTLs pursuant to this provision, the party or parties responsible for SRAs shall provide records substantiating such pesticide applications to the Department upon request. Notwithstanding the foregoing provisions of Section 24-44(2)(b), if groundwater contains contaminants above the groundwater CTLs set forth in Section 24-44(2)(f)(v)1. as a result of the pesticide application, then the CTLs and SRA procedures set forth in Section 24-44(2) shall apply.

- (d) Party or parties responsible for site rehabilitation actions shall be the discharger or, if the discharger is unknown or the contamination was the result of a previously unreported discharge, the property owner or operator who is subject to the provisions of Section 24-44(2).
- (e) Retroactivity. The CTLs and the SRA procedures set forth herein shall not apply to those contaminants for which, on or before the effective date of this ordinance, a no further action plan, a source removal plan, a remedial action plan or a monitoring only plan has been approved in writing by the Director, or the Director's designee, unless the party or parties responsible for SRAs have failed to comply with the conditions of the plan approval. However, the party or parties responsible for SRAs may elect to complete site rehabilitation as provided in Section 24-44(2).
- (f) The Clean-up Target Levels are as follows:
 - (i) The groundwater and surface water CTLs are set forth in Section 24-

44(2)(f)(v)1. The groundwater CTLs are equivalent to the numerical standards set forth in Section 24-43.3(2)(h) of this chapter. For contaminants not listed in Section 24-43.3(2)(h), the groundwater CTLs are equivalent to the numerical standards set forth in Chapter 62-550, F.A.C., Table 1, Table 2, Table 3, Table 4, Table 5 and Table 6, as same may be amended from time to time.

For contaminants not listed in Section 24-43.3(2)(h) or Chapter 62-550, F.A.C., Table 1, Table 2, Table 3, Table 4, Table 5 and Table 6, as same may be amended from time to time, groundwater CTLs are based upon the protection of human health and the prevention of nuisance conditions as set forth in Section 24-44(2)(b). The groundwater CTLs have been established using the procedures, equations and input parameters set forth in the DERM Technical Report: "Development of Clean-up Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County, Florida" (dated September, 2005).

The surface water CTLs are equivalent to the water quality standards set forth in Section 24-42(4) of this chapter.

For contaminants not listed in Section 24-42(4), the surface water CTLs are based upon the protection of human health and aquatic life and the prevention of nuisance conditions as set forth in Section 24-44(2)(b). The surface water CTLs have been established using the procedures, equations and input parameters set forth in the DERM Technical Report: "Development of Clean-up Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County, Florida" (dated September, 2005) and, as applicable, the numerical standards set forth in Chapter 62-302, F.A.C, as same may be amended from time to time.

Notwithstanding the foregoing provisions of Section 24-44(2)(f)(i), no groundwater or surface water CTLs shall be more stringent than the practical quantitation limits or naturally occurring background concentrations determined in a natural background concentration study which has been approved by the Director or the Director's designee.

(ii) The soil CTLs are set forth in Section 24-44(2)(f)(v)2.. The soil CTLs are based upon the protection of human health as set forth in Section 24-44(2)(b) and groundwater and surface water CTLs set forth in Section 24-44(2)(f)(v)1.. The soil CTLs have been established using the procedures, equations and input parameters set forth in the DERM Technical Report: "Development of Clean-up Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County, Florida" (dated September, 2005).

However, the applicable leachabilitybased soil CTLs may be exceeded if it is demonstrated to the satisfaction of the Director, or the Director's designee, that:

- 1. Leachate concentrations do not exceed the applicable ground-water or surface water CTLs set forth in Section 24-44(2)(f)(v)1., using a laboratory leaching procedure which simulates soil leachability and which has been approved by the Director or the Director's designee; or
- 2. For soil that is and has been exposed to the elements (i.e., open ground, not covered by impermeable or semi-permeable cover) and subject to infiltration throughout the entire unsaturated zone for a minimum of two years, it has been subsequently demonstrated to the satisfaction of the Director,

or the Director's designee, by a minimum of one year of groundwater monitoring data, that contaminants will not leach into the groundwater at concentrations that exceed the applicable groundwater or surface water CTLs set forth in Section 24-44(2)(f)(v)1.. This demonstration shall consider site-specific characteristics such as the thickness of the unsaturated zone, depth and mass of soil contaminants, soil lithology, actual precipitation, concentration gradients, and the chemical and physical characteristics of the contaminants.

Notwithstanding the foregoing provisions of Section 24-44(2)(f)(ii), no soil CTLs shall be more stringent than the practical quantitation limits or naturally occurring background concentrations determined in a natural background concentration study which has been approved by the Director or the Director's designee.

- (iii) The Director, or the Director's designee, may approve alternative CTLs provided that: human health, public safety, and the environment are afforded equivalent protection to that provided in Section 24-44 (2)(f)(i) and Section 24-44(2)(f)(ii); and same are based upon one (1) of the following, or a combination of the following:
 - 1. The application of the procedures set forth in Section 24-44 (2)(k)(ii) or Section 24-44(2)(1)(ii).
 - 2. A demonstration, provided in a feasibility study approved by the Director, or the Director's designee, that achieving the CTLs is not feasible utilizing the best available technologies.
 - 3. Calculations of site-specific soil CTLs using appropriate site-specific soil properties and equa-

- tions provided in the DERM Technical Report: "Development of Clean-up Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County, Florida" (dated September, 2005), and approved by the Director or the Director's designee.
- 4. Calculations of site-specific soil CTLs for total recoverable petroleum hydrocarbons (TRPH) based upon the site-specific composition of TRPH, as determined by an analytical method approved by the Director or the Director's designee. Calculations utilized to comply with this provision shall be in accordance with the DERM Technical Report: "Development of Clean-up Target Levels (CTLs)

- for Chapter 24 of the Code of Miami-Dade County, Florida" (dated September, 2005).
- The Director, or the Director's designee, shall maintain the DERM Technical Report: "Development of Clean-up Target Levels for Chapter 24 of the Code of Miami-Dade County. Florida" (dated September, 2005) which contains the risk equations, leachability equations and default input parameters used to calculate the CTLs set forth in Section 24-44(2)(f)(v) herein. The aforesaid Technical Report dated September, 2005, a copy of which is attached hereto, is hereby incorporated by reference, as same may be amended from time to time. Any changes, additions or deletions to the aforesaid Technical Report shall be approved by the Board of County Commissioners ordinance.
- (v) Clean-up Target Levels (CTLs).
 - Groundwater and Surface Water CTLs.

Table 1 Groundwater and Surface Water Clean-up Target levels

Contaminants	CAS#	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Criteria	Non-Cancer Target Organs/Systems or Effects#
Acenaphthene	83-32-9	20	3	3	-Liver
Acenaphthylene	208-96-8	210	*	*	-Liver
Acephate	30560-19-1	4	190	190	Cancer - Neurological
Acetone	67-64-1	6300	1700	1700	-Kidney -Liver -Neurolog- ical
Acetonitrile	75-05-8	42	20000	20000	-Mortality
Acetophenone	98-86-2	700	7800	7800	-None Specified
Acifluorfen, sodium [or Blazer]	62476-59-9	1	190	190	-Kidney
Acrolein	107-02-8	3.5	0.4	0.4	-Nasal
Acrylamide	79-06-1	0.008	0.3	0.3	Cancer - Neurological
Acrylic acid	79-10-7	3500	NA	NA	-Developmental
Acrylonitrile	107-13-1	0.06	0.2	0.2	Cancer -Nasal -Reproductive
Alachlor	15972-60-8	2	0.5	0.5	Cancer -Blood
Aldicarb [or Temik]	116-06-3	7	0.9	0.9	-Neurological
Aldicarb sulfone	1646-88-4	7	46	46	-Neurological
Aldicarb sulfoxide	1646-87-3	7	4.2	4.2	-Neurological
Aldrin	309-00-2	0.002	0.00014	0.00014	Cancer -Liver
Ally [or Metsulfuron, methyl]	74223-64-6	1800	NA	NA	-Body Weight
Allyl alcohol	107-18-6	35	5	5	-Kidney -Liver
Allyl chloride	107-05-1	35**	NA	NA	-Neurological
Aluminum	7429-90-5	200	13	1500	-Body Weight
Aluminum phosphide	20859-73-8	2.8	6.5	6.5	-Body Weight
Ametryn	834-12-8	63	6.2	6.2	-Liver
Ammonia	7664-41-7	NA	20	NA	-Body Weight
Ammonia (as Total)		2800	500	500	-Respiratory

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Contaminants	CAS#	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Cri- teria	Non-Cancer Target Or- gans/Systems or Effects#
Ammonium sulfamate	7773-06-0	1400	10000	10000	-Body Weight
Anilazine [or Dyrene]	101-05-3	2.8	NA	NA	-None Specified
Aniline	62-53-3	6.1	4	4	Cancer - Blood -Spleen
Anthracene	120-12-7	2100	0.3	0.3	-None Specified
Antimony	7440-36-0	6	4300	4300	-Blood
Aramite	140-57-8	1.4	3	3	-Cancer
Aroclor mixture [see PCBs]	110 01 0	1.1			Currect
Arsenic	NOCAS	10	50	50	-Cancer -Cardiovascular
Arsenic	NOOAD	10	50	50	-Skin
Atrazine	1912-24-9	3	1.9	1.9	-Cancer -Cardiovascular
Azinphos, methyl [see Guthion]					
Azobenzene	103-33-3	0.3	3.6	3.6	-Cancer
Barium (soluble salts)	7440-39-3	2000	NA	NA	-Cardiovascular
Baygon [or Propoxur]	114-26-1	28	0.4	0.4	-Blood -Neurological
Bayleton	43121-43-3	210	500	500	-Blood
Benomyl	17804-35-2	35**	0.3	0.3	-Developmental
Bensulide	741-58-2	46	NA	NA	-None Specified
Bentazon	25057-89-0	210	NA	NA	-Blood
Benzaldehyde	100-52-7	700	54	54	-Gastrointestinal -Kidney
Benzene	71-43-2	1	71.28	71.28	-Cancer -Blood
Benzenethiol	108-98-5	0.07	NA NA	NA NA	-Liver
Benzidine	92-87-5	0.0002	0.0002	0.0002	-Cancer -Liver -Neurolog-
Benzidine	92-01-9	0.0002	0.0002	0.0002	ical
Benzo(a)anthracene	56-55-3	0.05	*	*	-Cancer
Benzo(a)pyrene	50-32-8	0.2	*	*	-Cancer
Benzo(b)fluoranthene	205-99-2	0.05	*	*	-Cancer
Benzo(g,h,i)perylene	191-24-2	210	*	*	-Neurological
Benzo(k)fluoranthene	207-08-9	0.5	*	*	-Cancer
Benzoic acid	65-85-0	28000	9000	9000	-None Specified
Benzotrichloride	98-07-7	0.003	0.002	0.002	-Cancer
	l 100-51-6	2100	1500	500	-Castrointactinal
Benzyl alcohol	100-51-6	2100	500	500	-Gastrointestinal
Benzyl chloride	100-44-7	0.2	2	2	-Cancer
· ·					
Benzyl chloride	100-44-7	0.2	2	2	-Cancer -Cancer -Gastrointestinal
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see	100-44-7 7440-41-7	0.2	0.13	2 0.13	-Cancer -Cancer -Gastrointestinal -Respiratory
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b)	100-44-7 7440-41-7	0.2	0.13	2 0.13	-Cancer -Cancer -Gastrointestinal -Respiratory
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see hexachlorocyclohexane, alpha-] (b) BHC, beta- [see	100-44-7 7440-41-7	0.2	0.13	2 0.13	-Cancer -Cancer -Gastrointestinal -Respiratory
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b)	100-44-7 7440-41-7	0.2	0.13	2 0.13	-Cancer -Cancer -Gastrointestinal -Respiratory
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see hexachlorocyclohexane, alpha-] (b) BHC, beta- [see	100-44-7 7440-41-7	0.2	0.13	2 0.13	-Cancer -Cancer -Gastrointestinal -Respiratory
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see	100-44-7 7440-41-7	0.2	0.13	2 0.13	-Cancer -Cancer -Gastrointestinal -Respiratory
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b)	100-44-7 7440-41-7	0.2	0.13	2 0.13	-Cancer -Cancer -Gastrointestinal -Respiratory
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b)	100-44-7 7440-41-7	0.2	0.13	2 0.13	-Cancer -Cancer -Gastrointestinal -Respiratory
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b)	100-44-7 7440-41-7 NOCAS	4	2 0.13 NA	2 0.13 NA	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos]	100-44-7 7440-41-7 NOCAS	0.2	2 0.13 NA	2 0.13 NA	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9	0.2 4 4 0.7 35	2 0.13 NA 22 NA	2 0.13 NA 22 NA	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl]	100-44-7 7440-41-7 NOCAS	0.2	2 0.13 NA	2 0.13 NA	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9	0.2 4 4 0.7 35	2 0.13 NA 22 NA	2 0.13 NA 22 NA	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) Bidrin [or Dicrotophos] Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether]	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4	0.2 4 4 0.7 35 0.5	2 0.13 NA 22 NA 18	2 0.13 NA 22 NA 18	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloroethyl)ether	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4	0.2 4 4 0.7 35 0.5	2 0.13 NA 22 NA 18	2 0.13 NA NA 22 NA 18	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Biodilethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chlorostopropyl)ether] Bis(2-chlorostopropyl)ether [or Bis(2-chloro-1-metylethyl)ether]	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9	0.2 4 4 4 0.7 35 0.5 0.03 0.5	2 0.13 NA 22 22 NA 18	2 0.13 NA NA 22 NA 18 0.5 23	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Blood
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Biodilethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chlorostopropyl)ether] Bis(2-chlorostopropyl)ether [or Bis(2-chloro-1-metylethyl)ether] Bis(2-ethylnexyl)adipate	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400	2 0.13 NA 22 NA 18	2 0.13 NA NA 22 NA 18	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Cancer -Blood -Cancer -Body Weight
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, beta-] (b) BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloro-1-metylethyl)ether [or Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether]	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1 117-81-7	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400 6	2 0.13 NA 22 NA 18 0.5 23 33 2.2	2 0.13 NA NA 22 NA 18 0.5 23 33 2.2	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Cancer -Blood -Cancer -Body Weight -Cancer -Liver
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, beta-] (b) BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloro-thyl)ether Bis(2-chloro-1-metylethyl)ether [or Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether [soe Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chlylexyl)adipate Bis(2-ethylhexyl)phthalate [or DEHP] Bisphenol A	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400	2 0.13 NA 22 NA 18 0.5 23	2 0.13 NA NA 22 22 NA 18 0.5 23 33	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Cancer -Blood -Cancer -Body Weight
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, beta-] (b) BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloro-1-metylethyl)ether [or Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether]	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1 117-81-7	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400 6	2 0.13 NA 22 NA 18 0.5 23 33 2.2	2 0.13 NA NA 22 NA 18 0.5 23 33 2.2	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Cancer -Blood -Cancer -Body Weight -Cancer -Liver
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, beta-] (b) BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloro-thyl)ether Bis(2-chloro-1-metylethyl)ether [or Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether [soe Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chlylexyl)adipate Bis(2-ethylhexyl)phthalate [or DEHP] Bisphenol A	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1 117-81-7	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400 6	2 0.13 NA 22 NA 18 0.5 23 33 2.2	2 0.13 NA NA 22 NA 18 0.5 23 33 2.2	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Body Weight -Cancer -Liver -Body Weight
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, beta-] (b) BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloroethyl)ether Bis(2-chloro-1-metylethyl)ether [soe Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether [soe Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether] Bis(2-chloro-1-metylethyl)ether [soe Bis(2-chloro-1-metylethyl)ether] Bis(2-chlyhexyl)adipate Bis(2-ethylhexyl)phthalate [or DEHP] Bisphenol A Blazer [see Acifluorfen, sodium]	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1 117-81-7 80-05-7	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400 6 350	2 0.13 NA NA 22 NA 18 0.5 23 33 2.2	2 0.13 NA NA 22 NA 18 0.5 23 33 2.2	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Body Weight -Cancer -Liver -Body Weight
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, beta-] (b) BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chlorotophos) Bis(2-chlorotophos)	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1 117-81-7 80-05-7	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400 6 350	2 0.13 NA NA 22 NA 18 0.5 23 33 2.2	2 0.13 NA NA 22 NA 18 0.5 23 33 2.2	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Body Weight -Cancer -Liver -Body Weight
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, beta-] (b) BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloroisopropyl)ether [or Bis(2-chloroi-metylethyl)ether] Bis(2-chlylhexyl)adipate Bis(2-ethylhexyl)phthalate [or DEHP] Bisphenol A Blazer [see Acifluorfen, sodium] Boron Bravo [see Chlorothalonil]	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1 117-81-7 80-05-7 7440-42-8	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400 6 350 1400	2 0.13 NA NA 22 NA 18 0.5 23 33 2.2 55	2 0.13 NA NA 222 NA 18 0.5 23 33 2.2 55 NA	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Blood -Cancer -Body Weight -Cancer -Liver -Body Weight
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, beta-] (b) BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloroisopropyl)ether Bis(2-chloroisopropyl)ether [or Bis(2-chloroi-metylethyl)ether] Bis(2-ethylhexyl)adipate Bis(2-ethylhexyl)phthalate [or DEHP] Bisphenol A Blazer [see Acifluorfen, sodium] Boron Bravo [see Chlorothalonil]	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1 117-81-7 80-05-7 7440-42-8 314-40-9	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400 6 350 1400	2 0.13 NA NA 22 22 NA 18 0.5 23 33 2.2 55 NA	2 0.13 NA NA 22 22 NA 18 0.5 23 33 2.2 55 NA 97	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Blood -Cancer -Body Weight -Cancer -Liver -Body Weight -Reproductive -Respiratory -Body Weight
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloroisopropyl)ether [or Bis(2-chloroisopropyl)ether] Bis(2-ethylhexyl)adipate Bis(2-ethylhexyl)phthalate [or DEHP] Bisphenol A Blazer [see Acifluorfen, sodium] Boron Bravo [see Chlorothalonil] Bromacil Bromate	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1 117-81-7 80-05-7 7440-42-8 314-40-9 15541-45-4 74-97-5	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400 6 350 1400 70** 10 91	2 0.13 NA NA 222 NA 18 0.5 23 33 2.2 55 NA 97 NA	2 0.13 NA NA 222 NA 18 0.5 23 33 2.2 55 NA 97 100000 NA	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Blood -Cancer -Body Weight -Cancer -Liver -Body Weight -Reproductive -Respiratory -Body Weight -Cancer -Kidney -None Specified
Benzyl chloride Beryllium Beta radiation BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b) BHC, beta- [see Hexachlorocyclohexane, beta-] (b) BHC, delta- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, delta-] BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b) BHC, gamma- [see Hexachlorocyclohexane, Technical] (b) Bidrin [or Dicrotophos] Bioallethrin Biphenyl, 1,1- [or Diphenyl] Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether] Bis(2-chloroisopropyl)ether [or Bis(2-chloroisopropyl)ether] Bis(2-ethylhexyl)adipate Bis(2-ethylhexyl)adipate Bis(2-ethylhexyl)phthalate [or DEHP] Bisphenol A Blazer [see Acifluorfen, sodium] Boron Bravo [see Chlorothalonil] Bromacil	100-44-7 7440-41-7 NOCAS 141-66-2 28057-48-9 92-52-4 111-44-4 39638-32-9 103-23-1 117-81-7 80-05-7 7440-42-8 314-40-9 15541-45-4	0.2 4 4 4 0.7 35 0.5 0.03 0.5 400 6 350 1400 70**	2 0.13 NA NA 222 NA 18 0.5 23 33 2.2 55 NA	2 0.13 NA NA 22 22 NA 18 0.5 23 33 2.2 55 NA 97 100000	-Cancer -Cancer -Gastrointestinal -Respiratory -Cancer -Developmental -Liver -Kidney -Cancer -Cancer -Blood -Cancer -Body Weight -Cancer -Liver -Body Weight -Reproductive -Respiratory -Body Weight -Cancer -Kidney

Contaminants	CAS#	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Criteria	Non-Cancer Target Or- gans/Systems or Effects#
Bromomethane [or Methyl bromide]	74-83-9	9.8	35	35	-Gastrointestinal -Respiratory
Bromoxynil	1689-84-5	140	NA	NA	-None Specified
Bromoxynil octanoate	1689-99-2	140	NA	NA	-Neurological
Butane	106-97-8	9100	NA	NA	-Neurological -Respiratory
Butanol, n-	71-36-3	700	25000	25000	-Neurological
Butanol, tert- [see Butyl alcohol, tert-]					
Butanone, 2- [see Methyl ethyl ketone]					
Butyl acetate, n-	123-86-4	43	1000	1000	-None Specified
Butyl alcohol, tert- [or Butanol, tert-]	75-65-0	1400	NA	NA	-Kidney -Neurological
Butyl benzyl phthalate	85-68-7	140**	26	26	-Liver
Butylate	2008-41-5	350	11	11	-Liver
Butylbenzene, n-	104-51-8	280	NA	NA	-Kidney -Liver -Neurolog- ical
Butylbenzene, sec	135-98-8	280	240	240	-Kidney -Neurological
Butylbenzene, tert	98-06-6	280	NA	NA	-Kidney -Neurological
Butylphthalyl butylglycolate	85-70-1	7000	NA	NA	-None Specified
Cadmium	7440-43-9	5	e ^(0.7852[InH]-3.49)	9.3	-Cancer -Kidney
Calcium cyanide	592-01-8	280	NA	NA	-Neurological -Thyroid
Captafol	2425-06-1	4.1	0.9	0.9	-Cancer -Kidney
Captan	133-06-2	10	1.9	1.9	-Cancer -Body Weight
Carbaryl [or Sevin]	63-25-2	700	0.06	0.06	-Kidney -Liver
Carbazole	86-74-8	1.8	47	47	-Cancer
Carbofuran	1563-66-2	40	0.1	0.1	-Neurological -Reproduc- tive
Carbon disulfide	75-15-0	700	110	110	-Developmental -Neurological
Carbon tetrachloride	56-23-5	3	4.42	4.42	-Cancer -Liver
Carbophenothion [or Trithion]	786-19-6	0.9	0.1	0.1	-Neurological
Carboxin	5234-68-4	700	60	60	-Body Weight
CFC 113 [see Trichloro-1,2,2-trifluoroethane, 1,1,2-]			NA	NA	-Adrenals
Chloral hydrate	302-17-0	70**	NA	NA	-Gastrointestinal -Neuro- logical
Chloramben	133-90-4	110	NA	NA	-Liver
Chlordane (total)	(i)	2	0.00059	0.00059	-Cancer -Liver
Chloride	16887-00-6	250000	500000	e	-None Specified
Chlorine	7782-50-5	4000	10	10	-Respiratory
Chlorine cyanide [or Cyanogen chloride]	506-77-4	350	1.4	1.4	-Neurological -Thyroid
Chlorite (sodium salt) [or Sodium chlorite]	7758-19-2	1000	29	29	-Developmental -Neurolog- ical
Chloro-1,3-butadiene [or Chloroprene]	126-99-8	140	NA	NA	-Hair Loss -Nasal
Chloro-3-methylphenol, 4- [see Chloro-m-cresol, p-]					
Chloroacetic acid	79-11-8	14	2500	2500	-Cardiovascular
Chloroaniline, p-	106-47-8	28	2.5	2.5	-Spleen
Chlorobenzene	108-90-7	100	17	17	-Liver
Chlorobenzilate	510-15-6	0.1	0.02	0.02	-Cancer -Body Weight
Chloroethane [see Ethyl chloride]					
Chloroform	67-66-3	70	470.8	470.8	-Cancer -Liver
Chloro-m-cresol, p- [or Chloro-3-methylphenol, 4-]	59-50-7	63	100	100	-Body Weight
Chloromethane [see Methyl chloride]					
Chloronaphthalene, beta-	91-58-7	560	1600	1600	-Liver -Respiratory
Chloronitrobenzene, p-	100-00-5	1.9	110	110	-Cancer
Chlorophenol, 2-	95-57-8	35	130	130	-Reproductive
Chlorophenol, 3-	108-43-0	0.1	170	170	-Reproductive
Chlorophenol, 4-	106-48-9	0.1	180	180	-Reproductive
Chloropicrin	76-06-2	7.3	NA	NA	-None Specified
Chloroprene [see Chloro-1,3-butadiene]					
Chlorothalonil [or Bravo]	1897-45-6	3.2	0.8	0.8	-Cancer -Kidney

Contaminants	CAS#	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Criteria	Non-Cancer Target Organs/Systems or Effects#
Chlorotoluene, o-	95-49-8	140	390	390	-Body Weight
Chlorotoluene, p-	106-43-4	140	NA	NA	-None Specified
Chlorpropham	101-21-3	1400	190	190	-Bone Marrow -Kidney -Liver -Spleen
Chlorpyrifos	2921-88-2	21	0.002	0.002	-Neurological
Chlorpyrifos, methyl	5598-13-0	70	0.04	0.04	-Reproductive
Chlorsulfuron	64902-72-3	350	16	16	-Body Weight
Chromium (hexavalent)	18540-29-9	NA	11	50	-Cancer -Respiratory
Chromium (total)	NOCAS	100	11	50	-Cancer
Chromium (trivalent)	16065-83-1	NA	e ^(0.819[InH]+0.6848)	520	-None Specified
Chrysene	218-01-9	4.8	*	*	-Cancer
Cobalt	7440-48-4	140	NA	NA	-Cardiovascular -Immuno- logical -Neurological -Re- productive
Copper	7440-50-8	1000	e ^(0.8545[InH]-1.702)	2.9	-Gastrointestinal
Copper cyanide	544-92-3	35			-Kidney
Coumaphos	56-72-4	1.8	0.004	0.004	-Neurological
Cresol, m- [see Methylphenol, 3-]					0
Cresol, o- [see Methylphenol, 2-]					
Cresol, p- [see Methylphenol, 4-]					
Crotonaldehyde	123-73-9	0.02	NA	NA	-Cancer
Cumene [or Isopropyl benzene]	98-82-8	0.8	260	260	-Adrenals -Kidney
Cyanazine	21725-46-2	0.04	5.5	5.5	-Cancer
Cyanide, free	57-12-5	140	5.2	1	-Neurological -Thyroid
Cyanogen	460-19-5	280	NA	NA	-Neurological -Thyroid
Cyanogen chloride [see Chlorine cyanide]	100-13-3	200	NA .	IVA	-iveurologicar -inyroid
Cycloate	1134-23-2	35	130	130	-Neurological
Cyclohexanone	108-94-1	35000	26000	26000	recurological
Cyclohexylamine	108-91-8	1400	4000	4000	-Reproductive
	68085-85-8	35	18	18	-Developmental
Cyhalothrin [or Karate] Cymene, p- (or 4-Isopropyltoluene)	99-87-6	700	NA	NA	-Gastrointestinal -Neuro-
	52315-07-8	7**	0.0005	0.0005	logical -Skin -Gastrointestinal
Cypermethrin Death-al [an DCDA]					
Dacthal [or DCPA]	1861-32-1	70	310	310	-Eye -Kidney -Liver -Res- piratory -Thyroid
Dalapon	75-99-0	200	5000	5000	-Kidney
DB, 2,4- [see Dichlorophenoxybutyric acid, 2,4-]					
DBCP, 1,2- [see Dibromo-3-chloropropane, 1,2-]					
DDD, 4,4'- [see Dichlorodiphenyl dichloroethane, p,p']					
DDE, 4,4'- [see Dichlorodiphenyl dichloroethylene, p,p'-]					
DDT, 4,4'- [see Dichlorodiphenyl trichloroethane, p,p'-]					
Decabromodiphenyl ether	1163-19-5	7**	NA	NA	-None Specified
DEET	134-62-3	6300	NA	NA	-Body Weight
DEHP [see Bis(2-ethylhexyl)phthalate]	154 02 0	0000		1111	Body Weight
Demeton	8065-48-3	0.3	0.1	0.1	-Eye -Neurological
Diallate	2303-16-4	0.6	NA	NA	-Cancer -None Specified
Diazinon	333-41-5	6.3	0.002	0.002	-Neurological
Dibenz(a,h)anthracene	53-70-3	0.005	*	*	-Cancer
Dibenzofuran	132-64-9	28	67	67	-None Specified
Dibromo-3-chloropropane, 1,2- [or DBCP, 1,2-]	96-12-8	0.2	NA NA	NA	-Cancer -Reproductive
Dibromobenzene, 1,4-	106-37-6	70	240	240	-Liver
Dibromobenzene, 1,4- Dibromochloromethane	124-48-1	0.4	34	34	-Liver -Cancer -Liver
Dibromoethane, 1,2- [or EDB]	106-93-4	0.02	13	13	-Cancer -Reproductive
Dibutyl phthalate	84-74-2	700	23	23	-Mortality
Dicamba	1918-00-9	210	200	200	-Developmental
Dichloroacetic acid	79-43-6	0.7	1200	1200	-Cancer -Liver -Neurological -Reproductive
Dichloroacetonitrile	3018-12-0	5.6**	NA	NA	-None Specified
Dichlorobenzene, 1,2-	95-50-1	600	99	99	-Body Weight

Contaminants	CAS#	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Criteria	Non-Cancer Target Organs/Systems or Effects#
Dichlorobenzene, 1,3-	541-73-1	210	85	85	-None Specified
Dichlorobenzene, 1,4-	106-46-7	75	3	3	-Cancer -Liver
Dichlorobenzidine, 3,3'-	91-94-1	0.08	0.03	0.03	-Cancer
Dichlorobenzophenone, 4,4'-	90-98-2	210	1600	1600	-None Specified
Dichlorodifluoromethane	75-71-8	1400	NA	NA	-Liver
Dichlorodiphenyldichloroethane, p,p'- [or DDD, 4,4'-]	72-54-8	0.1	0.0003	0.0003	-Cancer
Dichlorodiphenyldichloroethylene, p,p'- [or DDE, 4,4'-]	72-55-9	0.1	0.0002	0.0002	-Cancer
Dichlorodiphenyltrichloroethane, p,p'- [or DDT, 4,4'-]	50-29-3	0.1	0.00059	0.00059	-Cancer -Liver
Dichloroethane, 1,1-	75-34-3	70**	NA	NA	-Kidney
Dichloroethane, 1,2- [or EDC]	107-06-2	3	37	37	-Cancer -None Specified
Dichloroethene, 1,1-	75-35-4	7**	3.2	3.2	-Liver
Dichloroethene, 1,2- (mixture)	540-59-0	NA	7000	7000	-Blood -Liver
Dichloroethene, cis-1,2-	156-59-2	70	NA	NA	-Blood
Dichloroethene, trans-1,2-	156-60-5	100	11000	11000	-Blood -Liver
Dichlorophenol, 2,3-	576-24-9	0.04	56	56	-Immunological
Dichlorophenol, 2,4-	120-83-2	0.3	13	13	-Immunological
Dichlorophenol, 2,5-	583-78-8	0.5	90	90	-Immunological
Dichlorophenol, 2,6-	87-65-0	0.2	73	73	-Immunological
Dichlorophenol, 3,4-	95-77-2	0.3	61	61	-Immunological
Dichlorophenoxy acetic acid, 2,4-	94-75-7	70	80	80	-Blood -Kidney -Liver
Dichlorophenoxy butyric acid, 2,4- [or DB, 2,4-]	94-82-6	56	NA	NA	-Blood -Cardiovascular
Dichloropropane, 1,2-	78-87-5	5	14	14	-Cancer -Nasal
Dichloropropene, 1,3-	542-75-6	0.4	12	12	-Cancer -Gastrointestinal -Nasal
Dichlorprop	120-36-5	35	42	42	-None Specified
Dichlorvos	62-73-7	0.1	0.005	0.005	-Cancer -Neurological
Dicofol [or Kelthane]	115-32-2	0.08	0.006	0.006	-Cancer -Adrenals
Dicrotophos [see Bidrin]	110 02 2	0.00	0.000	0.000	Cuitor Haronais
Dieldrin	60-57-1	0.002	0.00014	0.00014	-Cancer -Liver
Diethyl phthalate	84-66-2	5600	380	380	-Body Weight
Diethylene glycol, monoethyl ether	111-90-0	14000	170000	170000	-Kidney
Diethylstilbestrol	56-53-1	0.000007			-Cancer
Diisopropyl methylphosphonate	1445-75-6	560	13000	13000	-None Specified
Dimethoate	60-51-5	1.4	0.1	0.1	-Neurological
Dimethoxybenzidine, 3,3'-	119-90-4	2.5	NA	NA	-Cancer
Dimethrin	70-38-2	2100	1.1	1.1	-Liver
Dimethylaniline, 2,4-	95-68-1	0.05	1700	1700	-Cancer -Blood -Spleen
Dimethylaniline, N,N-	121-69-7	14	1700	1700	-Spleen
Dimethylbenzidine, 3,3'-	119-93-7	0.004	NA	NA	-Cancer
Dimethylformamide, N,N-	68-12-2	700	50000	50000	-Gastrointestinal -Liver
Dimethylphenol, 2,4-	105-67-9	140	160	160	-Blood -Neurological
Dimethylphenol, 2,6-	576-26-1	4.2	560	560	-Kidney -Liver -Spleen
Dimethylphenol, 3,4-	95-65-8	7	380	380	-Kidney -Liver -Spleen
	131-11-3				
Dimethylphthalate		70000	1400	1400	-Kidney
Dinitrobenzene, 1,2- (o)	528-29-0	2.8	30	30	-Spleen
Dinitrobenzene, 1,3- (m)	99-65-0	0.7	72	72	-Spleen
Dinitrobenzene, 1,4- (p)	100-25-4	2.8	30	30	-Spleen
Dinitro-o-cyclohexylphenol	131-89-5	14	NA	NA	-Eye
Dinitrophenol, 2,4-	51-28-5	14	3	3	-Eye
Dinitrotoluene, 2,4-	121-14-2	0.05	9.1	9.1	-Cancer -Liver -Neurolog- ical
Dinitrotoluene, 2,6-	606-20-2	0.05	0.7	0.7	-Cancer -Blood -Kidney -Neurological
Di-n-octylphthalate	117-84-0	140	NA	NA	-Kidney -Liver
Dinoseb	88-85-7	7	5.9	5.9	-Developmental
Dioxane, 1,4-	123-91-1	3.2	120	120	-Cancer
Dioxins, as total 2,3,7,8-TCDD equivalents (c)	1746-01-6	0.00003	0.000000005	0.000000005	-Cancer
Diphenamid	957-51-7	210	1600	1600	-Liver
Diphenyl [see Biphenyl, 1,1-]					
Diphenylamine, N,N-	122-39-4	180	NA	NA	-Kidney -Liver
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Contaminants	CAS#	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Cri- teria	Non-Cancer Target Or- gans/Systems or Effects#
Diphenylhydrazine, 1,2-	122-66-7	0.04	0.2	0.2	-Cancer
Diquat	85-00-7	20	1.5	1.5	-Eye
Disulfoton	298-04-4	0.3	0.3	0.3	-Neurological
Diuron	330-54-1	14	8	8	-Blood
Dyrene [see Anilazine]					
EDB [see Dibromoethane, 1,2-]					
EDC [see Dichloroethane, 1,2-]					
Endosulfan (alpha+beta+sulfate)	115-29-7	42	0.056	0.0087	-Cardiovascular -Kidney
Endothall	145-73-3	100	110	110	-Gastrointestinal
Endrin	72-20-8	2	0.0023	0.0023	-Liver
EPEG [see Ethylphthalyl ethylglycolate]					
Epichlorohydrin	106-89-8	3.5	130	130	-Cancer -Kidney -Nasal
EPN [see Ethyl p-nitrophenyl phenylphosphorothioate]					
EPTC [see Ethyl dipropylthiocarbamate, S-]					
Ethanol	64-17-5	10000	NA	NA	-Developmental
Ethion	563-12-2	3.5	0.007	0.007	-Neurological
Ethoprop	13194-48-4	0.7	0.3	0.3	-Neurological
Ethoxyethanol acetate, 2-	111-15-9	2100	2000	2000	-Developmental
Ethoxyethanol, 2-	110-80-5	2800	NA	NA	-Reproductive
Ethyl acetate	141-78-6	6300	6300	6300	-Body Weight
Ethyl acrylate	140-88-5	0.4	130	130	-Cancer
Ethyl chloride [or Chloroethane]	75-00-3	12	NA	NA	-Cancer -Developmental
Ethyl dipropylthiocarbamate, S- [or EPTC]	759-94-4	180	240	240	-Cardiovascular
Ethyl ether	60-29-7	750	130000	130000	-Body Weight
Ethyl methacrylate	97-63-2	630	NA	NA	-Kidney
Ethyl p-nitrophenyl phenylphosphorothioate [or EPN]	2104-64-5	0.07	0.02	0.02	-Neurological
Ethylbenzene	100-41-4	30	610	610	-Developmental -Kidney -Liver
Ethylene diamine	107-15-3	140	800	800	-Blood -Cardiovascular
Ethylene glycol	107-21-1	14000	16000	16000	-Kidney
Ethylene oxide	75-21-8	0.03	4200	4200	-Cancer
Ethylene thiourea [or ETU]	96-45-7	0.3	1300	1300	-Cancer -Thyroid
Ethylphthalyl ethylglycolate [or EPEG]	84-72-0	21000	NA	NA	-Kidney
Ethyltoluene, o-	622-96-8	210	NA	NA	-Body Weight -Liver
Ethyltoluene, p-	611-14-3	210	NA	NA	-Body Weight -Liver
ETU [see Ethylene thiourea]					
Famphur	52-85-7	3.5	NA	NA	-Blood
Fenamiphos	22224-92-6	1.8	0.2	0.2	-Neurological
Fensulfothion	115-90-2	1.8	0.5	0.5	-Neurological
Fenvalerate [see Pydrin]					
Fluometuron	2164-17-2	91	190	190	-None Specified
Fluoranthene	206-44-0	280	0.3	0.3	-Blood -Kidney -Liver
Fluorene	86-73-7	280	30	30	-Blood
Fluoride	7782-41-4	2000	10000	5000	-Teeth mottling
Fluoridone	59756-60-4	560	110	110	-Kidney -Reproductive
Fonofos	944-22-9	14	0.1	0.1	-Liver -Neurological
Formaldehyde	50-00-0	600	110	110	-Cancer -Gastrointestinal
Formic acid	64-18-6	14000	4500	4500	-Body Weight
Furan	110-00-9	7	NA	NA	-Liver
Furfural	98-01-1	21	650	650	-Liver -Nasal
Glycidaldehyde	765-34-4	2.8	NA	NA	-Adrenals -Blood -Kidney
Glyphosate [or Roundup]	1071-83-6	700	120	120	-Kidney
Gross alpha radiation	14127-62-9	15	15	15	-Cancer
Guthion [or Methyl azinphos]	86-50-0	11	0.01	0.01	-Neurological
Heptachlor	76-44-8	0.4	0.00021	0.00021	-Cancer -Liver
Heptachlor epoxide	1024-57-3	0.2	0.00004	0.00004	-Cancer -Liver
Hexachloro-1,3-butadiene	87-68-3	0.4	49.7	49.7	-Cancer -Kidney
Hexachlorobenzene	118-74-1	1	0.0003	0.0003	-Cancer -Liver
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Hexachlorocyclohexane, alpha- [or BHC, alpha-]		0.006	0.005	0.005	-Cancer
Hexachlorocyclohexane, beta-[BHC, beta-]	319-85-7	0.02	0.046	0.046	-Cancer
Hexachlorocyclohexane, delta- [or BHC, delta-]	319-86-8	2.1	NA	NA	-Kidney -Liver
Hexachlorocyclohexane, gamma- [or Lindane or BHC, gamma-]	58-89-9	0.2	0.063	0.063	-Cancer -Kidney -Liver
Hexachlorocyclohexane, technical [or BHC, technical]	608-73-1	0.02	0.02	0.02	-Cancer
Hexachlorocyclopentadiene	77-47-4	50	3	3	-Gastrointestinal
Hexachlorodibenzo-p-dioxin (mixture)	19408-74-3	0.000006	NA	NA	-Cancer
Hexachloroethane	67-72-1	2.5	3.3	3.3	-Cancer -Kidney
Hexachlorophene	70-30-4	2.1	1.1	1.1	-Neurological
Hexahydro-1,3,5-trinitro-1,3,5-triazine [or RDX]	121-82-4	0.3	180	180	-Cancer -Reproductive
Hexane, n-	110-54-3	6	3400	3400	-Neurological
Hexanone, 2- [or Methyl butyl ketone]	591-78-6	280	NA	NA	-None Specified
Hexazinone	51235-04-2	230	25000	25000	-Body Weight
HMX [see Octahydro-1,3,5,7-tetranitro-tetrazocine]					
Hydrogen cyanide (as Cyanide)	74-90-8	140	3.5	3.5	-Neurological -Thyroid
Hydrogen sulfide	7783-06-4	21	0.1	0.1	-Gastrointestinal -Nasal
Hydroquinone	123-31-9	280	4.5	4.5	-Blood
Indeno(1,2,3-cd)pyrene	193-39-5	0.05	*	*	-Cancer
Iprodione	36734-19-7	280	150	150	-Blood
Iron	7439-89-6	300	1000	300	-Gastrointestinal
Isobutyl alcohol	78-83-1	2100	47000	47000	-Neurological
Isophorone	78-59-1	37	650	650	-Cancer -None Specified
Isopropyl benzene [see Cumene]					
4-Isoproyl toluene [see Cymene]					
Kelthane [see Dicofol]					
Kepone	143-50-0	0.004	NA	NA	-Cancer
Lead	7439-92-1	15	e ^(1.273[InH]-4.705)	8.5	-Neurological
Limonene	138-86-3	700			-Kidney -Liver
Lindane [see Hexachlorocyclohexane, gamma-]					
Linuron	330-55-2	1.4**	45	45	-Blood
Lithium	7439-93-2	140	NA	NA	-None Specified
Malathion	121-75-5	140	0.1	0.1	-Neurological
Maleic anhydride	108-31-6	700	NA	NA	-Kidney
Maleic hydrazide	123-33-1	3500	750	750	-Kidney
Mancozeb	8018-01-7	210	3.5	3.5	-Thyroid
Maneb	12427-38-2	35	5.5	5.5	-Thyroid
Manganese	7439-96-5	50	NA	NA	-Neurological
MCPA [see Methyl-4- chlorophenoxy acetic acid, 2-]					
MCPP [see Propionic acid, 2-(2-methyl-4-chlorophenoxy)]					
Mercuric chloride (as Mercury)	7487-94-7	0.2**	0.05	0.05	-Immunological -Kidney
Mercury methyl- [see	7439-97-6	2	0.012	0.025	-Neurological
Methylmercury]	150 50 5	0.0	N/A	NT A	Manual aire
Merphos Merphos avido	150-50-5	0.2	NA 0.2	NA 0.2	-Neurological
Merphos oxide Metalaxyl	78-48-8 57837-19-1	0.2 420	37	37	-Neurological -Blood -Liver -Neurologi-
Methacrylonitrile	126-98-7	0.7	NA	NA	cal -Liver
Methamidophos	10265-92-6	0.4	0.00001	0.00001	-Neurological
Methanol	67-56-1	3500	45000	45000	-Developmental -Eye -Neurological
Methidathion	950-37-8	0.7**	0.03	0.03	-Liver
Methomyl	16752-77-5	180	1	1	-Kidney -Spleen
Methoxy-5-nitroaniline, 2-	99-59-2	0.8	NA	NA	-Cancer
Methoxychlor	72-43-5	40	0.03	0.03	-Developmental -Repro-
					ductive

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Methoxyethanol, 2-	109-86-4	•	NA	NA	-Reproductive
Methyl acetate	79-20-9	3000	NA	NA	-Liver
Methyl acrylate	96-33-3	210	NA	NA	-None Specified
Methyl azinphos [see Guthion]					
Methyl bromide [see Bromomethane]					
Methyl butyl ketone [see Hexanone, 2-]					
Methyl chloride [or Chloromethane]	74-87-3	2.7	470.8	470.8	-Cancer -Neurological
Methyl chloroform [see Trichloroethane, 1,1,1-]					
Methyl ethyl ketone [or Butanone, 2-]	78-93-3	4200	120000	120000	-Developmental
Methyl isobutyl ketone [or MIBK]	108-10-1	560	23000	23000	-Kidney -Liver
Methyl methacrylate	80-62-6	25	6500	6500	-Nasal
Methyl parathion [or Parathion, methyl]	298-00-0	1.8	0.01	0.01	-Blood -Neurological
Methyl tert-butyl ether [or MTBE]	1634-04-4	20	34000	34000	-Eye -Kidney -Liver
Methyl-4-chlorophenoxy acetic acid, 2- [or MCPA]	94-74-6	3.5	72	72	-Kidney -Liver
Methyl-5-nitroaniline, 2-	99-55-8	1.1	NA	NA	-Cancer
Methylaniline, 2-	95-53-4	0.1	26	26	-Cancer
Methylene bis(2-chloroaniline), 4,4-	101-14-4	0.3	NA	NA	-Cancer -Liver -Bladder
Methylene bromide	74-95-3	70	NA	NA	-Blood
Methylene chloride	75-09-2	5	1580	1580	-Cancer -Liver
Methylmercury [or Mercury,	22967-92-6	0.07**	NA	NA	-Neurological
methyl]					
Methylnaphthalene, 1-	90-12-0	28	95	95	-Nasal
Methylnaphthalene, 2-	91-57-6	28	30	30	-Nasal
Methylphenol, 2- [or Cresol, o-]	95-48-7	35**	250	250	-Neurological
Methylphenol, 3- [or Cresol, m-]	108-39-4	35**	450	450	-Neurological
Methylphenol, 4- [or Cresol, p-]	106-44-5	3.5**	70	70	-Neurological -Respiratory
Metolachlor	51218-45-2	110**	1.1	1.1	-Body Weight
Metribuzin	21087-64-9	180	64	64	-Kidney -Liver
Metsulfuron, methyl [see Ally]					
Mevinphos	7786-34-7	1.8	0.05	0.05	-Neurological
MIBK [see Methyl isobutyl ketone]					
Mirex	2385-85-5	1.4	0.001	0.001	-Liver -Thyroid
Molinate	2212-67-1	14	17	17	-Reproductive
Molybdenum	7439-98-7	35	NA	NA	-Gout
MTBE [see Methyl tert-butyl ether]					
Naled	300-76-5	14	0.02	0.02	-Neurological
Naphthalene	91-20-3	14**	26	26	-Nasal
Naphthylamine, 2-	91-59-8	0.0003	NA	NA	-Cancer
Napropamide	15299-99-7	700	210 e(0.846[InH]+0.0584)	210	-Body Weight
Nickel	7440-02-0	100	1	8.3	-Body Weight
Nickel subsulfide	12035-72-2	100	e ^(0.846[InH]+0.0584)	8.3	-Cancer
Nitrate	14797-55-8	10000	NA	NA	-Blood
Nitrate+Nitrite	NOCAS	10000	NA	NA	-Blood
Nitrite	14797-65-0	1000	NA	NA	-Blood
Nitroaniline, m-	99-09-2	1.7	NA	NA	-Cancer -Blood
Nitroaniline, o-	88-74-4	21	NA	NA	-Blood
Nitroaniline, p-	100-01-6	1.7	1200	1200	-Cancer -Blood
Nitrobenzene	98-95-3	3.5	90	90	-Adrenals -Blood -Kidney -Liver
Nitrophenol, 4-	100-02-7	56	55	55	-None Specified
Nitroso-di-ethylamine, N-	55-18-5	0.0002	0.008	0.008	-Cancer
Nitroso-dimethylamine, N	62-75-9	0.0007	3	3	-Cancer
Nitroso-di-n-butylamine, N-	924-16-3	0.006	0.04	0.04	-Cancer
Nitroso-di-n-propylamine, N-	621-64-7	0.005	0.5	0.5	-Cancer
Nitroso-diphenylamine, N-	86-30-6	7.1	6	6	-Cancer
Nitroso-N-methylethylamine, N-	10595-95-6	0.002	0.06	0.06	-Cancer
Nitrosopyrrolidine, N-	930-55-2	0.02	NA	NA	-Cancer
Nitrotoluene, m-	99-08-1	140	380	380	-Spleen
Nitrotoluene, o-	88-72-2	70	550	550	-Spleen
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Nitrotoluene, p-	99-99-0	70	550	550	-Spleen
Nonylphenol	25154-52-3	8.4	5.9	1.4	-Kidney
Norflurazon	27314-13-2	280	NA	NA	-Kidney -Liver -Thyroid
Octahydro-1,3,5,7-tetranitro- tetrazocine [or HMX]	2691-41-0	350	1300	1300	-Blood -Liver
Octamethylpyrophosphoramide	152-16-9	14	NA	NA	-Neurological
Oil and Grease	NOCAS	5000	5000	5000	-None Specified
Oryzalin	19044-88-3	35**	NA	NA	-Adrenals -Blood -Kidney -Liver
Oxadiazon	19666-30-9	35	44	44	-Liver
Oxamyl	23135-22-0	200	8.5	8.5	-Body Weight
Paraquat	1910-42-5	3.2**	47	47	-Respiratory
Parathion	56-38-2	4.2**	0.04	0.04	-Neurological
Parathion, methyl [see Methyl parathion]					
PCBs [or Aroclor mixture]	1336-36-3	0.5	0.000045	0.000045	-Cancer -Immunological
PCE [see Tetrachloroethene]					
Pebulate	1114-71-2	350	310	310	-Blood
Pendimethalin	40487-42-1	280	10	10	-Liver
Pentachlorobenzene	608-93-5	5.6	1.7	1.7	-Kidney -Liver
Pentachloronitrobenzene	82-68-8	0.1	0.02	0.02	-Cancer -Liver
Pentachlorophenol	87-86-5	1	8.2	7.9	-Cancer -Kidney -Liver
Perchlorate	7601-90-3	4	NA	NA	-Thyroid
Permethrin	52645-53-1	350	0.001	0.001	-Liver
Phenanthrene	85-01-8	210	*	*	-Kidney
Phenmedipham [or Betanal]	13684-63-4	1800	200	200	-None Specified
Phenol	108-95-2	10	6.5	6.5	-Developmental
Phenylenediamine, m-	108-45-2	42	NA	NA	-Liver
Phenylenediamine, p-	106-50-3	1300	NA	NA	-Whole Body
Phenylphenol, 2-	90-43-7	18	36	36	-Cancer
Phorate	298-02-2	1.4	0.005	0.005	-Neurological
Phosmet	732-11-6	140	0.1	0.1	-Liver -Neurological
Phosphine	7803-51-2	2.1	NA	NA	-Body Weight
Phthalic anhydride	85-44-9	14000	NA	NA	-Kidney -Nasal -Respira- tory
Picloram	1918-02-1	500	70	70	-Liver
Polychlorinated dibenzo-p-dioxins [see Dioxins]					
Polycyclic Aromatic Hydrocarbons (PAHs)			0.031	0.031	-Various Endpoints
Potassium cyanide	151-50-8	350	5.5	5.5	-Neurological -Thyroid
Profluralin	26399-36-0	42	NA	NA	-None Specified
Prometon	1610-18-0	110	600	600	-None Specified
Prometryn	7287-19-6	28	21	21	-Bone Marrow -Kidney
Pronamide	23950-58-5	53**	NA	NA	-Liver -None Specified
Propachlor	1918-16-7	91	12	12	-Liver
Propanil	709-98-8	35	20	20	-Spleen
Propargite	2312-35-8	140	1.6	1.6	-None Specified
Propagne	139-40-2	14**	190	190	-Body Weight
Propham	122-42-9	140	500	500	-Neurological
Propiconazole	60207-90-1	91	26	26	-Gastrointestinal
	93-65-2	7	NA	NA	-Kidney
Propionic acid, 2-(2-methyl-4-chlorophenoxy) [or MCPP]	30-00-2	'	TVA	172	-Mulley
Propoxur [see Baygon]	109.05.1	000	NT A	NTA	IZida an Lin N
Propylbenzene, n-	103-65-1	280	NA	NA	-Kidney -Liver -Neurolog- ical
Propylene glycol	57-55-6	140000	36000	36000	-Blood -Bone Marrow
Propylene glycol monomethyl ether	107-98-2	4900	NA	NA	-Kidney -Liver -Neurolog- ical
Propylene oxide	75-56-9	0.1	NA	NA	-Cancer -Nasal -Respira- tory
Pydrin [or Fenvalerate]	51630-58-1	180	0.0004	0.0004	-Neurological
Pyrene	129-00-0	210	0.3	0.3	-Kidney
Pyridine					•
	110-86-1	7	1300	1300	-Liver
Quinoline	91-22-5	0.01	NA	NA	-Cancer

Contaminants	CAS#	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Cri- teria	Non-Cancer Target Or- gans/Systems or Effects#
Radium, 226 and 228 (combined)	7440-14-4	5	5	5	-Cancer
RDX [see Hexahydro-1,3,5-trinitro-1,3,5-triazine]	1770-17-7				-Cancer
Resmethrin	10453-86-8	210	0.003	0.003	-Reproductive
Ronnel	299-84-3	350	0.06	0.06	-Liver
Rotenone	83-79-4	28	0.1	0.1	-Developmental
Roundup [see Glyphosate]			1		
Selenious acid (as Selenium)	7783-00-8	35	40	40	-Hair Loss -Neurological -Skin
Selenium	7782-49-2	50	5	71	-Hair Loss -Neurological -Skin
Sevin [see Carbaryl]					
Silver	7440-22-4	100	0.07	0.4	-Skin
Silvex [see Trichlorophenoxy propionic acid]					
Simazine	122-34-9	4	7.3	7.3	-Cancer -Blood
Sodium	7440-23-5	160000	NA	NA	-None Specified
Sodium chlorite [see Chlorite (sodium salt)]					
Sodium cyanide (as Cyanide)	143-33-9	280	3.8	3.8	-Neurological
Strontium	7440-24-6	4200			-Bone
Strychnine	57-24-9	2.1	38	38	-Mortality
Styrene	100-42-5	100	460	460	-Blood -Liver -Neurologi- cal
Sulfate	14808-79-8	250000	NA	NA	-None Specified
TCDD, 2,3,7,8- [see Dioxins, as total 2,3,7,8-TCDD equivalents]					
TCE [see Trichloroethene]					
TCMTB [see Thiocyanomethylthiobenzothiazole, 2-]					
TDS [see Total dissolved solids]					
Tebuthiuron	34014-18-1	490	310	310	-Body Weight
Temephos	3383-96-8	140	0.002	0.002	-None Specified
Temik [see Aldicarb]					
Terbacil	5902-51-2	91	2500	2500	-Liver -Thyroid
Terbufos	13071-79-9	0.2	0.01	0.01	-Neurological
Terbutryn	886-50-0	7	3.1	3.1	-Blood
Tetrachlorobenzene, 1,2,4,5-	95-94-3	2.1	1.6	1.6	-Kidney
Tetrachloroethane, 1,1,1,2-	630-20-6	1.3	NA	NA	-Cancer -Kidney -Liver
Tetrachloroethane, 1,1,2,2-	79-34-5	0.2	10.8	10.8	-Cancer -Liver
Tetrachloroethene [or PCE]	127-18-4	3	8.85	8.85	-Cancer -Liver
Tetrachlorophenol, 2,3,4,6-	58-90-2	210	4.5	4.5	-Liver
Tetraethyl dithiopyrophosphate	3689-24-5	3.5	0.01	0.01	-Bone Marrow -Neurolog- ical
Thallium	7440-28-0	2	6.3	6.3	-Hair Loss -Liver
Thallium sulfate (as Thallium)	7446-18-6	0.6	26	26	-Blood -Hair Loss -Liver
Thiobencarb	28249-77-6	70	NA	NA	-Kidney
Thiocyanomethylthio- benzothiazole, 2- [or TCMTB]	21564-17-0	2.8**	0.4	0.4	-Gastrointestinal
Thiram	137-26-8	35	0.2	0.2	-Neurological
Tin	7440-31-5	4200	NA	NA	-Kidney -Liver
Titanium Dioxide	13463-67-7	28000	NA	NA	
Toluene	108-88-3	40	480	480	-Kidney -Liver -Neurolog- ical
Toluene-2,4-diamine	95-80-7	0.01	NA	NA	-Cancer
Toluidine, p-	106-49-0	0.2	NA	NA	-Cancer
Total dissolved solids [or TDS]	C-010	500000	NA	NA	-None Specified
Toxaphene	8001-35-2	3	0.0002	0.0002	-Cancer -Developmental
Triallate	2303-17-5	91	65	65	-Liver -Spleen
Tributyltin oxide	56-35-9	2.1	0.05	0.05	-Immunological
Trichloro-1,2,2-trifluoroethane, 1,1,2- [or CFC 113]	76-13-1	210000	NA	NA	-Neurological
Trichloroacetic acid	76-03-9	9.1	100000	100000	-None Specified
Trichlorobenzene, 1,2,3-	87-61-6	70	85	85	-Adrenals
Trichlorobenzene, 1,2,4-	120-82-1	70	23	23	-Adrenals
Trichlorobenzene, 1,3,5-	108-70-3	40	NA	NA	-None Specified

Contaminants	CAS#	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Criteria	Non-Cancer Target Or- gans/Systems or Effects#
Trichloroethane, 1,1,1- [or Methyl chloroform]	71-55-6	200	270	270	-None Specified
Trichloroethane, 1,1,2-	79-00-5	5	16	16	-Cancer -Liver
Trichloroethene [or TCE]	79-01-6	3	80.7	80.7	-Cancer -None Specified
Trichlorofluoromethane	75-69-4	2100	NA	NA	-Cardiovascular -Kidney -Respiratory
Trichlorophenol, 2,4,5-	95-95-4	1	23	23	-Kidney -Liver
Trichlorophenol, 2,4,6-	88-06-2	3.2	6.5	6.5	-Cancer
Trichlorophenoxy acetic acid, 2,4,5-	93-76-5	70	140	140	-Kidney
Trichlorophenoxy propionic acid, 2, (2, 4, 5-) [or Silvex]	93-72-1	50	NA	NA	-Liver
Trichloropropane, 1,1,2-	598-77-6	35	NA	NA	-Cancer -Kidney -Liver -Thyroid
Trichloropropane, 1,2,3-	96-18-4	0.02	0.2	0.2	-Cancer -Kidney -Liver
Trichloropropene, 1,2,3-	96-19-5	35	NA	NA	-Eye
Trifluralin	1582-09-8	4.5	0.2	0.2	-Cancer -Blood -Liver
Trimethyl phosphate	512-56-1	0.9	NA	NA	-Cancer
Trimethylbenzene, 1,2,3-	526-73-8	10	NA	NA	-None Specified
Trimethylbenzene, 1,2,4-	95-63-6	10	220	220	-None Specified
Trimethylbenzene, 1,3,5-	108-67-8	10	220	220	-None Specified
Trinitrobenzene, 1,3,5-	99-35-4	210	19	19	-Blood -Spleen
Trinitrophenylmethylnitramine	479-45-8	70			-Kidney -Liver -Spleen
Trinitrotoluene, 2,4,6-	118-96-7	1.2	49	49	-Cancer -Liver
Trithion [see Carbophenothion]					
TRPH	NOCAS	5000	5000	5000	-Multiple Endpoints Mixed Contaminants
Uranium, soluble salts	7440-61-1	21	NA	NA	-Kidney
Vanadium	7440-62-2	49	NA	NA	-Hair Loss
Vanadium pentoxide (as Vanadium)	1314-62-1	63	13	13	-Hair Loss
Vernam	1929-77-7	7	12	12	-Body Weight
Vinyl acetate	108-05-4	88	700	700	-Kidney -Nasal
Vinyl chloride (d)	75-01-4	1	2.4	2.4	-Cancer -Liver
White phosphorus	7723-14-0	0.1	NA	0.1	-Maternal Death - Reproductive
Xylenes, total	1330-20-7	20	370	370	-Neurological
Zinc	7440-66-6	5000	e ^(0.8473[InH]+0.884)	86	-Blood
Zinc chloride	7646-85-7	2100	1.5	1.5	-Blood
Zinc phosphide	1314-84-7	2.1	NA	NA	-Body Weight
Zineb	12122-67-7	350	14	14	-Thyroid

CTLs are expressed in units of ug/l (ppb).

- # = These default Target Organ(s)/Systems or Effects are those reported to occur at the doses used to derive the referenced dose. Non-default Target Organ(s)/Systems or Effects may be justified through a detailed toxicological analysis of the chemicals present at a specific site.
- * = There are no surface water standards for these individual polycyclic aromatic hydrocarbons. Per Chapter 62-302, F.A.C., the surface water criterion for PolycyclicAromatic Hydrocarbons (PAHs) shall apply to the total concentration of Acenaphthylene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(fluoranthene, Benzo(g,i,h) perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h,)anthracene, Indenol(1,2,3-cd)pyrene, and Phenanthrene.
- ** = Groundwater CTLs for Class C carcinogens with no cancer slope factor were developed using the referenced dose divided by a factor of 10, as described in the DERM Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 24, of the Code of Miami-Dade County (September 2005).
- (a) = Freshwater surface water criterion for Ammonia based on un-ionized ammonia only. All other water criteria for ammonia are based on total ammonia.
- (b) = The common name BHC is a misnomer for Hexachlorocyclohexane.

- (c) = Criteria for Dioxins, as total 2,3,7,8-TCDD equivalents shall be compared to the total dioxin equivalents for chlorinated dioxin and dibenzofuran congeners using the approach set forth in the DERM Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County (September 2005).
- (d) = Surface water values protective of human health for Vinyl chloride calculated assuming continuous lifetime exposure from birth as described in the DERM Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County (September 2005).
- (e) = Not to exceed 10% above ambient, as set forth in Sec. 24-42(4).
- (f) = Hardness-dependent as set forth in Chapter 62-302, F.A.C.
- (g) = Criteria for these metals are measured as total recoverable metal. However, they may be applied as dissolved metals when, as part of a permit application, a dissolved metals translator has been established according to the procedures set forth in the document, "Guidance for Establishing a Metals Translator", Florida Department of Environmental Protection, December 17, 2001.
- (h) = In the absence of concentration data specific for the III and VI valence states of chromium, total chromium concentrations in surface water shall be compared to the criteria for Chromium (hexavalent).
- (i) = 12789-03-6 or 57-74-9

NA = Not available.

None Specified = Target organ(s) not available.

Note: Freshwater and marine surface waters, and groundwater at the point of discharge into surface water shall pass acute and chronic toxicity bioassay tests: The user shall consult the standard definitions for acute and chronic toxicity set forth in F.A.C. 62-302.200(1) and F.A.C. 62-302.200(4), respectively.

Table 2 Soil Clean-up Target Levels

		Direct	Direct Exposure		Leachability Based on			
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	Target Organs/Sys- tems or Effects#	
Acenaphthene	83-32-9	2400	20000	2.1	0.3	0.3	-Liver	
Acenaphthylene	208-96-8	1800	20000	27	NA	NA	-Liver	
Acephate	30560-19-1	120	720	0.02	0.8	0.8	-Cancer -Neurological	
Acetaldehyde	75-07-0	15	20	NA	NA	NA	-Nasal	
Acetone	67-64-1	11000	68000	25	6.8	6.8	-Kidney -Liver -Neu- rological	
Acetophenone	98-86-2	3900	32000	3.9	44	44	-None Specified	
Acifluorfen, sodium [or Blazer]	62476-59-9	28	140	0.1	25	25	-Kidney	
Acrolein	107-02-8	0.05	0.3	0.01	0.002	0.002	-Nasal	
Acrylamide	79-06-1	0.1	0.4	0.00003	0.001	0.001	-Cancer -Neurological	
Acrylic acid	79-10-7	48	250	14	NA	NA	-Developmental	
Acrylonitrile	107-13-1	0.3	0.6	0.0003	0.001	0.001	Cancer -Nasal -Repro- ductive	
Alachlor	15972-60-8	11	44	0.02	0.005	0.005	-Cancer -Blood	
Aldicarb [or Temik]	116-06-3	68	920	0.03	0.004	0.004	-Neurological	
Aldrin	309-00-2	0.06	0.3	0.2	0.01	0.01	-Cancer -Liver	
Ally [or Metsulfuron, methyl]	74223-64-6	19000	300000	12	NA	NA	-Body Weight	
Allyl alcohol	107-18-6	140	970	0.1	0.02	0.02	-Kidney -Liver	
Allyl chloride	107-05-1	0.5	2.7	0.2	NA	NA	-Neurological	
Aluminum	7429-90-5	80000	*	***	***	***	-Body Weight	
Aluminum phosphide	20859-73-8	35	880	***	***	***	-Body Weight	

		Direct	Exposure		Leachability Based of	on	
			T		<u> </u>		Target Organs/Sys-
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	or Effects#
Ametryn	834-12-8	670	11000	0.8	0.08	0.08	-Liver
Ammonia (a)	7664-41-7	NA	NA	NA	***	NA	-Respiratory
Ammonia (as Total)	7664-41-7	4400	26,400	***	***	***	-Respiratory
Aniline	62-53-3	27	150	0.03	0.02	0.02	-Cancer -Blood -Spleen
Anthracene	120-12-7	21000	300000	2500	0.4	0.4	-None Specified
Antimony (b)	7440-36-0	27	370	5.4	3900	3900	-Blood
Aroclor mixture [see PCBs]	7410 00 0	121	010	0.1	0000	0000	Diood
Arsenic	NOCAS	2.1	12	***	***	***	-Cancer -Cardiovascu- lar -Skin
Atrazine	1912-24-9	4.3	19	0.06	0.04	0.04	Cancer -Cardiovascu- lar
Azinphos, methyl [see Guthion]							
Azobenzene	103-33-3	7.9	31	0.03	0.4	0.4	-Cancer
Barium (soluble salts) (b)	7440-39-3	120**	130000	1600	NA	NA	-Cardiovascular
Baygon [or Propoxur]	114-26-1	280	4100	0.2	0.002	0.002	-Blood -Neurological
Bayleton	43121-43-3	2400	46000	4.8	11	11	-Blood
Benomyl	17804-35-2	4000	77000	3.1	0.03	0.03	-Developmental
Bentazon	25057-89-0	2100	32000	1.2	NA	NA	-Blood
Benzaldehyde	100-52-7	3300	24000	4.8	0.4	0.4	-Gastrointestinal -Kid- ney
Benzene	71-43-2	1.2	1.7	0.007	0.5	0.5	-Cancer -Blood
Benzenethiol	108-98-5	0.2	1.3	0.001	NA	NA	-Liver
Benzidine	92-87-5	0.004	0.02	0.00002	0.00002	0.00002	-Cancer -Liver -Neu- rological
Benzo(a)anthracene	56-55-3	##	##	0.8	NA	NA	-Cancer
Benzo(a)pyrene	50-32-8	0.1	0.7	8	NA	NA	-Cancer
Benzo(b)fluoranthene	205-99-2	##	##	2.4	NA	NA	-Cancer
Benzo(g,h,i)perylene	191-24-2	2500	52000	32000	NA	NA	-Neurological
Benzo(k)fluoranthene	207-08-9	##	##	24	NA	NA	-Cancer
Benzoic acid	65-85-0	180000	*	110	36	36	-None Specified
Benzotrichloride	98-07-7	0.04	0.09	0.0001	0.00008	0.00008	-Cancer
Benzyl alcohol	100-51-6	26000	670000	9.5	2.3	2.3	-Gastrointestinal
Benzyl chloride	100-44-7	1	1.6	0.002	0.02	0.02	-Cancer
Beryllium (b)	7440-41-7	120	1400	63	2.1	2.1	-Cancer -Gastrointestinal -Respiratory
Betanal [see Phenmedipham]							
BHC, alpha- [see Hexachloro cyclohexane, alpha-] (f)							
BHC, beta- [see Hexachloro cyclohexane, beta-] (f)							
BHC, delta- [see Hexachloro cyclohexane, delta-] (f)							
BHC, gamma- [see Hexachloro cyclohexane, gamma-] (f)							
Bidrin [or Dicrotophos]	141-66-2	7.4	120	0.005	0.1	0.1	-Developmental
Biphenyl, 1,1- [or Diphenyl]	92-52-4	3000	34000	0.003	5.8	5.8	-Kidney
Bis(2-chloro-1- metylethyl)ether [see Bis(2- chloroisopropyl)ether]							
Bis(2- chloroethoxy)methane	111-91-1	250	5700	63	NA	NA	-Liver
Bis(2-chloroethyl)ether	111-44-4	0.3	0.5	0.0001	0.002	0.002	-Cancer
Bis(2- chloroisopropyl)ether [or Bis(2-chloro-1- metylethyl)ether]	39638-32-9	6	12	0.009	0.4	0.4	-Cancer -Blood
Bis(2-ethylhexyl)adipate	103-23-1	620	1900	780	64	64	-Cancer -Body Weight
Bis(2-	117-81-7	72	390	3600	1300	1300	-Cancer -Liver
ethylhexyl)phthalate [or DEHP]							

		Direct	Exposure		Leachability Based of	n	
			T.				Target Organs/Sys-
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	tems or Effects#
Bisphenol A	80-05-7	4000	79000	11	1.7	1.7	-Body Weight
Blazer [see Acifluorfen, so- dium]	00-03-1	4000	73000	111	1.7	1.1	-Body Weight
Boron	7440-42-8	17000	430000	***	NA	NA	-Reproductive -Respi- ratory
Bravo [see Chlorothalonil]							Tatory
Bromacil	314-40-9	7500	120000	0.5	0.6	0.6	-Body Weight
Bromate	15541-45-4	1	2.8	0.04	NA	460	-Cancer -Kidney
Bromochloromethane	74-97-5	95	530	0.6	NA	NA	-None Specified
Bromodichloromethane	75-27-4	1.5	2.2	0.004	0.1	0.1	Cancer -Kidney
Bromoform	75-25-2	48	93	0.03	2.7	2.7	-Cancer -Liver
Bromomethane [or Methyl bromide]	74-83-9	3.1	16	0.05	0.2	0.2	-Gastrointestinal -Respiratory
Bromoxynil	1689-84-5	1600	29000	3	NA	NA	-None Specified
Butanol, n-	71-36-3	2900	21000	3	110	110	-Neurological
Butanol, tert- [see Butyl alcohol, tert-]							
Butanone, 2- [see Methyl ethyl ketone]							
Butyl alcohol, tert- [or Butanol, tert-]	75-65-0	3200	19000	5.7	NA	NA	-Kidney -Neurological
Butyl benzyl phthalate	85-68-7	17000	380000	310	56	56	-Liver
Butylate	2008-41-5	3200	40000	5.2	0.2	0.2	-Liver
Butylbenzene, n-	104-51-8	410	2400	21	NA	NA	-Kidney -Liver -Neu- rological
Butylbenzene, sec	135-98-8	360	2000	19	NA	NA	-Kidney -Neurological
Butylbenzene, tert	98-06-6	360	2100	15	NA	NA	-Kidney -Neurological
Butylphthalyl butylglycolate	85-70-1	84000	*	4200	NA	NA	-None Specified
Cadmium (b,c,h)	7440-43-9	82	1700	7.5	(k)	14	Cancer -Kidney
Calcium cyanide	592-01-8	3500	88000	***	NA	NA	-Neurological -Thyroid
Captafol	2425-06-1	110	570	0.5	0.1	0.1	-Cancer -Kidney
Captan	133-06-2	230	750	0.1	0.03	0.03	-Cancer -Body Weight
Carbaryl [or Sevin]	63-25-2	7700	130000	8.7	0.0007	0.0007	-Kidney -Liver
Carbazole	86-74-8	49	240	0.2	6.5	6.5	-Cancer
Carbofuran	1563-66-2	130	910	0.2	0.0006	0.0006	-Neurological -Repro- ductive
Carbon disulfide	75-15-0	270	1500	5.6	0.8	0.8	-Developmental -Neu- rological
Carbon tetrachloride	56-23-5	0.5	0.7	0.04	0.06	0.06	-Cancer -Liver
Carbophenothion [or Trithion]	786-19-6	11	250	13	1.5	1.5	-Neurological
Carboxin	5234-68-4	7400	120000	5	0.4	0.4	-Body Weight
CFC 113 [see Trichloro- 1,2,2-trifluoroethane, 1,1,2-]							-Adrenals
Chloral hydrate	302-17-0	5700	62000	0.3	NA	NA	-Gastrointestinal -Neurological
Chloramben	133-90-4	960	12000	0.5	NA	NA	-Liver
Chlordane (total)	(j)	2.8	14	9.6	0.003	0.003	-Cancer -Liver
Chlorine cyanide [or Cyanogen chloride]	506-77-4	3100	37000	71	0.3	0.3	-Neurological -Thyroid
Chloro-1, 1-difluoroethane, 1-	75-68-3	16000	84000	NA	NA	NA	-None Specified
Chloro-1,3-butadiene [or Chloroprene]	126-99-8	3.5	19	1.5	NA	NA	-Hair Loss -Nasal
Chloro-3-methylphenol, 4- [see Chloro-m-cresol, p-]							
Chloroacetic acid	79-11-8	130	1700	0.07	13	13	-Cardiovascular
Chloroaniline, p-	106-47-8	270	3700	0.2	0.02	0.02	-Spleen
Chlorobenzene	108-90-7	120	650	1.3	0.2	0.2	-Liver
Chlorobenzilate	510-15-6	3.6	18	0.1	0.01	0.01	-Cancer -Body Weight
Chlorobenzoic acid, p-	74-11-3	16000	290000	28	NA	NA	-None Specified
Chlorobenzotrifluoride, 4-	98-56-6	130	710	5.2	NA	NA	-Kidney
Chlorobutane, 1-	109-69-3	780	4200	26	NA	NA	-Blood -Neurological

		Direct	Exposure		Leachability Based	on	
Contaminants	CAS#		Commercial /		Fresh Surface	Marine Surface	Target Organs/Sys- tems
		Residential	Industrial	Groundwater	Water	Water Water	or Effects#
Chlorodifluoromethane	75-45-6	16000	82000	NA	NA	NA	-Adrenals -Kidney -Pi- tuitary
Chloroethane [see Ethyl chloride]							
Chloroform	67-66-3	0.4	0.6	0.4	2.8	2.8	Cancer -Liver
Chloro-m-cresol, p- [or Chloro-3-methylphenol, 4-]	59-50-7	600	8000	0.4	0.6	0.6	-Body Weight
Chloromethane [see Methyl chloride]							
Chloronaphthalene, beta-	91-58-7	5000	61000	260	740	740	-Liver -Respiratory
Chloronitrobenzene, o-	88-73-3	22	51	0.02	NA	NA	Cancer
Chloronitrobenzene, p-	100-00-5	31	73	0.03	1.6	1.6	Cancer
Chlorophenol, 2-	95-57-8	130	860	0.7	2.5	2.5	-Reproductive
Chlorophenol, 3-	108-43-0	370	5900	0.002	3.1	3.1	-Reproductive
Chlorophenol, 4-	106-48-9	330	4400	0.0007	1.2	1.2	-Reproductive
Chloroprene [see Chloro- 1,3-butadiene]							
Chloropropane, 2-	75-29-6	47	250	NA	NA	NA	-Liver
Chlorothalonil [or Bravo]	1897-45-6	88	420	0.2	0.06	0.06	-Cancer -Kidney
Chlorotoluene, o-	95-49-8	200	1200	2.8	7.7	7.7	-Body Weight
Chlorotoluene, p-	106-43-4	170	990	2.5	NA	NA	-None Specified
Chlorpropham	101-21-3	16000	310000	51	7	7	-Bone Marrow -Kid- ney -Liver -Spleen
Chlorpyrifos	2921-88-2	250	5000	15	0.001	0.001	-Neurological
Chromium (hexavalent) (b)	18540-29-9	310	470	NA	4.2	19	-Cancer -Respiratory
Chromium (total) (b,g)	NOCAS	310	470	38	4.2	19	-Cancer
Chromium (trivalent) (b)	16065-83-1	110000	*	NA	NA	*	-None Specified
Chrysene	218-01-9	##	##	77	NA	NA	-Cancer
Cobalt	7440-48-4	1700	42000	***	NA	NA	-Cardiovascular -Im- munological -Neuro-
0	7.110 FO O	4 FOWN	20000	***		***	logical -Reproductive
Copper	7440-50-8	150**	89000		(k)		-Gastrointestinal
Cresol, m- [see Methylphenol, 3-]	56-72-4	21	450	0.3	0.0007	0.0007	-Neurological
Cresol, o- [see Methylphenol, 2-]							
Cresol, p- [see Methylphenol, 4-]							
Crotonaldehyde	123-73-9	0.6	3.3	0.00008	NA	NA	-Cancer
Cumene [or Isopropyl ben- zene]	98-82-8	220	1200	0.2	56	56	-Adrenals -Kidney
Cyanide, free (b)	57-12-5	34**	11000	0.56	0.02	0.004	-Neurological -Thyroid
Cyanogen	460-19-5	560	3400	57	NA	NA	-Neurological -Thyroid
Cyanogen chloride [see Chlorine cyanide]							
Cycloate	1134-23-2	340	4700	0.7	2.5	2.5	-Neurological
Cyclohexanone	108-94-1	150000	*	150	110	110	
Cyclohexylamine	108-91-8	18000	440000	7.9	22	22	-Reproductive
Cyhalothrin [or Karate]	68085-85-8	420	9600	290	150	150	-Developmental
Cymene, p- (or Isopropyltoluene)	99-87-6	960	5600	NA	NA	NA	-Gastrointestinal -Neurological -Skin
Cypermethrin	52315-07-8	840	19000	30	0.002	0.002	-Gastrointestinal
DBCP, 1,2- [see Dibromo- 3-chloropropane, 1,2-]							
DDD, 4,4'- [see Dichlorodiphenyl dichloroethane, p,p']							
DDE, 4,4'- [see Dichlorodiphenyl dichloroethylene, p,p'-]							
DDT, 4,4'- [see Dichlorodiphenyl dichloroethane, p,p'-]							
Decabromodiphenyl ether	1163-19-5	840	19000	9.3	NA	NA	-None Specified
	+	-+	+	+	1		· -

		Direct .	Exposure		Leachability Based of	n	
	a.a						Target Organs/Sys-
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	or Effects#
Diallate	2303-16-4	16	82	0.6	NA	NA	-Cancer -None Speci- fied
Diazinon	333-41-5	70	1200	0.2	0.00005	0.00005	-Neurological
Dibenz(a,h)anthracene	53-70-3	##	##	0.7	NA	NA	-Cancer
Dibenzofuran	132-64-9	320	6300	15	36	36	-None Specified
Dibromo-3- chloropropane, 1,2- [or DBCP, 1,2-]	96-12-8	0.7	3.8	0.001	NA	NA	-Cancer -Reproductive
Dibromobenzene, 1,4-	106-37-6	430	3600	7.8	27	27	-Liver
Dibromochloromethane	124-48-1	1.5	2.3	0.003	0.2	0.2	-Cancer -Liver
Dibromoethane, 1,2- [or EDB]	106-93-4	0.1	0.2	0.0001	0.07	0.07	-Cancer -Reproductive
Dibutyl phthalate	84-74-2	8200	170000	47	1.5	1.5	-Mortality
Dicamba	1918-00-9	2300	40000	2.6	2.4	2.4	-Developmental
Dichloroacetic acid	79-43-6	21	120	0.005	8.1	8.1	-Cancer -Liver -Neu- rological -Reproduc- tive
Dichloroacetonitrile	3018-12-0	340	2900	0.03	NA	NA	-None Specified
Dichlorobenzene, 1,2-	95-50-1	880	5000	17	2.8	2.8	-Body Weight
Dichlorobenzene, 1,3-	541-73-1	380	2200	7	2.8	2.8	-None Specified
Dichlorobenzene, 1,4-	106-46-7	6.4	9.9	2.2	0.09	0.09	-Cancer -Liver
Dichlorobenzidine, 3,3'-	91-94-1	2.1	9.9	0.003	0.0009	0.0009	Cancer
Dichlorobenzophenone, 4,4'-	90-98-2	2500	51000	25	190	190	-None Specified
Dichlorodifluoromethane	75-71-8	77	410	44	NA	NA	-Liver
Dichlorodiphenyl- dichloroethane, p,p'- [or DDD, 4,4'-]	72-54-8	4.2	22	5.8	0.01	0.01	Cancer
Dichlorodiphenyl- dichloroethylene, p,p-' [or DDE, 4,4'-]	72-55-9	2.9	15	18	0.04	0.04	Cancer
Dichlorodiphenyl- trichloroethane, p,p'- [or DDT, 4,4'-]	50-29-3	2.9	15	11	0.06	0.06	-Cancer -Liver
Dichloroethane, 1,1-	75-34-3	390	2100	0.4	NA	NA	-Kidney
Dichloroethane, 1,2- [or EDC]	107-06-2	0.5	0.7	0.01	0.2	0.2	-Cancer -None Speci- fied
Dichloroethene, 1,1-	75-35-4	95	510	0.06	0.03	0.03	-Liver
Dichloroethene, cis-1,2-	156-59-2	33	180	0.4	NA	NA	-Blood
Dichloroethene, trans-1,2-	156-60-5	53	290	0.7	75	75	-Blood -Liver
Dichlorophenol, 2,3-	576-24-9	230	4100	0.0008	1.2	1.2	-Immunological
Dichlorophenol, 2,4-	120-83-2	190	2400	0.003	0.1	0.1	-Immunological
Dichlorophenol, 2,5-	583-78-8	240	4600	0.02	4.3	4.3	-Immunological
Dichlorophenol, 2,6-	87-65-0	220	3600	0.007	2.5	2.5	-Immunological
Dichlorophenol, 3,4-	95-77-2	230	3700	0.01	2	2	-Immunological
Dichlorophenoxy acetic acid, 2,4-	94-75-7	770	13000	0.7	0.9	0.9	-Blood -Kidney -Liver
Dichloropropane, 1,2-	78-87-5	0.6	0.9	0.03	0.09	0.09	-Cancer -Nasal
Dichloropropene, 1,3-	542-75-6	1.4	2.2	0.002	0.09	0.09	-Cancer -Gastrointestinal -Na- sal
Dichlorprop	120-36-5	370	5800	0.3	0.3	0.3	-None Specified
Dichlorvos	62-73-7	0.3	0.4	0.0006	0.00002	0.00002	-Cancer -Neurological
Dicofol [or Kelthane]	115-32-2	2.2	11	0.01	0.0008	0.0008	-Cancer -Adrenals
Dicrotophos [see Bidrin]							
Dieldrin	60-57-1	0.06	0.3	0.002	0.0001	0.0001	-Cancer -Liver
Diethyl phthalate	84-66-2	61000	*	86	5.9	5.9	-Body Weight
Diethylene glycol, monoethyl ether	111-90-0	130000	*	63	750	750	-Kidney
Diisopropyl methylphosphonate	1445-75-6	4500	49000	3.6	85	85	-None Specified
Dimethoate	60-51-5	13	170	0.006	0.0004	0.0004	-Neurological
Dimethoxybenzidine, 3,3'-	119-90-4	69	330	0.2	NA	NA	-Cancer
Dimethrin	70-38-2	24000	440000	2500	1.3	1.3	-Liver
Dimethylaniline, 2,4-	95-68-1	0.5	1	0.0005	19	19	-Cancer -Blood -Spleen
Dimethylaniline, N,N-	121-69-7	55	380	0.1	12	12	-Spleen

		Direct	Exposure		Leachability Based	on	
a	GAG!!	au l					Target Organs/Sys-
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	tems or Effects#
Dimethylbenzidine, 3,3'-	119-93-7	0.1	0.6	0.001	NA	NA	-Cancer
Dimethylformamide, N,N-	68-12-2	1400	8600	3	210	210	-Gastrointestinal -Liver
Dimethylphenol, 2,4-	105-67-9	1300	18000	1.7	1.9	1.9	-Blood -Neurological
Dimethylphenol, 2,6-	576-26-1	34	370	0.04	5.2	5.2	-Kidney -Liver -Spleen
Dimethylphenol, 3,4-	95-65-8	71	1000	0.06	3.4	3.4	-Kidney -Liver -Spleen
Dimethylphthalate	131-11-3	690000	*	380	7.8	7.8	-Kidney
Dinitrobenzene, 1,2- (o)	528-29-0	23	240	0.01	0.2	0.2	-Spleen
Dinitrobenzene, 1,3- (m)	99-65-0	5.8	64	0.004	0.4	0.4	-Spleen
Dinitrobenzene, 1,4- (p)	100-25-4	35	890	0.04	0.4	0.4	-Spleen
Dinitro-o-cresol, 4,6-	534-52-1	8.4	180	0.4	NA	NA	-Metabolic Disorders
Dinitrophenol, 2,4-	51-28-5	110	1200	0.06	0.01	0.01	-Eye
Dinitrotoluene, 2,4-	121-14-2	1.2	4.3	0.0004	0.07	0.07	-Cancer -Liver -Neu- rological
Dinitrotoluene, 2,6-	606-20-2	1.2	3.8	0.0004	0.005	0.005	-Cancer -Blood -Kid- ney -Neurological
Di-n-octylphthalate	117-84-0	1700	39000	480000	NA	NA	-Kidney -Liver
Dinoseb	88-85-7	65	840	0.03	0.03	0.03	-Developmental
Dioxane, 1,4-	123-91-1	23	38	0.01	0.5	0.5	-Cancer
Dioxins, as total 2,3,7,8- TCDD equivalents (e)	1746-01-6	7E-6	3E-5	0.003	6E-7	6E-7	-Cancer
Diphenamid	957-51-7	2300	41000	2.6	20	20	-Liver
Diphenyl [see Biphenyl, 1,1-]							
Diphenylamine, N,N-	122-39-4	2000	40000	14	NA	NA	-Kidney -Liver
Diphenylhydrazine, 1,2-	122-66-7	1.1	4.8	0.002	0.007	0.007	-Cancer
Diquat	85-00-7	190	4300	800	60	60	-Eye
Disulfoton	298-04-4	3.3	66	0.09	0.1	0.1	-Neurological
Diuron	330-54-1	150	2300	0.3	0.2	0.2	-Blood
EDB [see Dibromoethane, 1,2-]							
EDC [see Dichloroethane, 1,2-]							
Endosulfan (alpha+beta+sulfate)	115-29-7	450	7600	3.8	0.005	0.0008	-Cardiovascular -Kid- ney
Endothall	145-73-3	1800	44000	0.4	0.4	0.4	-Gastrointestinal
Endrin	72-20-8	25	510	1	0.001	0.001	-Liver
EPEG [see Ethylphthalyl ethylglycolate]							
Epichlorohydrin	106-89-8	14	80	0.03	1.1	1.1	-Cancer -Kidney -Na- sal
EPN [see Ethyl p-nitrophenyl phenylphosphorothioate]							
EPTC [see Ethyl dipropylthiocarbamate, S-]							
Ethanol	64-17-5	*	*	40	NA	NA	-Developmental
Ethion	563-12-2	42	920	1.7	0.003	0.003	-Neurological
Ethoprop	13194-48-4	7.4	120	0.005	0.002	0.002	-Neurological
Ethoxyethanol acetate, 2-	111-15-9	14000	130000	8.8	8.4	8.4	-Developmental
Ethoxyethanol, 2-	110-80-5	10000	72000	13	NA	NA	-Reproductive
Ethyl acetate	141-78-6	9100	53000	26	26	26	-Body Weight
Ethyl acrylate	140-88-5	2	3	0.002	0.6	0.6	-Cancer
Ethyl chloride [or Chloroethane]	75-00-3	3.9	5.4	0.06	NA	NA	-Cancer -Developmen- tal
Ethyl dipropylthiocarbam- ate, S- [or EPTC]	759-94-4	1400	14000	11	15	15	-Cardiovascular
Ethyl ether	60-29-7	260	1400	5	850	850	-Body Weight
Ethyl methacrylate	97-63-2	630	3500	3.5	NA	NA	-Kidney
Ethyl p-nitrophenyl phenylphosphorothioate [or EPN]	2104-64-5	0.8	18	0.02	0.003	0.003	-Neurological
Ethylbenzene	100-41-4	1500	9200	0.6	12	12	-Developmental -Kid- ney -Liver
Ethylene diamine	107-15-3	1100	11000	0.6	3.2	3.2	-Blood -Cardiovascu- lar

			Exposure		Leachability Based	on		
Contaminants	CAS#						Target Organs/Sys-	
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	or Effects#	
Ethylene glycol	107-21-1	110000	*	56	65	65	-Kidney	
Ethylene oxide	75-21-8	0.3	0.4	0.0002	20	20	-Cancer	
Ethylene thiourea [or ETU]	96-45-7	7	57	0.001	5.6	5.6	-Cancer -Thyroid	
Ethylphthalyl ethylglycolate [or EPEG]	84-72-0	260000	*	1200	NA	NA	-Kidney	
Ethyltoluene, o-	622-96-8	320	1900	8.1	NA	NA	-Body Weight -Liver	
Ethyltoluene, p-	611-14-3	330	1900	8.1	NA	NA	-Body Weight -Liver	
ETU [see Ethylene thio- urea]								
Fenamiphos	22224-92-6	19	340	0.02	0.003	0.003	-Neurological	
Fensulfothion	115-90-2	19	310	0.01	0.004	0.004	-Neurological	
Fenvalerate [see Pydrin]								
Fluometuron	2164-17-2	980	16000	0.9	1.8	1.8	-None Specified	
Fluoranthene	206-44-0	3200	59000	1200	1.3	1.3	-Blood -Kidney -Liver	
Fluorene	86-73-7	2600	33000	160	17	17	-Blood	
Fluoride	7782-41-4	840**	130000	6000	30000	15000	-Teeth mottling	
Fluoridone	59756-60-4	7000	180000	2500	460	460	-Kidney -Reproductive	
Fonofos	944-22-9	140	2100	0.4	0.003	0.003	-Liver -Neurological	
Formaldehyde	50-00-0	23	31	2.4	0.4	0.4	-Cancer -Gastrointestinal	
Furan	110-00-9	4.8	26	0.09	NA	NA	-Liver	
Furfural	98-01-1	190	2400	0.09	2.7	2.7	-Liver -Nasal	
Glycidaldehyde	765-34-4	15	120	0.01	NA	NA	-Adrenals -Blood -Kid- ney	
Glyphosate [or Roundup]	1071-83-6	8800	220000	3.3	0.5	0.5	-Kidney	
Guthion [or Methyl azinphos]	86-50-0	120	2400	0.2	0.0002	0.0002	-Neurological	
Heptachlor	76-44-8	0.2	1	23	0.01	0.01	-Cancer -Liver	
Heptachlor epoxide	1024-57-3	0.1	0.5	0.6	0.0001	0.0001	-Cancer -Liver	
Hexachloro-1,3-butadiene	87-68-3	6.2	13	1	110	110	-Cancer -Kidney	
Hexachlorobenzene	118-74-1	0.4	1.2	2.2	0.0006	0.0006	-Cancer -Liver	
Hexachlorocyclohexane, al- pha- [or BHC, alpha-]	319-84-6	0.1	0.6	0.0003	0.0003	0.0003	-Cancer	
Hexachlorocyclohexane, beta- [BHC, beta-]	319-85-7	0.5	2.4	0.001	0.003	0.003	-Cancer	
Hexachlorocyclohexane, delta- [or BHC, delta-]	319-86-8	24	490	0.2	NA	NA	-Kidney -Liver	
Hexachlorocyclohexane, gamma- [or Lindane or BHC, gamma-]	58-89-9	0.7	2.5	0.009	0.003	0.003	-Cancer -Kidney -Liver	
Hexachlorocyclopentadiene	77-47-4	9.5	50	400	24	24	-Gastrointestinal	
Hexachloroethane	67-72-1	38	87	0.2	0.2	0.2	-Cancer -Kidney	
Hexachlorophene	70-30-4	26	670	53	26	26	-Neurological	
Hexahydro-1,3,5-trinitro- 1,3,5- triazine [or RDX]	121-82-4	7.7	28	0.002	1.3	1.3	-Cancer -Reproductive	
Hexane, n-	110-54-3	680	3900	2.1	1200	1200	-Neurological	
Hexanone, 2- [or Methyl butyl ketone]	591-78-6	24	130	1.4	NA	NA	-None Specified	
Hexazinone	51235-04-2	2300	32000	1.1	120	120	-Body Weight	
Hydroquinone	123-31-9	2600	35000	1.4	0.02	0.02	-Blood	
Indeno(1,2,3-cd)pyrene	193-39-5	##	##	6.6	NA	NA	-Cancer	
Iron	7439-89-6	53000	*	***	***	***	-Gastrointestinal	
Isobutyl alcohol	78-83-1	6400	42000	8.9	200	200	-Neurological	
Isophorone	78-59-1	540	1200	0.2	3.8	3.8	-Cancer -None Speci- fied	
Isopropyl benzene [see Cumene]								
Isopropyl toluene [see p-Cymene]								
Karate [see Cyhalothrin, lambda]								
Kelthane [see Dicofol]								
Lead (d)	7439-92-1	400	1400	***	(k)	***	-Neurological	
Limonene	138-86-3	640	3600	42	NA	NA	-Kidney -Liver	

		Direct Exposure		Leachability Based on			
Contaminanto	CAS#		T				Target Organs/Sys-
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	or Effects#
Lindane [see Hexachlorocyclohexane, gamma-]							
Linuron	330-55-2	160	3100	0.04	1.4	1.4	-Blood
Lithium	7439-93-2	1700	44000	***	NA	NA	-None Specified
Malathion	121-75-5	1500	24000	4.2	0.003	0.003	-Neurological
Maleic anhydride	108-31-6	3200	24000	2.8	NA	NA	-Kidney
Maleic hydrazide	123-33-1	1000	5400	16	3.4	3.4	-Kidney
Malonitrile	109-77-3	1.2	13	0.0006	NA	NA	-Liver -Spleen
Maneb	12427-38-2	410	8400	2.9	0.5	0.5	-Thyroid
Manganese MCPA [see Methyl-4-chlorophenoxy acetic acid, 2-]	7439-96-5	3500	43000		NA	NA	-Neurological
MCPP [see Propionic acid, 2-(2-methyl-4- chlorophenoxy)]							
Mercury (c)	7439-97-6	3	17	2.1	0.01	0.03	-Neurological
Mercury, methyl- [see Methylmercury]							
Merphos	150-50-5	2.5	52	0.5	NA	NA	-Neurological
Merphos oxide	78-48-8	2.5	56	0.3	0.3	0.3	-Neurological
Methacrylonitrile	126-98-7	1	5.9	0.003	NA	NA	-Liver
Methamidophos	10265-92-6	3.1	36	0.001	0	0	-Neurological
Methanol	67-56-1	13000	90000	14	180	180	-Developmental -Eye -Neurological
Methidathion	950-37-8	68	950	0.003	0.0001	0.0001	-Liver
Methomyl	16752-77-5	38	200	1.2	0.007	0.007	-Kidney -Spleen
Methoxy-5-nitroaniline, 2-	99-59-2	19	71	0.006	NA	NA	-Cancer
Methoxychlor	72-43-5	420	8800	160	0.1	0.1	-Developmental -Re- productive
Methyl acetate	79-20-9	6800	38000	16	NA	NA	-Liver
Methyl acrylate	96-33-3	260	1500	0.9	NA	NA	-None Specified
Methyl azinphos [see Guthion]							
Methyl bromide [see Bromomethane]							
Methyl butyl ketone [see Hexanone, 2-]							
Methyl chloride [or Chloromethane]	74-87-3	4	5.7	0.01	2.3	2.3	-Cancer -Neurological
Methyl chloroform [see Trichloroethane, 1,1,1-]							
Methyl ethyl ketone [or Butanone, 2-]	78-93-3	16000	110000	17	490	490	-Developmental
Methyl isobutyl ketone [or MIBK]	108-10-1	4300	44000	2.6	110	110	-Kidney -Liver
Methyl methacrylate Methyl parathion [or Parathion, methyl]	80-62-6 298-00-0	1900	10000 370	0.1	0.0003	0.0003	-Nasal -Blood -Neurological
Methyl styrene (mixed)	25013-15-4	120	770	0.8	NA	NA	-Nasal
Methyl styrene, alpha	98-83-9	1500	10000	11	NA NA	NA	-Kidney -Liver
Methyl tert-butyl ether [or MTBE]	1634-04-4	4400	24000	0.09	150	150	-Eye -Kidney -Liver
Methyl-4-chlorophenoxy acetic acid, 2- [or MCPA]	94-74-6	35	500	0.02	0.4	0.4	-Kidney -Liver
Methylaniline, 2-	95-53-4	2.6	6.4	0.0009	0.2	0.2	-Cancer
Methylene chloroaniline), 4,4-	101-14-4	6.4	23	0.001	NA	NA	-Cancer -Liver -Blad- der
Methylene bromide	74-95-3	96	550	0.3	NA	NA	-Blood
Methylene chloride	75-09-2	17	26	0.02	7.3	7.3	-Cancer -Liver
Methylene diphenyl diisocyanate	101-68-8	400	2100	NA	NA	NA	-Nasal
Methylmercury [or Mercury, methyl]	22967-92-6	1.1	6.1	0.002	NA	NA	-Neurological
Methylnaphthalene, 1-	90-12-0	200	1800	3.1	10	10	-Nasal
Methylnaphthalene, 2-	91-57-6	210	2100	8.5	9.1	9.1	-Nasal

		Direct Exposure			Leachability Based on		
Contaminant.	CACH						Target Organs/Sys-
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	or Effects#
Methylphenol, 2- [or Cresol, o-]	95-48-7	2900	31000	0.3	1.9	1.9	-Neurological
Methylphenol, 3- [or Cresol, m-]	108-39-4	2900	33000	0.3	3.3	3.3	-Neurological
Methylphenol, 4- [or Cresol, p-]	106-44-5	300	3400	0.03	0.5	0.5	-Neurological -Respiratory
Metolachlor	51218-45-2	12000	200000	1.2	0.01	0.01	-Body Weight
Metribuzin	21087-64-9	54	290	2.2	0.8	0.8	-Kidney -Liver
Metsulfuron, methyl [see Ally]							
Mevinphos MIBK [see Methyl isobutyl	7786-34-7	18	270	0.01	0.0003	0.0003	-Neurological
ketone]							
Molinate	2212-67-1	120	1300	0.1	0.1	0.1	-Reproductive
Molybdenum	7439-98-7	440	11000	***	NA	NA	-Gout
MTBE [see Methyl tert- butyl ether]							
Naled	300-76-5	150	2400	0.1	0.0002	0.0002	-Neurological
Naphthalene	91-20-3	55	300	1.2	2.2	2.2	-Nasal
Nickel (b,c)	7440-02-0	340**	35000	130	(k)	11	-Body Weight
Nitrate	14797-55-8	140000	*	***	NA	NA	-Blood
Nitrite	14797-65-0	8700	220000	***	NA	NA	-Blood
Nitroaniline, m-	99-09-2	21	130	0.01	NA	NA	-Cancer -Blood
Nitroaniline, o-	88-74-4	24	130	0.1	NA	NA	-Blood
Nitroaniline, p-	100-01-6	17	96	0.008	5.9	5.9	-Cancer -Blood
Nitrobenzene	98-95-3	18	140	0.02	0.6	0.6	-Adrenals -Blood -Kid- ney -Liver
Nitroglycerin	55-63-0	27	54	0.03	NA	NA	Cancer -Cardiovascu- lar
Nitrophenol, 4-	100-02-7	560	7900	0.3	0.3	0.3	-None Specified
Nitroso-di-ethylamine, N-	55-18-5	0.003	0.005	0.000001	0.00003	0.00003	-Cancer
Nitroso-dimethylamine, N-	62-75-9	0.009	0.02	0.000003	0.01	0.01	-Cancer
Nitroso-di-n-butylamine, N-	924-16-3	0.05	0.08	0.00009	0.0005	0.0005	-Cancer
Nitroso-di-n- propylamine, N-	621-64-7	0.08	0.2	0.00005	0.005	0.005	-Cancer
Nitroso-diphenylamine, N-	86-30-6	180	730	0.4	0.3	0.3	-Cancer
Nitroso-N- methylethylamine, N-	10595-95-6	0.02	0.04	0.000006	0.0002	0.0002	-Cancer
Nitrotoluene, m-	99-08-1	640	4700	1.4	3.6	3.6	-Spleen
Nitrotoluene, o-	88-72-2	400	3300	0.9	7.3	7.3	-Spleen
Nitrotoluene, p-	99-99-0	750	12000	0.9	7.3	7.3	-Spleen
Nonylphenol	25154-52-3	100	2200	20	14	3.4	-Kidney
Octamethylpyro- phosphoramide	152-16-9	130	1600	0.06	NA	NA	-Neurological
Oxamyl	23135-22-0	1700	22000	0.9	0.04	0.04	-Body Weight
Paraquat	1910-42-5	340	5500	16	230	230	-Respiratory
Parathion	56-38-2	500	11000	1	0.01	0.01	-Neurological
Parathion, methyl [see Methyl parathion]							
PCBs [or Aroclor mixture]	1336-36-3	0.5	2.6	17	0.002	0.002	-Cancer -Immunolog- ical
PCE [see Tetrachloroethene]							
Pebulate	1114-71-2	2000	17000	8.5	7.4	7.4	-Blood
Pendimethalin	40487-42-1	3200	58000	28	1	1	-Liver
Pentachlorobenzene	608-93-5	45	480	3.9	1.2	1.2	-Kidney -Liver
Pentachloronitrobenzene	82-68-8	3.3	12	0.2	0.03	0.03	-Cancer -Liver
Pentachlorophenol	87-86-5	7.2	28	0.03	0.2	0.2	-Cancer -Kidney -Liver
Permethrin	52645-53-1	4200	96000	2500	0.007	0.007	-Liver
Phenanthrene	85-01-8	2200	36000	250	NA	NA	-Kidney
Phenmedipham [or Betanal]	13684-63-4	21000	450000	150	18	18	-None Specified
Phenol	108-95-2	500**	220000	0.05	0.03	0.03	-Developmental

	Direct Exposure			Leachability Based on			
Contaminants	CAS#						Target Organs/Sys- tems
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	or Effects#
Phenylenediamine, m-	108-45-2	360	4000	0.2	NA	NA	-Liver
Phenylenediamine, o-	95-54-5	17	54	0.004	NA	NA	-Cancer
Phenylenediamine, p-	106-50-3	12000	160000	6.2	NA	NA	-Whole Body
Phenylphenol, 2-	90-43-7	490	2100	0.4	0.8	0.8	-Cancer
Phorate	298-02-2	16	320	0.3	0.001	0.001	-Neurological
Phosmet	732-11-6	1600	33000	5	0.004	0.004	-Liver -Neurological
Phthalic acid, p-	100-21-0	8000	45000	110	NA	NA	-Bladder
Phthalic anhydride	85-44-9	11000	63000	76	NA	NA	-Kidney -Nasal -Res- piratory
Polychlorinated dibenzo-p- dioxins [see Dioxins]							
Prometon	1610-18-0	1200	23000	2.4	14	14	-None Specified
Prometryn	7287-19-6	320	6100	0.7	0.5	0.5	-Bone Marrow -Kid- ney -Liver
Propachlor	1918-16-7	990	17000	1.1	0.1	0.1	-Liver
Propanil	709-98-8	390	6700	0.4	0.2	0.2	-Spleen
Propazine	139-40-2	1600	28000	0.2	2.7	2.7	-Body Weight
Propionic acid, 2-(2- methyl-4-chlorophenoxy) [or MCPP]	93-65-2	64	800	0.03	NA	NA	-Kidney
Propoxur [see Baygon]							
Propylbenzene, n-	103-65-1	340	1900	12	NA	NA	
Propylene glycol	57-55-6	*	*	560	140	140	-Blood -Bone Marrow
Propylene glycol monomethyl ether	107-98-2	38000	390000	20	NA	NA	-Kidney -Liver -Neu- rological
Propylene oxide	75-56-9	3.1	9.3	0.0006	NA	NA	-Cancer -Nasal -Res- piratory
Pydrin [or Fenvalerate]	51630-58-1	2100	46000	70	0.0001	0.0001	-Neurological
Pyrene	129-00-0	2400	45000	880	1.3	1.3	-Kidney
Pyridine	110-86-1	20	130	0.03	5.4	5.4	-Liver
Quinoline	91-22-5	0.3	1.3	0.0009	NA	NA	-Cancer
RDX [see Hexahydro-1,3,5-trinitro-1,3,5-triazine]							
Resmethrin	10453-86-8	2500	56000	1200	0.01	0.01	-Reproductive
Ronnel	299-84-3	4200	88000	1300	0.2	0.2	-Liver
Roundup [see Glyphosate]							
Selenium (b,c)	7782-49-2	440	11000	5.2	0.5	7.4	-Hair Loss -Neurolog- ical -Skin
Sevin [see Carbaryl]							
Silver (b)	7440-22-4	410	8200	17	0.01	0.06	-Skin
Silvex [see Trichlorophenoxy propionic acid]							
Simazine	122-34-9	7.8	35	0.08	0.1	0.1	-Cancer -Blood
Strontium	7440-24-6	52000	*	***	NA	NA	-Bone
Strychnine	57-24-9	23	380	0.02	0.3	0.3	-Mortality
Styrene	100-42-5	3600	23000	3.6	16	16	-Blood -Liver -Neuro- logical
TCDD, 2,3,7,8- [see Dioxins, as total 2,3,7,8-TCDD equivalents]							
TCE [see Trichloroethene]							
Temik [see Aldicarb]				1			
Terbacil	5902-51-2	920	14000	0.5	14	14	-Liver -Thyroid
Terbufos	13071-79-9	1.9	29	0.02	0.001	0.001	-Neurological
Terbutryn	886-50-0	88	2200	0.2	0.09	0.09	-Blood
Tetrachlorobenzene, 1,2,4,5-	95-94-3	12	100	0.5	0.4	0.4	-Kidney
Tetrachloroethane, 1,1,1,2-	630-20-6	2.9	4.3	0.01	NA	NA	-Cancer -Kidney -Liver
Tetrachloroethane, 1,1,2,2-	79-34-5	0.7	1.2	0.001	0.08	0.08	-Cancer -Liver
Tetrachloroethene [or PCE]	127-18-4	8.8	18	0.03	0.1	0.1	-Cancer -Liver
Tetrachlorophenol, 2,3,4,6-	58-90-2	2100	30000	3.2	0.07	0.07	Liver
Tetraethyl dithiopyrophosphate	3689-24-5	35	510	0.1	0.0004	0.0004	-Bone Marrow -Neu- rological

	Direct Exposure		Leachability Based on				
					T		Target Organs/Sys-
Contaminants	CAS#	Residential	Commercial / Industrial	Groundwater	Fresh Surface Water	Marine Surface Water	tems or Effects#
Thallium	7440-28-0	6.1	150	2.8	9	9	-Hair Loss -Liver
Thiobencarb	28249-77-6	810	16000	2.9	NA	NA	-Kidney
Thiram	137-26-8	400	7700	1.1	0.005	0.005	-Neurological
Tin	7440-31-5	47000	880000	***	NA	NA	-Kidney -Liver
Toluene	108-88-3	7500	60000	0.5	5.6	5.6	-Kidney -Liver -Neu- rological
Toluene diisocyanate, 2,4/ 2,6-mixture	26471-62-5	1.3	15	NA	NA	NA	-Respiratory
Toluidine, p-	106-49-0	2.2	4.5	0.0009	NA	NA	-Cancer
Toxaphene	8001-35-2	0.9	4.5	31	0.002	0.002	-Cancer -Developmen- tal
Triallate	2303-17-5	980	16000	8.4	6	6	-Liver -Spleen
Tributyltin oxide	56-35-9	25	570	7.6	0.2	0.2	-Immunological
Trichloro-1,2,2- trifluoroethane, 1,1,2- [or CFC 113]	76-13-1	18000	96000	11000	NA	NA	-Neurological
Trichloroacetic acid	76-03-9	770	8800	0.04	400	400	-None Specified
Trichlorobenzene, 1,2,3-	87-61-6	650	8200	4.6	5.6	5.6	-Adrenals
Trichlorobenzene, 1,2,4-	120-82-1	660	8500	5.3	1.7	1.7	-Adrenals
Trichlorobenzene, 1,3,5-	108-70-3	260	2300	16	NA	NA	-None Specified
Trichloroethane, 1,1,1- [or Methyl chloroform]	71-55-6	730	3900	1.9	2.6	2.6	-None Specified
Trichloroethane, 1,1,2-	79-00-5	1.4	2	0.03	0.09	0.09	-Cancer -Liver
Trichloroethene [or TCE]	79-01-6	6.4	9.3	0.03	0.9	0.9	-Cancer -None Speci- fied
Trichlorofluoromethane	75-69-4	270	1500	33	NA	NA	-Cardiovascular -Kid- ney -Respiratory
Trichlorophenol, 2,4,5-	95-95-4	7700	130000	0.07	1.5	1.5	-Kidney -Liver
Trichlorophenol, 2,4,6-	88-06-2	70	230	0.06	0.1	0.1	-Cancer
Trichlorophenoxy acetic acid, 2,4,5-	93-76-5	690	9500	0.4	0.8	0.8	-Kidney
Trichlorophenoxy propionic acid, 2, (2,4,5-) [or Silvex]	93-72-1	660	14000	5.4	NA	NA	-Liver
Trichloropropane, 1,1,2-	598-77-6	76	460	0.3	NA	NA	-Kidney -Liver -Thy- roid
Trichloropropane, 1,2,3-	96-18-4	0.06	0.1	0.0001	0.001	0.001	-Cancer -Kidney -Liver
Trichloropropene, 1,2,3-	96-19-5	18	98	0.4	NA	NA	-Eye
Triethylamine	121-44-8	41	270	NA	NA	NA	-Nasal
Trifluralin	1582-09-8	92	280	3.6	0.2	0.2	-Cancer -Blood -Liver
Trimethyl phosphate	512-56-1	19	57	0.004	NA	NA	-Cancer
Trimethylbenzene, 1,2,3-	526-73-8	18	96	0.3	NA	NA	-None Specified
Trimethylbenzene, 1,2,4-	95-63-6	18	95	0.3	7.2	7.2	-None Specified
Trimethylbenzene, 1,3,5-	108-67-8	15	80	0.3	6.7	6.7	-None Specified
Trinitrobenzene, 1,3,5-	99-35-4	2000	26000	1	0.09	0.09	-Blood -Spleen
Trinitrophenyl- methylnitramine	479-45-8	790	15000	1.4	NA NA	NA NA	-Kidney -Liver -Spleen
Trinitrotoluene, 2,4,6-	118-96-7	28	97	0.006	0.3	0.3	-Cancer -Liver
Trithion [see Carbophenothion]	110-30-7	20	31	0.000	0.5	0.5	-Cancer -Liver
TRPH	NOCAS	460	2700	340	340	340	-Multiple Endpoints Mixed Contaminants
Uranium, soluble salts	7440-61-1	110	820	***	NA	NA	-Kidney
Vanadium (b)	7440-61-1	67**	10000	980	NA	NA	-Hair Loss
Vernam (b)	1929-77-7	51	510	0.1	0.2	0.2	-Body Weight
Vinyl acetate	108-05-4	320	1700	0.1	3	3	-Kidney -Nasal
Vinyl acetate Vinyl chloride (i)	75-01-4	0.2	0.8	0.007	0.02	0.02	-Cancer -Liver
		130	700	-			-Cancer -Liver -Neurological
Xylenes, total	1330-20-7			0.2	3.9	3.9	
Zinc (b,c)	7440-66-6	26000	630000	***	(k)		-Blood
Zinc phosphide	1314-84-7	26	660		NA	NA 0.7	-Body Weight
Zineb	12122-67-7	4100	82000	19	0.7	0.7	-Thyroid

CTLs are expressed in units of mg/kg (ppm) on a dry weight basis and rounded to two significant figures if >1 and to one significant figure if <1.

- # = These default Target Organ(s)/Systems or Effects are those reported to occur at the doses used to derive the referenced dose. Non-default Target Organ(s)/Systems or Effects may be justified through a detailed toxicological analysis of the chemicals present at a specific site.
- * Contaminant is not a health concern for this exposure scenario.
- ** Direct exposure value based on acute toxicity considerations. This criterion is applicable in scenarios where children might be exposed to soils (e.g. residences, schools, playgrounds).
- *** Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.
- ## = Site concentrations for carcinogenic polycyclic aromatic hydrocarbons shall be converted to Benzo(a)pyrene equivalents before comparison with the appropriate direct exposure SCTL for Benzo(a)pyrene using the approach described in the DERM Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 24, of the Code of Miami-Dade County (September 2005).
- (a) = See discussion on the development of SCTLs for Ammonia in the DERM Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County (September 2005).
- (b) = Leachability values derived from USEPA Soil Screening Guidance (1996). These values were derived assuming soil pH 6.8. These leachability values are dependent upon both the metal concentration in soil and soil characteristics. Thus, if site-specific soil characteristics are different than the defaults, these leachability values may not apply. If this is the case, site-specific leachability values may be derived using methods such as TCLP or SPLP.
- (c) = Phytotoxicity must be considered.
- (d) = Residential direct exposure value from USEPA Revised Interim Soil Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12 (1994). The industrial direct exposure value was derived using methodologies set forth in USEPA "Recommendations of the Technical Review Workgroup for Lead for an Interim Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil', December 1996; and in 'Blood Lead Concentrations of U.S. Adult Females: Summary Statistics from Phases 1 and 2 of the NHANES III', March 2002.
- (e) = The SCTL for Dioxins, as total 2,3,7,8-TCDD equivalents should be compared to the total dioxin equivalents for chlorinated dioxin and dibenzofuran congeners using the approach described in the DERM Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County (September 2005).
- (f) = The common name BHC is a misnomer for hexachlorocyclohexane.
- (g) = Unless concentrations for both chromium III and VI are known, total chromium concentrations may be compared with direct exposures SCTLs for chromium VI.
- (h) = Residential chronic SCTL for cadmium shall be used as a not-to-exceed value because the residential chronic SCTL for cadmium is indistinguishable from the SCTL based on acute toxicity.
- (i) = Residential chronic SCTL for vinyl chloride calculated by adding prorated and non-prorated risks, as discussed in the DERM Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County (September 2005).
- (i) = 12789-03-6 or 57-74-9
- (k) = Hardness-dependent fresh surface water CTLs shall be calculated using the site-specific hardness prior to calculating the leachcability based upon fresh surface water CTLs or comparing the SPLP leachate concentrations.

None Specified = Target organ(s) not determined. NA = Not available.

- 3. For contaminants not listed in Section 24-44(2)(f)(v), CTLs shall be established as set forth in Section 24-44(2)(f)(i) and Section 24-44(2)(f)(ii). The CTLs calculated pursuant to Section 24-44(2)(f)(v)3. shall be provided in a technical report approved by the Director or the Director's designee.
- (g) All technical plans, reports, proposals, or studies shall be submitted by the party or parties responsible for SRAs in accordance with the written orders of the Director, or the Director's designee, or as set forth herein. The Director, or the Director's designee, shall review each technical plan, report, proposal, or study and approve, approve with modifications or disapprove the aforesaid in writing within sixty (60) calendar days from receipt of the submittal.

To facilitate a phased risk-based assessment process that is iterative and that tailors site rehabilitation actions to site-specific conditions, the party or parties responsible for SRAs may submit to the Department for approval a proposal to establish applicable exposure factors and a risk management approach based upon land use at the site pursuant to the requirements set forth in Section 24-44(2)(k)(ii) and Section 24-44(2)(l)(ii).

- (h) Site rehabilitation actions shall neither be, nor reasonably be expected to be, a source of pollution, as herein defined, or cause, or reasonably be expected to cause, a nuisance as defined in Section 24-5, Section 24-27 or Section 24-28.
- (i) Emergency response actions may be performed without prior approval from the Director, or the Director's designee, provided that these actions do not cause any adverse effects upon human health, public safety or the environment. The party

- or parties responsible for SRAs and performing the emergency response actions shall notify the Director, or the Director's designee, within 24 hours of the commencement of any such emergency response actions.
- (j) Point of compliance, notification, source removal, and assessment procedures shall be as follows:
 - (i) The sampling points to determine compliance with Section 24-44(2) shall be as set forth in Section 24-44.1 herein. However, contamination may exist beyond the property boundary while clean-up, including natural attenuation in conjunction with appropriate monitoring, is proceeding.
 - (ii) When contamination exists beyond the property boundary of the site from which SRAs have been initiated the party or parties responsible for SRAs shall commence notification in accordance with the following:
 - 1. Laboratory analytical results, which comply with appropriate quality assurance protocols pursuant to Chapter 62-160, F.A.C., that document the off-site contamination, shall be submitted to the Department no later than ten (10) calendar days from the date that the laboratory analyses are completed. A site sketch shall be submitted along with the laboratory analytical data which indicates the locations where the samples were obtained that resulted in the confirmation of the contamination.
 - 2. The property owners, residents, and tenants of any property onto or into which the contamination extends shall be notified within sixty (60) calendar

days of the approval of the site assessment report. Notification shall include, but not be limited to, the following type of information: the type of contaminant and site remedy selected, a description of the location of the subject site, the name and address of the party or parties responsible for SRAs, and the name of a Department contact. Persons receiving notice shall have thirty (30) calendar days upon receipt of the notice to comment on the assessment and the site remedy selected. Nothing herein shall preclude any persons from initiating a civil action as a result of said contamination.

(iii) Prior to site closure as set forth in Section 24-44(2)(k), source removal of free product and soil saturated with contaminants or free product is required, unless demonstrated through a feasibility study approved by the Director, or the Director's designee, that the source removal is neither cost effective nor technically feasible. Source removal of free product from a new discharge shall be initiated as soon as possible but, in any event, no later than seven (7) calendar days after the discovery of free product. Source removal of free product from a previous discharge shall be initiated in accordance with the written orders of the Director, or the Director's designee, or the timeframes set forth in a source removal plan approved by the Director or the Director's designee.

> Source removal of contaminated soils and saturated soils by excavation may be implemented at any time upon prior written notification by the party or parties responsible for SRAs to the Director or the Director's designee. Such notification shall be

submitted to the Department at least three (3) calendar days prior to performing the source removal by excavation. Excavated soils shall be disposed of in accordance with 40 CFR 261, 40 CFR 761, Chapter 62-701, F.A.C., Chapter 62-713, F.A.C., and any other applicable federal, state and local regulations. A source removal report shall be submitted to the Department within sixty (60) calendar days of completion of the source removal. The source removal report shall describe all activities performed during the source removal including all analytical results as well as all disposal manifests.

When excavated soil is temporarily stored or stockpiled on site, the soil shall be secured in a manner which prevents human exposure to contaminated soil and prevents soil exposure to conditions which may facilitate the spread of contamination. Any excavation shall be secured to prevent accidental or intentional entry by the public and shall comply with applicable federal, state and local regulations. Contaminated soils may be stored on site for ninety (90) calendar days, unless otherwise ordered by the Director or the Director's designee. Prior to the expiration of the ninety (90) calendar day period, the soils shall be disposed of in accordance with this section.

(iv) The site assessment report shall include, but not be limited to: an investigation of the source(s) of contamination; an identification of the types of contaminants present; a determination of the extent and degree of contamination in all media which are impacted; a determination of the physical and environmental conditions and characteristics of the site and the underlying aquifer(s), if applicable; an identification of poten-

tial human and environmental receptors; and an evaluation of the current exposure and potential risk of exposure to those identified receptors. Groundwater sampling shall be performed less than two hundred seventy (270) calendar days before the submittal of the site assessment report.

The summary and conclusions of the approved site assessment report shall propose one of the following: no further action, no further action with conditions, monitoring only, risk assessment, or a remedial action plan.

- (k) Site closure, in the form of a no further action or a no further action with conditions, shall be approved by the Director, or the Director's designee, when the CTLs or alternative CTLs established pursuant to Section 24-44(2)(f)(iii) and the requirements set forth in this section have been achieved.
 - (i) A no further action proposal shall be approved by the Director, or the Director's designee, if such proposal demonstrates that human health, public safety and the environment are protected and the following criteria are met:
 - Concentrations of contaminants detected in soil shall not exceed the lower of the direct exposure residential soil CTLs or the applicable leachability-based soil CTLs set forth in Section 24-44(2)(f)(v)(ii).

The applicable leachability-based soil CTLs shall be the groundwater leachability-based CTLs. If surface waters are, or are reasonably expected to be, affected by contaminated groundwater, as demonstrated using monitoring well data, groundwater flow rate and direction, or fate and transport modeling, then the applicable

leachability-based soil CTLs shall be the lower of the ground-water or the applicable freshwater or marine surface water leachability-based CTLs.

Notwithstanding the foregoing provisions of Section 24-44(2)(k)(i)1, alternative residential direct exposure and leachability-based CTLs may be proposed in accordance with the procedures set forth in Section 24-44(2)(f)(iii)3. and Section 24-44(2)(f)(iii)4.

2. Concentrations of contaminants detected in groundwater shall not exceed the groundwater CTLs set forth in Section 24-44(2)(f)(v)1.

If surface waters are, or are reasonably expected to be, affected by contaminated groundwater, as demonstrated using monitoring well data, groundwater flow rate and direction, or fate and transport modeling, then the groundwater CTLs shall be the lower of the groundwater CTLs or the applicable freshwater or marine surface water CTLs set forth in Section 24-44(2)(f)(v)1.

- 3. Concentrations of contaminants detected in surface water shall not exceed the applicable freshwater or marine surface water CTLs set forth in Section 24-44(2)(f)(v)1.
 - Nothing herein shall supersede the rules governing Outstanding Florida Waters, aquatic preserves, areas of critical state concern and any other rules adopted pursuant to Section 403.061(34), Florida Statutes.
- 4. It is demonstrated that contaminants in sediments are not detected in concentrations, quantities, properties, levels or

accumulations which are, or are reasonably expected to be, injurious to human, plant, animal, fish and other aquatic life, or property. This demonstration may be based, as applicable, on the Threshold Effects Levels published in the FDEP's guideline "Approach to the Assessment of Sediment Quality in Florida Coastal Waters" (dated November 1994), site specific bioassays, a site-specific risk assessment developed in accor-Section dance with 44(2)(1)(ii), or a combination thereof.

- 5. If more than one contaminant is present or contamination is present in more than one (1) medium, the human healthbased CTLs shall be adjusted to achieve the following: for noncarcinogenic compounds affecting the same organ(s), the hazard index (sum of the hazard quotients) shall be one (1) or less; and for carcinogens, the cumulative lifetime excess cancer risk level (sum of the lifetime excess cancer risk levels for each carcinogenic contaminant) shall be 1.0E-06 or less.
- (ii) A no further action with conditions proposal shall be approved by the Director, or the Director's designee, provided the following: the property owner of the location elects to implement institutional and, if applicable, engineering controls; it is demonstrated, using site-specific data, modeling results, risk assessment studies, risk reduction techniques or a combination thereof, that human health, public safety and the environment are afforded protection equivalent to that provided in Sec-

tion 24-44(2)(f)(i) and Section 24-44(2)(f)(ii); and the following criteria are met:

- 1. For contaminants detected in soil, a proposal for alternative soil CTLs shall be submitted to the Department and shall achieve one of the following or a combination of the following:
 - a. Concentrations of contaminants detected in soil shall not exceed the lower of the industrial direct exposure soil CTLs set forth in Section 24-44(2)(f)(v)2. or the applicable leachability-based soil CTLs, set forth in Section 24-44(2)(f).

The applicable leachability-based soil CTLs shall be the groundwater leachability-based CTLs or alternative groundwater leachability-based CTLs derived in accordance with Section 24-44(2)(k)(ii)1c Section 44(2)(k)(ii)2. If surface waters are, or are reasonably expected to be, affected by contaminated groundwater, as demonstrated using monitoring well data, groundwater flow rate and direction, or fate and transport modeling, then the applicable leachabilitybased soil CTLs shall be the lower of the groundwater or the applicable freshwater or marine surface water leachability-based CTLs.

If a marine surface water is, or is reasonably expected to be, affected by contaminated groundwater, and no other property or fresh surface water bod-

ies are located between the source property boundary and the marine surface water body and the groundwater on-site is not utilized, then the applicable leachability-based soil CTLs shall be the marine surface water leachability-based soil CTLs.

Notwithstanding the foregoing provisions of Section 24-44(2)(k)(ii)1a, alternative industrial direct exposure and leachabilitybased CTLs may be proposed in accordance with the procedures set forth in Section 24-44(2)(f)(iii)3 and Section 24-44(2)(f)(iii)4. In addition, the applicable leachability-based CTLs may be exceeded if it is demonstrated using groundwater monitoring data supported, if required, by site-specific modeling, that contaminants will not leach into groundwater at concentrations which exceed the applicable groundwater CTLs. The groundwater monitoring data shall be compiled for a minimum period of one (1) year and shall include four (4) quarterly sampling events.

b. Concentrations of contaminants may exceed the soil CTLs if an engineering control, approved by the Director, or the Director's designee, in conjunction with the institutional control, is utilized to eliminate or control contaminant exposure and migration such that human health, public safety and the environment are

- afforded protection equivalent to that provided in Section 24-44(2)(f)(i) and Section 24-44(2)(f)(ii).
- c. Concentrations of contaminants detected in soil shall not exceed the alternative soil CTLs derived in accordance with Section 24-44(2)(f)(iii) and Section 24-44(2)(1)(ii).
- 2. For contamination detected in groundwater, a proposal for alternative groundwater CTLs shall be submitted to the Department and shall provide the following:
 - A complete evaluation of the current and projected use of the affected groundwater and documentation that the following conditions have been met:
 - (1) Source removal is completed as set forth in Section 24-44(2)(j)(iii).
 - (2) Groundwater contamination is not migrating away from a localized source.
 - Groundwater concentrations at the property boundary, as determined groundwater monitoring data supported, if required, by site-specific modeling, do not, and are not reasonably expected to, exceed the groundwater CTLs set forth in Section 24-44(2)(f)(v)1. The groundwater monitoring data shall be compiled for a minimum period of one

(1) year and shall include four (4) quarterly sampling events.

If surface waters are, or are reasonably expected to be, affected by contaminated groundwater, as demonstrated using monitoring well data, groundwater flow rate and direction, or fate and transport modeling, then the groundwater CTLs shall be the lower of the groundwater CTLs or the applicable freshwater or marine surface water CTLs set forth in Section 24-44(2)(f)(v)1. If a marine surface water is, or is reasonably expected to be, affected by contaminated groundwater, and no other property or fresh surface water bodies are located between the source property boundary and the marine surface water body and the groundwater on-site is not utilized, then the groundwater CTLs shall be the marine surface water CTLs.

b. If there is a receptor which may potentially be exposed to on-site groundwater and such exposure has not been eliminated by the implementation of institutional and, if applicable, engineering controls, then concentrations of contaminants detected groundwater shall not exthe alternative ceed groundwater CTLs derived in accordance with Section 24-44(2)(f)(iii) and Section 24-44 (2)(1)(ii).

- 3. Concentrations of contaminants detected in surface water shall not exceed the applicable freshwater or marine surface water CTLs set forth in Section 24-44(2)(f)(v)1.
 - Nothing herein shall supersede the rules governing Outstanding Florida Waters, aquatic preserves, areas of critical state concern and any other rules adopted pursuant to Section 403.061(34), Florida Statutes.
- It is demonstrated that contam-4. inants in sediments are not detected in concentrations, quantities, proportions, levels or accumulations which are, or are reasonably expected to be, injurious to human, plant, animal, fish and other aquatic life, or property. This demonstration may be based, as applicable, on the Threshold Effects Levels published in the FDEP's guideline "Approach to the Assessment of Sediment Quality in Florida Coastal Waters" (November 1994), site specific bioassays, a site-specific risk assessment developed in accordance with Section 24-44(2)(1)(ii), or a combination thereof.
- 5. If more than one (1) contaminant is present or contamination is present in more than one (1) media, the human health-based CTLs or alternative human health-based CTLs shall be adjusted to achieve the following: for non-carcinogenic compounds affecting the same organ(s), the hazard index (sum of the hazard quotients) shall be one (1) or less; and for carcinogens, the cumulative lifetime excess cancer risk level (sum of the lifetime excess cancer risk levels for each carcinogenic contaminant) shall be 1.0E-06 or less.

- 6. The property owner of the location at which site rehabilitation actions are being conducted elects to implement an institutional and, if applicable, engineering control to eliminate or control exposure of human and environmental receptors to contaminants. When an engineering control is used in conjunction with institutional controls, an engineering control plan shall be submitted to the Department. The engineering control plan shall provide details of the design and construction of the engineering control and shall demonstrate that the engineering control is effective, reliable and capable of being monitored and maintained.
 - The no further action with conditions proposal shall include a copy of the proposed institutional control, in a form prescribed by the Director, or the Director's designee, and approved by the Board of County Commissioners, with site-specific closure conditions. Upon written approval by the Director, or the Director's designee, of the institutional control and. if applicable, the engineering control plan, the institutional control shall be recorded in the public records of Miami-Dade County. A copy of the recorded instrument shall be submitted to the Department and the engineering control, if applicable, shall be implemented prior to approval of the no further action with conditions proposal.
 - Upon demonstration to the satisfaction of the Director, or the Director's designee, by the party or parties responsible for SRAs that institutional and, if applicable, engineering controls are

- no longer required because the conditions set forth in Section 24-44(2)(k)(i) have been achieved, the Director, or the Director's designee, shall release the institutional control.
- 7. An operating permit in accordance with Section 24-18 shall be required for all sites for which site rehabilitation actions have been completed in accordance with the provisions set forth in Section 24-44(2)(k)(ii). The Director, or the Director's designee, shall approve, deny, or approve with conditions, restrictions or limitations any application for an operating permit.
- (l) For sites which do not qualify for site closure in accordance with Section 24-44(2)(k), one (1) of the following, or a combination of the following, shall be submitted for approval by the Director, or the Director's designee, to achieve site closure pursuant to Section 24-44(2)(k): a monitoring only plan, a risk assessment report, or a remedial action plan.
 - i) The monitoring only plan:
 - The monitoring only plan for natural attenuation shall include, but shall not be limited to, an evaluation of the contaminant plume history, site conditions and aguifer chemical characteristics to demonstrate that the applicable CTLs will be attained in accordance with the approval by the Director, or the Director's designee, and that monitoring only is the most costeffective remedial approach. The monitoring period shall be a minimum of one (1) year, unless two (2) consecutive quarterly samplings have indicated that applicable CTLs have been met. The monitoring only plan shall also demonstrate that hu-

man health, public safety, and the environment will be protected. Upon completion of the approved monitoring, a proposal for a no further action, a no further action with conditions, an extension of the monitoring only plan, risk assessment, or a remedial action plan, in accordance with the requirements herein, shall be submitted to the Department.

- The monitoring only plan to verify that compliance with the approved remedial action as set forth in Section 24-44(2)(1)(iii) has been achieved shall be for a minimum of a one (1) year period and shall include four (4) quarterly sampling events. However, if contamination was only present in the unsaturated zone during the site assessment and remediation tasks, only one groundwater sampling event approved by the Director, or the Director's designee, shall be required. Upon completion of the approved monitoring, a proposal for a no further action, a no further action with conditions, an extension of the monitoring only plan, risk assessment, or a remedial action plan modification, in accordance with the requirements herein, shall be submitted to the Department for approval.
- (ii) The risk assessment shall include, but shall not be limited to, a human and environmental exposure assessment, toxicity assessment, cumulative risk characterization, and supporting documentation for the development of alternative CTLs. Alternative health-based CTLs shall be calculated using the risk equations set forth in the DERM Technical Report: "Development of Clean-up

Target Levels (CTLs) for Chapter 24 of the Code of Miami-Dade County, Florida" (dated September, 2005), and site-specific exposure scenarios and input parameters. Upon approval of the risk assessment, a proposal for a no further action, no further action with conditions, monitoring only plan for natural attenuation or remedial action, in accordance with the requirements herein, shall be submitted to the Department.

(iii) The remedial action plan shall include, but not be limited to, all supporting documentation for the remedial technique proposed to achieve CTLs or alternative CTLs, or to qualify for natural attenuation in all contaminated media. Groundwater sampling shall be performed less than two hundred seventy (270) calendar days before the submittal of the remedial action plan to the Department. Detailed technical documentation shall be provided for all elements of the proposed remedial process. Pilot testing may be required to support the design. A monitoring schedule shall be included to evaluate the performance of the clean-up. Within one hundred twenty (120) calendar days after the approval of the remedial action plan, the approved remedial action plan shall be implemented and record drawings of the operating remedial system shall be submitted. Upon achieving the CTLs or alternative CTLs, or qualifying for natural attenuation in all contaminated media, a monitoring only plan, prepared in accordance with the requirements set forth in Section 24-44(2)(1)(i), shall be submitted to the Department.

> If implementation of the approved remedial action plan does not achieve the CTLs or alternative CTLs, or does not qualify for natural attenuation in all contaminated media a

proposal for a monitoring only plan for natural attenuation, a risk assessment, or a remedial action plan modification, in accordance with the requirements herein, shall be submitted to the Department.

(m) All sampling and analyses shall be performed in accordance with Chapter 62-160, F.A.C., Quality Assurance. Reports submitted to the Department which contain analytical data shall include, at a minimum, the following: original laboratory reports which include all information required in Chapter 62-160.670, F.A.C.; copies of the completed chain of custody records; copies of the completed water sampling log forms; and results from screening tests or on-site analyses.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 06-34, §§ 1—8, 3-7-06; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-44.1. SRA Compliance Tests.

Sampling points to determine compliance with Section 24-44(2) shall be as follows:

- (1) Soil. Soil samples shall be collected from locations nearest to the point of entry of a contaminant or contaminants to the ground. Additional sampling points may be required if existing sampling points are determined to be inadequate to establish the extent and degree of contamination in the judgment of the Director or the Director's designee. Sampling point locations and the number of samples required shall be established in accordance with the requirements set forth in Section 24-44(2)(j)(iv).
- (2) Groundwater: Groundwater samples shall be collected from groundwater monitoring wells nearest to the point of entry of a contaminant or contaminants into the groundwater. Additional test wells may be required to be installed and maintained if existing sampling points are determined to be inadequate to establish the extent and degree of contamination in the judgment of the Director or the Director's designee. Sampling point loca-

tions and the number of samples required shall be established in accordance with the requirements set forth in Section 24-44(2)(j)(iv).

If surface waters are, or are reasonably expected to be, affected by contaminated groundwater, as demonstrated through groundwater monitoring well data, groundwater flow rate and direction, or fate and transport modeling data, groundwater samples shall be collected from groundwater monitoring wells as close to the groundwater/surface water interface as is physically possible.

- (3) Surface Water. Surface water samples shall be collected nearest to and downstream from the point of entry of a contaminant or contaminants into the surface water. Sampling point locations and the number of samples required shall be established in accordance with the requirements set forth in Section 24-44(2)(j)(iv).
- (4) Sediment. Sediment samples shall be collected nearest to and downstream from the point of entry of a contaminant or contaminants into the surface water. Sampling point locations and the number of samples required shall be established in accordance with the requirements set forth in Section 24-44(2)(j)(iv).

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-44.2. Compliance tests, sampling points and methods.

COMPLIANCE TESTS. Sampling points to determine compliance with Section 24-42, Section 24-42.1, Section 24-42.4, Section 24-42.5, Section 24-44.1 and Section 24-44.2, except for Section 24-44 shall be selected as follows:

(1) Effluents. For compliance with the effluent standards in Section 24-42(2) and the pretreatment standards in Section 24-42.4, the samples shall be taken at the point past which no further treatment is given by the facility to the waste or in the case of effluents subject to Federal Pretreatment Regulations, at a sampling point as

determined by the Director or the Director's designee in accordance with the Federal Pretreatment Regulations. An outfall line shall not be considered as further treatment. In facilities which have sand filter beds where the effluent percolates directly into the soil and no approved sampling points are provided, the samples will be taken before the sand filter and a five (5) percent overall reduction of the effluent sewage will be allowed.

- (2) Sampling stations may be required to be installed if reasonable access is not available, as determined by the Director or the Director's designee.
- (3) Surface water and tidal salt water. The sample for compliance with the water quality standards of Section 24-42(4) should normally be taken at a point at least fifty (50) feet from the point of discharge of the waste stream; where possible the samples should be taken upstream and downstream from the point of discharge.
- (4) Groundwater. For compliance with Section 24-42(4) samples shall be taken from wells nearest to and encircling the point of entry of a waste stream into the ground water table. Test wells may be required to be installed and maintained if existing sampling points are found to be inadequate in the judgment of the Director or the Director's designee.
- Methods. Determination of plant efficiency and percent removal of BOD and suspended solids shall be based on the average of three (3) eight-hour composite samples taken on three (3) consecutive days. At least one (1) peak flow period should be included in each eight-hour period. Composite sampling devices will be required. Determination of the effluent values as set forth in Section 24-42(2) will be based on individual, not composite, samples. Field testing, sample collection and preservation, and laboratory testing, including quality control procedures, shall be in accordance with methods approved by the Department or as published in the

sixteenth edition of Standard Methods for the Examination of Water and Wastewater or the following methods:

- (a) 40 CFR 136, 49 FR 43234, October 26, 1984.
- (b) 40 CFR 136, 40 FR 690, January 4, 1985.
- (c) EPA SW-846 Test Methods for Evaluating Solid Waste, November, 1986.
- (d) EPA-600/4-79-020 Methods for Chemical Analysis of Water and Wastes, March, 1979.
- (e) EPA Methods 502.1, 502.2, 503.1, 504, 505, 507, 508, 515, 524.2, Environmental Monitoring and Support Laboratory, September, 1986.
- (f) EPA-600/4-85/054 Method 531. (Ord. No. 04-214, \S 1, 5, 12-2-04; Ord. No. 08-55, \S 2, 5-6-08)

DIVISION 4. REGULATION OF UNDERGROUND STORAGE FACILITIES, LIQUID WASTE TRANSPORTERS, AND METAL RECYCLING FACILITIES

Sec. 24-45. Regulation of underground storage facilities.

- (1) Legislative intent. The intent and purpose of this section is to safeguard the public health, safety and welfare by regulating underground storage facilities.
- (2) Short title; applicability; construction. This section shall be known as the "Underground Storage Facilities Ordinance." The provisions of this section shall be effective in the incorporated and unincorporated areas of Miami-Dade County and shall be liberally construed to effect the purpose set forth herein.
- (3) Performance Standards For Underground Storage Facilities
 - (a) It shall be unlawful for any person to operate, maintain, or cause, permit allow, let or suffer the operation or maintenance of any underground storage facility installed prior to June 2, 1992 without a

- network of groundwater monitoring wells of design and location approved by the Director or the Director's designee.
- (b) Underground storage facilities installed prior to June 2, 1992 and located in the Northwest Wellfield protection area, the West Wellfield Interim protection area, the basic wellfield protection area of any public utility potable water supply well or within any property served or to be served by any source of potable water supply other than a public water supply shall include:
 - A secondary containment system consisting of double-walled tanks and double-walled piping, and
 - (ii) A continuous automatic leak detection system approved by the Director or the Director's designee which is capable of detecting a leak from any point in the underground storage facility by monitoring the piping sumps, dispenser liners, and the interstices between the following two components:
 - 1. the double walls of the tanks and,
 - 2. between the double walls of the piping.
- (c) It shall be unlawful for any person to install, modify, expand, replace, or permit, cause, allow, let or suffer the installation, modification, expansion or replacement of any underground storage facility installed after June 2, 1992 without complying with all of the following:
 - (i) Installation of a network of groundwater monitoring wells of design and location approved by the Director or the Director's designee prior to installation of said monitoring wells, and
 - (ii) Installation of a secondary containment system consisting of doublewalled tanks and double-walled piping, and

- (iii) Installation of a continuous automatic leak detection system approved by the Director or the Director's designee which is capable of detecting a leak from any point in the underground storage facility by monitoring the piping sumps, dispenser liners, and the interstices between the following two components:
 - 1. the double walls of the tanks and,
 - 2. between the double walls of the piping.
- (iv) Approval of plans by the Director or the Director's designee in accordance with the requirements of Section 24-15(6) of this Code.
- (d) Underground storage facilities installed prior to the effective date of this ordinance with flexible liner secondary containment systems approved by the Director or the Director's designee shall upgrade the existing systems to comply with the requirements set forth herein not later than December 31, 2009.
- (e) Underground storage facilities installed with modular, rigid, sealed, impervious hydrocarbon-resistant encasing systems approved by the Director or the Director's designee shall upgrade the existing systems to comply with the requirements set forth herein not later than December 31, 2009.
- (4) Operational Requirements
- (a) Release Detection.
 - (i) The owner or operator of the underground storage facility shall be responsible for monthly visual inspections of the groundwater for the purpose of detecting the presence of free product in each compliance monitoring well as required by Section 24-45(1) herein.
 - (ii) The owner or operator of the underground storage facility shall maintain a record of the results of the visual inspections in the form of an

- on-site inspection log. The monthly visual inspection record shall be made available to Department representatives for inspection upon request.
- (iii) In the event groundwater in the compliance monitoring wells of the underground storage facility is contaminated by free product, the owner or operator of the underground storage facility shall immediately implement the provisions of Section 24-45(5)(b) of this Code and, cease the monthly visual inspections of the monitoring wells, and shall, within thirty (30) days from the date of the detection of free product, implement an alternate method of release detection capable of detecting new releases pursuant to the requirements of Chapter 62-761, Florida Administrative Code. When an alternate method of release detection is implemented, the owner or operator of the underground storage facility shall maintain the approved network of monitoring wells, pursuant to the requirements of Section 24-45 of this Code, in a functional condition and make them accessible for periodic inspection by Department representatives upon request.
- (iv) The owner or operator of underground storage facilities operating with approved secondary containment systems shall perform monthly inspections of the continuous automatic leak detection system to verify the proper operation of the system. A record of the results of the monthly inspections shall be maintained on site and be made available to Department representatives for inspection upon request.
- (b) Operating Permits. Underground storage facilities with a capacity greater than one hundred and ten (110) gallons shall obtain an operating permit as required by Section 24-18(12) herein. A current and valid storage tank registration placard

- issued by the Florida Department of Environmental Protection is hereby determined to satisfy the requirement of obtaining an operating permit as set forth in Section 24-18(12) of this Code. It shall be unlawful for any person to operate, maintain or permit, cause, allow, let or suffer the operation or maintenance of any underground storage facility with a capacity greater than one hundred and ten (110) gallons without an operating permit issued in accordance with the requirements of this Chapter or current storage tank registration placard issued by the Florida Department of Environmental Protection.
- (c) It shall be unlawful for any person to operate, maintain or permit, cause, allow, let or suffer the operation or maintenance of any underground storage facility located within the Northwest Wellfield Protection Area or the West Wellfield Interim Protection Area, except for those underground storage facilities that were installed prior to November 15, 1983 and which are used exclusively for the retail sale of gasoline, gasohol, or diesel fuel.
- (5) Discharges From Underground Storage Facilities
 - In the event that a discharge of hazardous materials from an underground storage facility to the environment or into a secondary containment system has occurred or may have occurred, the Department shall require the operator or owner of the underground storage facility, or the owner of the real property upon which said underground storage facility is located, to immediately investigate and may require testing of the underground storage facility and the groundwater and soil in the area of the underground storage facility. The required investigation shall determine whether the underground storage facility has discharged or is discharging hazardous materials into the secondary containment system of the facility or into the environment outside of said facility.

- (b) Operators of underground storage facilities as well as any persons, individually or otherwise, having a legal, beneficial, or equitable interest in the underground storage facilities or in the real property upon which said underground storage facilities are located shall be jointly and severally liable and responsible for immediately accomplishing the following when the underground storage facility has discharged, is discharging or may be discharging any hazardous materials of any quantity whatsoever into the environment outside of said facility:
 - (i) Locating and determining the cause of the discharge.
 - (ii) Stopping and preventing any further discharges.
 - (iii) Implementing and completing the site rehabilitation actions for contaminants in accordance with Section 24-44 herein.
 - (iv) Notify the Department of such discharge within twenty-four (24) hours of any such discharge.
- (6) Removal or Abandonment of Underground Storage Facilities
 - Unmaintained underground storage facilities shall be removed from the ground and disposed of in accordance with state and local laws, rules, and regulations, or abandoned in place as set forth below within ninety (90) days of discovery by the owner or operator, discovery by Departrepresentatives of unmaintained underground storage facility, or notification of the owner or operator by the Director or the Director's designee, whichever occurs first. Prior to implementation of such removal or abandonment in place the owner or operator shall submit written notification of the proposed removal or abandonment in place to the Department on Department-approved forms. Subsequent to the written notification, the

- owner or operator shall notify the Department a minimum of two (2) working days prior to commencing such removal or abandonment activities.
- The owner or operator shall provide access to Department representatives to the underground storage facility, excavation, excavated soils, and exposed groundwater for the purpose of inspection. If the groundwater table in the excavation is not visible at the time of inspection, or if there is any evidence of ground pollution or water pollution, the Department may require from the owner or operator of the underground storage facility the installation of one or more groundwater monitoring wells or soil borings or both in the area of the excavation.
- It shall be unlawful for any person to (c) abandon in place or permit, cause, allow, let or suffer such abandonment in place of any underground storage facility without the prior written approval of the Director or the Director's designee The Director or the Director's designee shall issue his written approval only if the abandonment in place is necessary to protect human health, the environment or the structural integrity of adjacent buildings. A Tank Closure Assessment Report (TCAR) prepared in accordance with Florida Department of Environmental Protection reference standard entitled "Storage Tank System Closure Assessment Requirements", Revised April 1998, as same may be amended from time to time, shall be prepared and submitted to the Department within sixty (60) days of abandonment in place of any underground storage facility.
- (d) Abandonment in place of an underground storage facility shall mean:
 - installation and sampling of the monitoring wells and soil borings required for the TCAR,
 and

- (ii) emptying, inerting and cleaning the interior of the underground storage facility, and
- (iii) filling the underground storage facility with a non-shrinking, inert, solid, material approved by the Department.
- (7) Residential Tanks Underground storage facilities with total storage volumes less than 300 gallons located at single family residences shall be exempt from Sections 24-45(3) and (4) herein. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 05-196, §§ 3, 4, 11-3-05; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-46. Regulation of liquid waste transporters.

- (1) It shall be unlawful for any person to permit, cause, allow, let or suffer the transportation within Miami-Dade County of any liquid waste without having a valid liquid waste transporter operating permit issued by the Director or the Director's designee pursuant to Section 24-18.
- (2) The Director or the Director's designee shall approve, deny, or approve with conditions, limitations or restrictions any application for a liquid waste transporter operating permit. Violations of any permit condition, limitation or restriction shall constitute a violation of the provisions of this chapter. The Director or the Director's designee may suspend or revoke a liquid waste transporter operating permit for failure to comply with any of the provisions of this chapter. The criterion for issuance of the operating permit pursuant to this section is compliance with Chapter 24 of the Code of Miami-Dade County. In addition to the liquid waste transporter operating permit, the Director, or the Director's designee, shall issue numbered stickers which shall be visibly posted on each vehicle permitted to transport liquid waste.
- (3) All applications for permits issued pursuant to this section shall be on a form prescribed by the Director or the Director's designee and accompanied by a fee which shall be established by administrative order of the County Manager and approved by the Board of County Commissioners.

The permit fee payable hereunder shall be deposited in a separate county fund and shall be used exclusively by the Department to pay for the costs of environmental services to and environmental regulation of liquid waste transportation in Miami-Dade County, Florida.

- (4) All operating permits required by this chapter shall be in addition to any other permits, registrations or occupational licenses which may be required by federal, State or local law. The Director, or the Director's designee, in his or her discretion, may require conditions, limitations or restrictions as part of the operating permit if said conditions, limitations and restrictions are consistent with the requirements of this chapter.
- (5) Monthly reporting required. All liquid waste transporters shall submit on a monthly basis to the Director or the Director's designee, on a form prescribed by the Department all information required by any conditions, limitations or restrictions which are part of the liquid waste transporter's operating permit.
- (6) Immediate reporting required. Any liquid waste transporter who causes, permits, lets, allows, or suffers any liquid waste accident, liquid waste spill, or other liquid waste discharge anywhere within the boundaries of Miami-Dade County, shall immediately report the same to the Department.
- (7) It shall be unlawful for any liquid waste transporter to dump, dispose, throw, drain, run, leak or otherwise discharge, or to allow, cause, permit, let, or suffer to be dumped, disposed, thrown, drained, run, leaked or otherwise discharged any liquid waste or solid waste into a sanitary sewer, any type of manhole, storm sewer, catch basin, french drain, disposal well, soakage pit, solid waste transfer or disposal facility, recycling facility, waste oil facility or similar structure or on to or into the ground, or into any of the waters of this county, or at any other place in Miami-Dade County unless said place is a sewage treatment plant or industrial waste treatment plant or a resource recovery and management facility approved by the Director or the Director's designee to receive said liquid or solid wastes and unless the liquid waste transporter's operating permit authorizes said place for disposal.

- (8) No person shall utilize a liquid waste transporter unless the liquid waste transporter has a valid operating permit issued by the Director or the Director's designee.
- (9) The following activities shall be exempt from the provisions of this ordinance:
 - (a) The on site transportation of liquid waste to a place within the boundaries of a particular facility, location, property or site.
 - (b) The transportation of fully containerized and hermetically-sealed receptacles approved by the State of Florida Department of Transportation, provided said transportation does not commence or end in Miami-Dade County.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-47. Regulations for the operation of metal recycling facilities.

The intent and purpose of this section is to safeguard the public health, safety and welfare by setting minimum requirements and guidelines for the operation of metal recycling facilities.

- (1) Effective January 1, 1995, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any metal recycling facility unless the person has obtained the prior written approval of the Director or the Director's designee. The Director or the Director's or the Director's designee shall issue the Director's or the Director's designee's written approval only if:
 - (a) All shredder residue or prepared ferrous scrap which is placed on site shall be maintained on an impervious area, and
 - (b) All shredder residue is covered by a roof, or functional equivalent, sufficient to prevent stormwater from coming in contact with the shredder residue, or a stormwater management system approved by the Director or the Director's designee shall

- be in place to contain, properly treat, handle, and dispose of any stormwater coming in contact with the shredder residue, and
- (c) No more than three thousand (3,000) tons of shredder residue shall be maintained on the property at any given time, and
- (d) A performance bond in a form acceptable to the Director or the Director's designee is provided in an amount as determined by the Director or the Director's designee which shall not be less than the disposal cost of the largest quantity of shredder residue to be stored at the facility.
- (2) Effective January 1, 1996, all prepared ferrous scrap shall be maintained in an area which either:
 - (a) Is covered by a roof, or functional equivalent, sufficient to prevent stormwater from coming in contact with the shredder residue or prepared ferrous scrap, or
 - (b) Contains a stormwater management system approved by the Director or the Director's designee to contain, properly treat, handle, and dispose of any stormwater coming in contact with the shredder residue or prepared ferrous scrap.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

ARTICLE IV. NATURAL AND BIOLOGICAL ENVIRONMENTAL RESOURCES PERMITTING AND PROTECTION; REGULATION OF DRAINAGE SYSTEMS AND STORMWATER MANAGEMENT

DIVISION 1. WORK IN CANAL RIGHTS-OF WAY, TIDAL WATERS, SUBMERGED BAY-BOTTOM LANDS, AND WETLANDS; DEWATERING; CONSTRUCTION OF DRAINAGE SYSTEMS

Sec. 24-48. Permit required; exceptions; work standards; compliance with work standards, suspension of permit.

(1) It shall be unlawful for any person to perform work or authorize, allow, suffer or permit work to be performed in County canal rights-ofway, reservations or easements anywhere in Miami-Dade County, or to trim, cut or alter a mangrove tree anywhere in Miami-Dade County, or to authorize, allow, suffer or permit the trimming, cutting or alteration of a mangrove tree anywhere in Miami-Dade County, or to fill, dredge or authorize, allow, suffer or permit filling or dredging or perform or authorize, allow, suffer or permit any type of work in, on, over, or upon tidal waters, submerged bay bottom lands, or wetlands anywhere in Miami-Dade County, or to perform or authorize, allow, suffer or permit any work which results in harmful obstruction or alteration of the natural flow of surface waters or substantial reduction in recharge of water to the Biscayne Aquifer, or authorize cause, permit, allow, let or suffer the dewatering of groundwater into any groundwater, surface water or drainage structure anywhere in Miami-Dade County, or the construction of a drainage system for any non-residential project anywhere in Miami-Dade County, without first having obtained a permit from the Department. All said work shall conform to minimum standards set forth in the Code of Miami-Dade County, Florida, and the "Permit Information Manual IV" of the South Florida Water Management District, dated March 19, 1994, as same may be amended from time to time. This section shall not apply to work in treatment facilities or their ancillary facilities such as, but not limited to, cooling canals or polishing ponds or to the following projects:

- (a) The placement of natural limerock boulder riprap waterward of an existing seawall, bulkhead or unconsolidated shoreline provided that the riprap is placed on a two (2) horizontal to one (1) vertical slope and the riprap does not extend more than ten (10) feet waterward of the mean high water line; provided, however, the Department conducts an inspection prior to the placement of the riprap and determines that said placement will not result in an adverse environmental impact to benthic communities.
- (b) Repair and/or replacement of the decking or handrails, on an existing dock or pier, limited to their original dimensions.
- (c) Repair and/or replacement of the tieback systems on an existing seawall or bulkhead, provided that the contractor submits an engineering plan which the Department determines meets acceptable standards for professional engineering design.
- (d) Repair and/or replacement of the cap of an existing seawall or bulkhead, provided that the contractor submits an engineering plan which the Department determines meets accepted standards for professional engineering design.
- (e) Sealing of cracks in a seawall or bulkhead cap or face.
- (f) Repair or sealing of the pilasters of an existing seawall or bulkhead.
- (g) Backfilling landward of existing seawalls or bulkheads.
- (h) Placement of riprap, gunite-filled tube, or other approved material beneath an undercut seawall or bulkhead provided that material does not extend more than two (2) feet waterward of the seawall or bulkhead.
- (i) Placement of sand-cement riprap bags at the toes of a seawall or bulkhead provided

- the bags do not extend more than two (2) feet or the width of two (2) standard sand-cement bags waterward of the seawall or bulkhead.
- (j) The removal of old or unused or rotting mooring piles or the removal of dilapidated docks or piers.
- (k) Trimming or cutting or any other alteration of a mangrove tree(s) for the exclusive purpose of conducting a land survey, provided that the area of mangroves affected by the survey line is less than three (3) feet wide and said survey is conducted by a licensed land surveyor.
- (1) Roadway maintenance activities which are performed or authorized by the Miami-Dade County Public Works Department to correct safety deficiencies or are undertaken to maintain the continuity of existing use for an established road or road right-of-way.
- (m) Maintenance of private roads approved by the Department or maintenance of roads and fill pads approved by the Department located upon a public or private utility right-of-way.
- (n) Installation, repair, or replacement of marine hardware necessary to secure vessels including, but not limited to, cleats, mooring whips, chocks and mooring bits on docks and piers.
- (o) Construction, installation, repair, or replacement of permanent uncovered benches and/or tables on docks and piers.
- (p) Construction, installation, repair, or replacement of fenders, except fender piles, on docks and piers necessary for the protection of vessels.
- (q) Construction, installation, repair, or replacement of storage boxes, not exceeding thirty-six (36) inches in height, on docks and piers.
- (r) Construction, installation, repair, replacement of ladders on docks and piers to provide access to and from vessels and/or the water.

- (s) The placement of concrete jackets or other forms of protection on existing dock, pier or mooring piles.
- (t) The replacement of mooring piles at the same exact location as they presently exist and provided that the following criteria are adhered to:
 - (i) The mooring piles to be replaced do not protrude into the water more than twenty-five (25) percent of the width of the waterway.
 - (ii) The work will be done by a contractor holding an applicable certificate of competency.
 - (iii) The contractor shall contact the Director or the Director's designee within twenty-four (24) hours of performing the mooring piling replacement work with information on the location and the number of mooring pilings replaced.
- (u) The installation of a drainage system for a commercially or industrially zoned project which does not use, generate, handle, dispose of, discharge or store hazardous materials. This exemption, however, shall not apply to an airport facility, a resource recovery and management facility or a sewage treatment facility.
- (2) The exemptions set forth in Sections 24-48(1)(l) and (m) shall neither apply to any work involving expansion in the width or length of roads nor shall said exemptions apply to work involving the filling of roads to higher elevations when said roads occur at elevations which are less than the elevations set forth by Miami-Dade County flood criteria.
- (3) All work to be performed under any County permits shall conform with the applicable portions of this Article.
- (4) If the Director, or the Director's designee, determines that the permittee and/or contractor is not performing the construction in accordance with the conditions of the permit or the approved plans upon which the permit was issued, the Director, or the Director's designee, may order suspension of the permit or the stopping of work

until such time as the permittee and/or the contractor has complied with the permit, plans or standards. In such case, the permittee or the contractor or both shall take all necessary precautions to leave the work area in a safe and secure condition. In the event of any future widening, repairs, installation, construction, or reconstruction, by or for Miami-Dade County, of any road, bridge, canal, culvert, traffic signal, streetlight, water distribution system, sewage collection system, storm drainage system, or any other County facility within the public right-of-way in which the permittee or the contractor or both have constructed any utility which has not been conveyed to a franchised public utility, said permittee or contractor or both shall move or remove such utility as may be required for the public convenience as and whenever specified by the Director of the Public Works Department and at the expense of the permittee or the contractor or both.

(5) It shall be unlawful for any person to violate or fail to comply with any of the conditions or special conditions of a class I, class II, class III, class IV, class V, or class VI permit issued by the Director, or the Director's designee. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.1. Permit classifications; interpretation as to permit requirement, fee; determination of wetlands.

- (1) There are six (6) permit classifications: class I, class II, class III, class IV, class V and class VI.
 - (a) Class I: Class I permits are required to trim, cut or alter a mangrove tree anywhere in Miami-Dade County or for any type of work as defined herein to take place in, on, over or upon any tidal waters, bay bottom lands anywhere in Miami-Dade County or in wetlands supporting halophytic vegetation anywhere in Miami-Dade County, including but not limited to dredging or filling provided, however, that class I permits shall not apply to the construction, installation or alterations of

- outfalls or overflow systems as described under the definition of class II permits (Section 24-48.1(1)(b)).
- (b) Class II: Class II permits are required for the construction, installation and/or alteration of any outfall or overflow system in, on, under or upon any water body of Miami-Dade County, including, but not limited to, canals, rivers, lakes, lagoons and/or all tidal water bodies.
- Class III: Class III permits are required for work in, on, upon or contiguous to nontidal lakes, canals, rivers and other water areas and waterfronts under the direct control of Miami-Dade County by virtue of ownership, dedication by plat, right-of-way easement, reservation, or right-of-way and access agreement or instrument, including canal right-of-way as herein defined; provided, however, that class III permits shall not apply to Sections 33-13(e) and 33-16(a) of the Code of Miami-Dade County, Florida, nor shall they apply to the construction, installation, and/or alteration of outfalls or overflow systems as described under the definition of class II permits (Section 24-48.1(1)(b)).
- (d) Class IV: Class IV permits are required for any work in, on, or upon wetlands not supporting halophytic vegetation anywhere in Miami-Dade County.
- (e) Class V: Class V permits are required for any dewatering of groundwater, surface water or water which has entered into an underground facility, excavation or trench.
- (f) Class VI: Class VI permits are required for drainage systems to be installed in non-residential projects.
- (2) If any person is in doubt as to whether or not the proposed work requires a permit as hereunder provided, said person may request a written determination from the Director. Within thirty (30) days after receipt of such request, the Director shall issue a letter of interpretation with respect to whether or not a permit is required for the proposed work. The Director may require any

or all of the information which is required in a short form permit application as a condition precedent to the issuance of such a letter. Such letter shall have no precedential value to any person other than the person who requested said written determination, or his grantees, heirs, successors or assigns. A fee, to be set by administrative order approved by the Board of County Commissioners, shall be collected from any person requesting a letter of interpretation by the Director. The fee shall be applied towards the permit application fee if the Director determines that a permit is required.

(3) Determinations as to the landward extent of wetlands shall be based on the unified statewide methodology adopted pursuant to Section 373.421(1), Florida Statutes, as amended from time to time. A determination that any portion of a tract of land is not a wetland does not preclude the requirement for a permit on any other portion of the tract that is determined to be a wetland. The unified statewide methodology adopted pursuant to Section 373.421(1), Florida Statutes, as amended from time to time, is hereby adopted by reference, as same may be amended from time to time.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.2. Permit application forms; procedures.

There are two (2) types of application forms; short form and standard form. The general criteria for determining the type of application form required are based on the magnitude of the project, and its potential environmental impact. Unless waived by the municipality, the applicant's plans shall require municipal approval.

- (I) Short Form Permit Application:
 - (A) When permissible: A short form permit application may be accepted by the Department of Environmental Resources Management for the following types of work:
 - (1) Repair or replacement of seawalls or bulkheads at the mean high water line or at their existing location.

- (2) Construction or the placement of a single-family residence fixed or floating dock, davit, boat lift, mooring or fender pile, all of which are associated with a single family residence provided that none of the foregoing protrude into the water more than twenty-five (25) percent of the width of the waterway.
- (3) Repair, replacement or restoration of docks, piers, davits, boat lifts, mooring or fender piles, provided none of the foregoing protrude into the water more than twenty-five (25) percent of the width of the waterway.
- (4) Installation, repair or replacement of mooring buoys, when it is determined that the proposed work will not present a hazard to navigation.
- (5) All work requiring a class II permit.
- (6) All work requiring a class III permit.
- (7) Maintenance dredging projects where the dredged material is to be deposited on a self-contained upland site.
- (8) The placement of riprap in front of an existing seawall, bulkhead or shoreline, provided there is no adverse environmental impact associated with the project.
- (9) Construction of new seawalls or bulkheads at the mean high water line.
- (10) Davit installation on a dock, seawall or bulkhead.
- (11) Repair or replacement of wave baffles at their original location and dimensions.
- (12) Construction or the placement of fixed or floating docks, piers, davits, boat lifts, mooring piles and fender piles in order to

create fifty (50) or less boat slips at a new or existing boat docking facility other than a single-family residence, provided that the following criteria are adhered to:

- (a) None of the foregoing protrude into the water more than twenty-five (25) percent of the width of the waterway.
- (b) No dredging or filling is associated or required for the project.

A boat docking facility expansion may only be accepted as a short form application if the facility has not been physically expanded during the past two (2) years.

- (13) Installation of a subaqueous cable or pipeline crossing requiring the dredging and backfilling of ten thousand (10,000) cubic yards or less of material.
- (14) Installation of aids to navigation.
- (15) Class II temporary dewatering projects.
- (16) Repair of bridge fender systems.
- (17) Repair or replacement of a bridge to its original dimensions or less.
- (18) Construction of artificial reefs.
- (19) Trimming or cutting or any other alteration of a mangrove tree(s) which is not a part of a coastal band community.
- (20) Trimming or cutting or any other alteration of a mangrove tree(s) for the exclusive purpose of conducting a land survey, provided the area of mangrove trees affected by the survey line is greater than three

- (3) feet wide and said survey is conducted by a licensed land surveyor.
- (21) Clearing, farming, filling, dredging, plowing or any other work within wetlands requiring a class IV permit and not lying within the Bird Drive Everglades Wetland Basin or the North Trail Wetland Basin where the usage is consistent with existing zoning regulations and where the cumulative area upon which work will be performed does not exceed:
 - a) One (1) acre of wetlands in areas designated as "Environmental Protection" on the current Miami-Dade County Comprehensive Development Master Plan Map, or
 - (b) Ten (10) acres of wetlands in areas designated as "Open Land" or "Agriculture" on the current Miami-Dade County Comprehensive Development Master Plan Map, or
 - (c) Fifteen (15) acres of wetlands for lands inside the "Urban Development Boundary Line" as it appears on the current Miami-Dade County Comprehensive Development Master Plan.
- (22) Rockmining in the Transitional Northeast Everglades, the East Turnpike Wetland Basin and the C-9 Wetland Basin, when said rockmining has been previously approved as an unusual use by Miami-Dade County. However, a short form application for said rockmining shall be permitted only when the design and development criteria for the proposed rockmining

- project do not conflict with the prior unusual use approval by Miami-Dade County.
- (23) Elevated boardwalks landward of the mean high water line.
- (24) Boat elevator installation on a new or existing dock, seawall or bulkhead.
- (25) The clearing, farming, placement of clean fill, dredging, plowing or any other agricultural site alteration within the North Trail Wetland Basin or the Bird Road Drive Everglades Wetland Basin.
- (26) Clearing, placement of clean fill or dredging in wetlands associated with a modification of the Central and South Florida Flood Control Project, intended to restore historical patterns of hydrologic flow to Everglades National Park, Florida Bay or Biscayne Bay and performed by the State of Florida or the United States Government. Modifications intended to provide additional drainage of wetland areas shall be subject to the provisions of Section 24-48.2(II)(A).
- (27) All work requiring a class V permit.
- (28) All work requiring a class VI permit.
- (B) Application procedure (class I, class II, class III, class IV, class V, and class VI permits):
 - (1) The applicant or his agent shall submit to the Department an application in such form as prescribed by the Department. A class I permit application shall be verified by the upland property owner who possesses riparian rights to the area of the proposed work or the lessee of said upland property. For removal and disposal of contaminated sedi-

ments from the Miami River and its tidal tributaries conducted by the U. S. Army Corps of Engineers and the local project sponsor in conjunction with maintenance dredging of the Miami River federal navigation channel, the written consent of the upland property owner who possesses riparian rights to the area of the proposed work or the written consent of the lessee who possesses riparian rights to the area of the proposed work shall be the equivalent of the aforesaid verification of the application. In such case, the local project sponsor shall be deemed and shall be the applicant for the purposes of this Article. Written consent shall be in a form prescribed by the Director or the Director's designee. Verification by the upland property owner who possesses riparian rights to the area of the proposed work or by the lessee of said upland property shall not be required for a class I permit application submitted by a federal, state, county, municipal, or other governmental entity for dredging projects to improve drainage in tidal waters of canals and rivers, provided, that the proposed work shall be performed only on submerged lands owned by the governmental entity submitting the class I permit application. A class IV permit application shall be verified by the owner of the property or the lessee of the property upon which the work is proposed. If the application for a class I or class IV permit is verified by the lessee, a statement from the owner of the property indicating that he has no objection to the work proposed shall be submitted with the application. A public hearing by the Board of County Commissioners shall be held for a short form application if a written request therefor is field with the Department prior to the Department's issuance of the per-

mit. The written request for public hearing before the Board of County Commissioners shall include in the written request the specific Department pending permit application number. If no such written request is filed, the Department shall approve and issue, deny or approve and issue subject to conditions, limitations or restrictions, the work proposed under the permit application based upon the applicable evaluation factors set forth in Section 24-48.3 of this Code. If a timely request is filed, the Board of County Commissioners shall approve, approve with conditions, limitations or restrictions, or deny a permit for the proposed work after conducting said public hearing in accordance with the procedures set forth in Section 24-48.2(II)(B)(1), (2) and (3). A short form permit application shall include but not be limited to the following:

Two (2) or more complete sets of construction plans and calculations for the proposed work prepared by an engineer registered in the State of Florida. Said plans and calculations shall be subject to review and approval by the Department. Said plans and calculations may be prepared by an architect registered in the State of Florida for work described in Section 24-48.2(I)(A)(4), (7), (8), (10), (11), (14), (19), (21) and (27). Said plans and calculations may be prepared by a land surveyor registered in the State of Florida for the work described in Section 24-48.2(I)(A)(21) and (27). Rockplowing or other agricultural site alterations as described Section in 48.2(I)(A)(22) and (23) are exempt from submitting plans prepared by an architect or engineer only if said rockplowing

or agricultural site alteration does not involve the construction of any roads built at elevations higher than natural surface elevations, fill pads, culverts, or structures of any type; excavation of any borrow pits, ditches or canals; or the construction of any other drainage facilities or drainage structures. Short form applications for rockplowing or other agricultural site alteration which meet the requirements of this provision mav substitute sketches or plans of the proposed work. Said sketches or plans shall be in sufficient detail to identify the type of the proposed work, location of the proposed work and whether or not the proposed work complies with all applicable development criteria and management practices. Work limited exclusively to the trimming or cutting of a mangrove tree(s) is exempt from this requirement.

- (b) A check in the amount of the required application fee payable to Miami-Dade County.
- Evidence of ownership or a lease of the upland and submerged land, or evidence of ownership or a lease of the wetland upon which work is proposed. Said evidence of ownership may include, in the discretion of the Department, an affidavit of ownership executed by the owner of the property. For proposed work on submerged lands owned by a federal, state, county, municipal, or other governmental entity, evidence of ownership or a lease of the upland and a.) the written consent of the federal. state, county, municipal, or other government entity owning the

- submerged lands upon which the work is proposed or, b.) lease from the federal, state, county, municipal, or other governmental entity owning the submerged lands upon which the work is proposed, shall be required. Written consent shall be in a form prescribed by the Director or the Director's designee. For removal and disposal of contaminated sediments from the Miami River and its tidal tributaries conducted by the U.S. Army Corps of Engineers and the local project sponsor in conjunction with maintenance dredging of the Miami River federal navigation channel, the written consent of the owner or lessee of the submerged lands and the written consent of the owner or lessee of the upland who possesses riparian rights to the area of the proposed work shall be deemed to satisfy the requirements of this paragraph. The written consent shall be in a form prescribed by the Director or the Director's designee.
- If the proposed work is within an incorporated area, a substantiating letter shall be submitted, as part of the permit applifrom the cation. zoning department of the incorporated area. If the proposed work is within an unincorporated area, a substantiating letter from Miami-Dade County Department of Planning and Zoning shall be submitted as part of the permit application. Said substantiating letter shall state that the proposed usage of the property upon which the proposed work would occur does not violate any zoning law applicable to the area of the proposed work.

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- If the work is limited exclusively to the trimming or cutting of a mangrove tree(s), a sketch shall be prepared by a licensed landscape architect which delineates the property lines of the upland owner, the location and size of all existing mangrove tree(s) on the site and the nature, degree, and methodology of the proposed trimming or cutting. If the proposed work involves trimming or cutting of less than five (5) mangrove tree(s) or involves the trimming of mangrove tree(s) for a property line survey, the sketch may be prepared by the applicant or his agent.
- (f) For all proposed work involving the placement of clean fill within the Bird Drive Everglades Wetland Basin or the North Trail Basin, a maintenance plan shall be submitted which shall include:
 - (i) A description of how the stormwater management system shall be maintained in a functional condition.
 - (ii) Treatment and control techniques as well as a management schedule to ensure that all of the stormwater management areas will be maintained free from exotic plant species, and
 - (iii) A description of how the stormwater management system shall be kept free of solid waste.
- (g) For all proposed work which involves the placement of more than four (4) inches of fill above the seasonal high water table in the area(s) of the subject property designated as the stormwater management ar-

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ea(s), a report prepared by an engineer registered in the State of Florida shall be submitted. Said report shall demonstrate the consistency of the site plan with the goals and requirements of either the North Trail Basin Fill Enforcement and Water Management Criteria (for properties located within the North Trail Basin), or with the Bird Drive Everglades Basin Fill Encroachment and Water Management Criteria (for properties located within the Bird Drive Everglades Wetland Ba-

- In lieu of constructing an onsite stormwater management system to satisfy the North Trail Basin Fill Encroachment and Water Management Criteria, the Board Drive Everglades Basin Fill Encroachment and Water Management Criteria or the Basin B Fill Encroachment and Water Management Criteria, persons who own parcels which parcels have been continuously four and one half (4.5) acres or less in size in any of the aforesaid basins since September 30, 1997 are eligible to contribute a to the Miami-Dade County Stormwater Compensation Trust Fund. The amount of the contribution shall be in accordance with an administrative order of the County Manager as approved by the Board of County Commissioners.
- (i) Evidence that a public notice of filing of a class I permit application in a form approved by the Director or the Director's designee which describes the nature and location of the proposed work has been published in a newspaper of general cir-

- culation in Miami-Dade County is required for class I permit applications submitted by federal, state, county, municipal, or other governmental entity for dredging projects to improve drainage in tidal waters of canals and rivers, when the work proposed will be performed only on submerged lands owned by the governmental entity submitting the class I permit application, and when the application is not verified by the upland property owner who possesses riparian rights to the area of the proposed work or by the lessee of said upland prop-
- (2) In addition, the following supplemental information may, at the discretion of the Department, be required to be submitted with a short form permit application:
 - (a) Certification by an engineer registered in the State of Florida, who is qualified by education and experience in the area of construction, that:
 - the best of the engineer's knowledge and belief, the proposed work does not violate any laws, rules, or regulations of the State of Florida or any provisions of the Code of Miami-Dade County which may be applicable; that diligence and recognized standard practices of the engineering profession have been exercised in the engineer's design process for the proposed work; and in the opinion of the engineer, based upon his knowledge and belief, the following will not occur:
 - 1. Harmful obstruction or undesirable alter-

- ation of the natural flow of the water within the area of the proposed work.
- 2. Harmful or increased erosion, shoaling of channels or stagnant areas of water. (Not applicable to class IV permits.)
- 3. Material injury to adjacent property.
- 4. Harmful effect upon the water quality within the receiving water body of the emergency overflow from a stormwater retention system. (Applicable to class II permits only.)
- 5. Adverse environmental impacts from changes in water quality or quantity. (Applicable to class IV permits only.)
- (ii) The engineer has been retained by the applicant to provide inspections throughout the construction period and shall prepare a set of reproducible record prints of drawings showing changes made during the construction process based upon the marked-up prints, drawings and other data furnished by the contractor to the engineer.
- (b) A covenant running with the land in favor of Miami-Dade County executed by the landowner(s). Said covenant shall be subject to the approval of the Board of County Commissioners and shall not be revoked or modified without the

- consent of the Board of County Commissioners. Said covenant shall restrict development or alteration of the property to a designated portion of the property and may include conditions for the environmental protection and environmental management of designated portions of the property.
- (c) A comprehensive environmental impact statement, if required pursuant to Section 24-7(25).
- (d) If, in the opinion of the Director, inadequate information has been provided to evaluate the proposed work, or adverse environmental impact may occur as a result of the proposed work, the Director, before making a recommendation as to the application, shall require the applicant to conduct a coastal engineering study or water quality study or biological study or groundwater study. Said studies shall be a part of the permit application.
- For all proposed work within the North Trail Basin or the Bird Drive Everglades Wetland Basin, a covenant running with the land in favor of Miami-Dade County, in a form approved by the Board of County Commissioners, shall be executed. Said covenant may only be revoked or modified by action of the Board of County Commissioners and shall provide for the protection and maintenance of the stormwater management area of the subject property.
- (II) Standard Form Permit Application:
- (A) A standard form permit application shall be required for any work requiring a class

I or class IV permit not specifically described under Section 24-48.2(I). A standard form permit application shall also be required for all short form permit applications for which a public hearing has been requested pursuant to Section 24-48.2(I)(B)(1). A class I permit application shall be verified by the upland property owner who possesses riparian rights to the area of the proposed work or the lessee of said upland property. For removal and disposal of contaminated sediments from the Miami River and its tidal tributaries conducted by the U.S. Army Corps of Engineers and the local project sponsor in conjunction with maintenance dredging of the Miami River federal navigation channel, the written consent of the upland property owner who possesses riparian rights to the area of the proposed work or the written consent of the lessee who possesses riparian rights to the area of the proposed work shall be the equivalent of the aforesaid verification of the application. In such case, the local project sponsor shall be deemed and shall be the applicant for the purposes of this Article. Written consent shall be in a form prescribed by the Director or the Director's designee. Verification by the upland property owner who possesses riparian rights to the area of the proposed work or by the lessee of said upland property shall not be required for a class I permit application submitted by a federal, state, county, municipal, or other governmental entity for dredging projects to improve drainage in tidal waters of canals and rivers, provided, that the proposed work shall be performed only on submerged lands owned by the governmental entity submitting the class I permit application. A class IV permit application shall be verified by the owner of the property or the lessee of the property upon which the work is proposed. If the application for a class I or IV permit is verified by the lessee, a statement from the owner of the property indicating that he has no objection to the work proposed shall be submitted with

the application. All permit applications shall be submitted to the Department in such form as prescribed by the Department. A standard form permit application shall include, but not be limited to, the following:

Evidence of ownership or a lease of the upland and submerged land, or evidence of ownership or a lease of the wetland upon which work is proposed. Said evidence of ownership may include, in the discretion of the Department, an affidavit of ownership executed by the owner of the property. For proposed work on submerged lands owned by a federal, state, county, municipal, or other governmental entity, evidence of ownership or a lease of the upland and a.) the written consent of the federal, state, county, municipal, or other government entity owning the submerged lands upon which the work is proposed or, b.) lease from the federal, state, county, municipal, or other governmental entity owning the submerged lands upon which the work is proposed, shall be required. Written consent shall be in a form prescribed by the Director or the Director's designee. For removal and disposal of contaminated sediments from the Miami River and its tidal tributaries conducted by the U.S. Army Corps of Engineers and the local project sponsor in conjunction with maintenance dredging of the Miami River federal navigation channel, the written consent of the owner or lessee of the submerged lands and the written consent of the owner or lessee of the upland who possesses riparian rights to the area of the proposed work shall be deemed to satisfy the requirements of this paragraph. The written consent shall be in a form prescribed by the Director or the Director's designee.

- Three (3) copies of a plan or sketch of the proposed structure or work. For class I permits this shall include the locations of the mean high water line, mean low water line, the property lines of the upland owner, and soundings made in the surrounding water areas, corrected to mean low water datum. For work which involves the trimming or cutting of a mangrove tree(s), the sketch or plan shall delineate the location and size of all existing mangrove tree(s) on the site and the nature, degree and methodology of the proposed trimming or cutting.
- A written statement signed by the permit applicant or the applicant's authorized agent stating that, if approval is granted for the proposed work by the Board of County Commissioners, complete and detailed plans and calculations of the proposed work shall be prepared by an engineer registered in the State of Florida in accordance with the minimum requirements of this chapter. Said plans and calculations shall be subject to the review and approval of the Department of Environmental Resources Management. Said written statement shall state that the applicant will secure the services of a registered engineer to conduct inspections throughout the construction period, and that said engineer shall prepare all required drawings of record. This statement shall also provide that for work which involves cutting or trimming of a mangrove tree(s), a detailed plan of the proposed cutting or trimming shall be prepared by a licensed landscape architect and submitted to the Department for review and approval, and that the applicant will secure the services of a licensed landscape architect to supervise the trimming or cutting.

- (4) Certification by an engineer registered in the State of Florida, who is qualified by education and experience in the area of construction, that:
 - To the best of the engineer's knowledge and belief, the proposed work does not violate any laws, rules or regulations of the State of Florida or any provisions of the Code of Miami-Dade County which may be applicable; that diligence and recognized standard practices of the engineering profession have been exercised in the engineer's design process for the proposed work; and in the opinion of the engineer, based upon his knowledge and belief, the following will not occur:
 - (i) Harmful obstruction or undesirable alteration of the natural flow of the water within the area of the proposed work.
 - (ii) Harmful or increased erosion, shoaling of channels or stagnant areas of water. (Not applicable to class IV permits.)
 - (iii) Material injury to adjacent property.
 - (iv) Adverse environmental impacts from changes in water quality or quantity. (Applicable to class IV permits only.)
 - (b) The engineer has been retained by the applicant to provide inspections throughout the construction period and shall prepare a set of reproducible record prints of drawings showing changes made during the construction process based upon the marked-up prints, drawings, and other data furnished by the contractor to the engineer. Work limited exclusively

to the cutting or trimming of a mangrove tree(s) is exempt from the requirements of Section 24-48.2(II)(A)(4)(a) and (b).

- (5) Names and addresses from the latest County tax rolls of owners of all riparian or wetland property within three hundred (300) feet of the proposed work.
- (6) A check in the amount of the required application fee payable to Miami-Dade County.
- If the proposed work is within an incorporated area, a substantiating letter shall be submitted, as part of the permit application, from the zoning department of the incorporated area. If the proposed work is within an unincorporated area, a substantiating letter from Miami-Dade County Department of Planning and Zoning shall be submitted as part of the permit application. Said substantiating letter shall state that the proposed usage of the property upon which the proposed work would occur does not violate any zoning law applicable to the area of the proposed work. Applicants for class I permits shall have the option of submitting the above described substantiating letter from the applicable zoning authority after obtaining approval from the Board of County Commissioners but prior to permit issuance. Applications for class I or class IV permits by the Florida Departments of Transportation and Natural Resources shall not be required to submit the above described substantiating letter from the local zoning authority.
- (8) For all proposed work involving the placement of clean fill within the Bird Drive Everglades Wetland Ba-

sin or the North Trail Basin, a maintenance plan shall be submitted which shall include:

- (a) A description of how the stormwater management system shall be maintained in a functional condition,
- (b) Treatment and control techniques as well as a management schedule to ensure that all of the stormwater management areas will be maintained free from exotic plant species, and
- (c) A description of how the stormwater management system shall be kept free of solid waste.
- For all proposed work which involves the placement of more than four (4) inches of fill above the seasonal high water table in the area(s) of the subject property designated as the stormwater management area(s), a report prepared by an engineer registered in the State of Florida shall be submitted. Said report shall demonstrate the consistency of the site plan with the goals and requirements of either the North Trail Basin Fill Encroachment and Water Management Criteria (for properties located within the North Trail Basin), or with the Bird Drive Everglades Basin Fill Encroachment and Water Management Criteria (for properties located within the Bird Drive Everglades Wetland Basin).
- (10) In addition, the following supplemental information may, at the discretion of the Department, be required to be submitted with a standard form permit application:
 - (a) If, in the opinion of the Director, inadequate information has been provided to evaluate the proposed work, or adverse environmental impact may occur

- as a result of the proposed work, the Director, before making a recommendation as to the application, shall require the applicant to conduct a coastal engineering study or water quality study or biological study. Said studies shall be a part of the permit application.
- (b) If requested by the Director, a coastal resources management line shall be determined for the property upon which work requiring a class I permit is proposed. Said line shall be determined according to scientifically recognized ecological techniques and said line shall be subject to approval by the Department. Said line shall identify those areas where detrital cycles contribute to the ecological productivity of coastal waters.
- A covenant running with the land in favor of Miami-Dade County executed by the landowner(s). Said covenant shall be subject to the approval of the Board of County Commissioners and shall not be revoked or modified without the consent of the Board of County Commissioners. Said covenant shall restrict development or alteration of the property to a designated portion of the property and may include conditions for the environmental protection and environmental management of designated portions of the property.
- (d) A comprehensive environmental impact statement, if required pursuant to Section 24-7(25).
- (11) The applicant, in his or her discretion, may provide evidence of public interest or public economic values relating to the proposed work.

- (12) For all proposed work within the North Trail Basin or the Bird Drive Everglades Wetland Basin, a covenant running with the land in favor of Miami-Dade County, in a form approved by the Board of County Commissioners, shall be executed. Said covenant may only be revoked or modified by action of the Board of County Commissioners and shall provide for the protection and maintenance of the stormwater management area of the property.
- (B) Obtaining approval from the Board of County Commissioners:
 - The Director shall review the permit application for the proposed work and shall make a recommendation to the Board of County Commissioners of approval, denial, or approval subject to conditions, limitations or restrictions for the proposed work. The Director's recommendation shall be based upon the applicable evaluation factors set forth in Section 24-48.3 of this Code. The Board of County Commissioners or Community Zoning Appeals Board pursuant to Section 33-13 shall hold a public hearing concerning the proposed work. A notice of the time and place of said public hearing shall be published in a newspaper of general circulation in Miami-Dade County a minimum of seven (7) days prior to the public hearing. Said notice shall include a brief description of the proposed work and the location of the proposed work. A courtesy notice containing substantially the same information set forth in said published notice shall be mailed to those parties whose names appear on the application as the owners of all riparian or wetland property within three hundred (300) feet of the proposed work. Failure to mail or receive said courtesy notice shall not affect any action or proceeding taken thereunder. The Board of

County Commissioners or Community Zoning Appeals Board pursuant to Section 33-13 shall, after holding the public hearing, approve, deny, or approve subject to conditions, limitations or restrictions, the work proposed under the permit application based upon the applicable evaluation factors set forth in Section 24-48.3 of this Code.

- (2) If the Board of County Commissioners or Community Zoning Appeals Board pursuant to Section 33-13 approves a permit application, the Department of Environmental Resources Management shall issue the permit subject to the conditions, limitations or restrictions required by the Community Zoning Appeals Boards or Board of County Commissioners. The Department of Environmental Resources Management, in its discretion, may require additional conditions, limitations and restrictions as part of the permit only if said additional conditions, limitations or restrictions are consistent with the action of the Board of County Commissioners or Community Zoning Appeals Board with respect to the permit.
- (3) At the request of a permit applicant, a conclusive list of permit conditions, limitations, and restrictions, which may not be amended or modified by the Department of Environmental Resources Management except as provided in Section 24-48.2(II)(B)(3)(b), below, shall be prepared prior to the public hearing and shall be submitted to the Board of County Commissioners or Community Zoning Appeals Board pursuant to Section 33-13 as part of the Director's recommendation of approval, provided that the permit application includes the following:
 - (a) All requirements set forth in Section 24-48.5(2)(a) and (b).

A verified statement by the permit applicant that the proposed work shall commence within three (3) months of approval of said permit by the Board of County Commissioners or Community Zoning Appeals Board pursuant to Section 33-13 and that if the work does not commence within three (3) months of the date of approval of said permit by the Board of County Commissioners or Community Zoning Appeals Board, then the Department of Environmental Resources Management may, in its discretion, require additional conditions, restrictions, and limitations as to the permit other than those described in the aforesaid list. All such additional conditions, restrictions, and limitations shall be consistent with the action of the Board of County Commissioners or Community Zoning Appeals Board with respect to the permit.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 06-8, §§ 1, 2, 1-24-06; Ord. No. 07-175, § 1, 12-4-07; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.3. Factors for evaluation of permit applications; incomplete permit applications.

- (1) The Department shall base its recommendation for approval, denial or approval subject to conditions, limitations, or restrictions, and the Board of County Commissioners shall make its decision for approval, denial, or approval subject to conditions, limitations or restrictions, for any of the permits provided for under this article, upon the following evaluation factors, when applicable:
 - (a) The potential adverse environmental impact and cumulative adverse environmental impact of the proposed work, including but not limited to the effect upon hydrology, water quality, water supply, wellfields, aquifer recharge, aesthetics, navigation,

- public health, historic values, air quality, marine and wildlife habitats, archeological values, wetland soils suitable for habitat, floral and faunal values, rare, threatened and endangered species, natural flood damage protection, wetland values, land use classification, recreation, and any other environmental values, affecting the public interest.
- (b) Conformance with standard construction procedures and practices and design and performance standards, including but not limited to, all applicable portions of the Miami-Dade County Public Works Manual, Chapter 33B of the Code of Miami-Dade County, Florida, and Miami-Dade County Ordinance No. 81-19 [codified as Sections 33D-1 through 33D-4], as all of same may be amended from time to time.
- (c) The information provided by the comprehensive environmental impact statement, if required.
- (d) Conformance with all applicable federal, state and local laws and regulations. Conformance with the Rules of the South Florida Water Management District set forth in Chapter 40E-40, Florida Administrative Code (F.A.C.), as same may be amended from time to time, pertaining to general surface water management permits within Miami-Dade County, and with the provisions contained in the "Basis of Review for Surface Water Management Permit Applications Within the South Florida Water Management District," dated March 10, 1994 as same may be amended from time to time.
- (e) Conformance with the Miami-Dade County Comprehensive Development Master Plan, Chapter 33B of the Code of Miami-Dade County, Florida, Miami-Dade County Ordinance No. 81-19 [codified as Sections 33D-1 through 33D-4], and the Miami-Dade County Manatee Protection Plan (a copy of which shall be made permanently available at the Department for reference by the public), as all of same may be amended from time to time.

- (f) Consistency with criteria for lake excavations in Miami-Dade County established by the Board of County Commissioners.
- (g) The recommendation to the Board of County Commissioners as to approval or denial from the municipality within which the proposed work is located.
- (h) The relationship of the proposed work to a coastal resources management line established pursuant to the provisions of Section 24-48.2(II)(A)(10)(b).
 - (i) Preservation and protection of all existing wetland communities seaward of said management line.
 - (ii) Protection of all existing wetland biological and hydrological functions landward of said management line.
- (i) Maximum protection of a wetland's hydrological and biological functions through adherence to the following fill limitations:
 - (i) Placement of the minimum fill necessary on a site to provide for the land usage alternative which results in the least adverse environmental impact and the least cumulative adverse environmental impact.
 - (ii) Placement of temporary fill pads and fill roads for the purpose of conducting rockmining.
- (j) For Class I permit applications proposing to exceed the boundaries described in Section D-5(03)(2)(a) of the Miami-Dade County Public Works Manual, the following additional factors shall be considered:
 - (i) Whether the proposed exceedance is the minimum necessary, as determined by the Director or the Director's designee, to avoid seagrass or other valuable environmental resources.
 - (ii) Whether the proposed exceedance is the minimum necessary, as determined by the Director or the Director's designee, to achieve adequate water depth for mooring of a vessel,
 - (iii) Whether the applicant has provided to the Department notarized let-

ter(s) of consent from adjoining riparian property owners in a form prescribed by the Director or the Director's designee, and

- (iv) Whether the Department has received any letter of objection from adjoining riparian property owners.
- (2) In addition to the applicable evaluation factors found in Section 24-48.3(1)(a) through (i) above, dredging or filling work proposed in class I permit applications shall comply with at least one (1) of the following criteria:
 - (a) Minimum dredging and spoiling for public navigation or public necessity.
 - (b) An alteration of physical conditions as may be necessary to enhance the quality or utility of adjacent waters.
 - (c) Minimum dredging and filling for the creation and maintenance of marinas, piers, docks and attendant navigational channels.
 - (d) Minimum dredging and filling as is necessary for the elimination of conditions hazardous to the public health or for the elimination of stagnant waters.
 - (e) Minimum dredging and filling as is necessary to enhance the biological, chemical or physical characteristics of adjacent waters.
 - (f) A physical modification necessary to protect public or private property.
- (3) In addition to the applicable evaluation factors found in Section 24-48.3(1)(a) through (i) above, boat slips created by the construction or placement of fixed or floating docks, piers, piles and other structures requiring a permit under this article and located in tidal waters within the geographical boundaries of Miami-Dade County, Florida shall have a minimum water depth of four feet N.O.A.A. mean low water datum. It shall be unlawful to moor or store vessels at fixed and floating docks, piers, piles and any structure requiring a permit under this article in tidal waters within the geographical boundaries of Miami-Dade County in areas with less than four feet of depth N.O.A.A. mean low water datum

except for those existing structures which were constructed or placed in accordance with all of the requirements of the Code of Miami-Dade County, Florida prior to October 11, 1985. The foregoing requirements in this subsection (3) shall not apply to:

- (a) Fixed or floating docks or piers in tidal waters which are utilized exclusively for fishing, viewing Biscayne Bay, or swimming and which do not have one or more slips or mooring or fender piles present or proposed at or adjacent to the dock or pier, or
- (b) Fixed or floating docks or piers in tidal waters which are utilized exclusively for launching canoes or kayaks, or
- (c) Construction or placement of davits in tidal waters, provided that the davits are attached to seawalls or bulkheads, or
- (d) Fixed or floating docks, piers or boat slips in tidal waters created by work requiring a permit under this Article if located in artificially created canals, provided the canal is bulkheaded and bordered by uplands on both sides of the canal, or
- (e) Floating vessel platforms and floating boat lifts in tidal waters which qualify for the exemption contained within Section 403.813(2)(s), Florida Statutes.

Additionally, no permit shall be issued for a proposed slip or for any other proposed work requiring a permit under this Article which is to be used for the mooring or securing of a vessel, unless adequate water depth exists, including when the vessel is fully loaded.

- (4) In addition to the applicable evaluation factors found in Section 24-48.3(1)(a) through (i) above, any filling in the wetlands of Miami-Dade County shall comply with the following criteria: All fill shall consist only of clean fill.
- (5) In addition to the applicable evaluation factors set forth in Section 24-48.3(1)(a) through (i) above and the fill quality requirements set forth in Section 24-48.3(4) above, the following

requirements shall apply to any work within the North Trail Basin or within the Bird Drive Everglades Wetland Basin:

- (a) Except as provided in (e) below, the work shall be consistent with the North Trail Basin Plan (if it is located within the North Trail Basin), or shall be consistent with the Bird Drive Everglades Wetland Basin Plan (if it is located within the Bird Drive Everglades Basin). These plans are included in Sections 24-48.19 and 24-48.20 respectively.
- (b) All tree islands shall be preserved.
- (c) All proposed work which involves filling
 (a) stormwater management area(s) shall
 be constructed as specified in the North
 Trail Basin Fill Encroachment and Water
 Management Criteria for properties located within the North Trail Basin, or as
 specified in the Bird Drive Everglades
 Basin Fill Encroachment and Water Management Criteria, for properties located
 within the Bird Drive Everglades Wetland
 Basin.
- (d) Stormwater management areas which are less than five (5) acres in size and are located within the Urban Development Boundary as it appears on the Comprehensive Development Master Plan's Land Use Map (as same is amended from time to time) shall not be left at natural grade (unfilled).
- (e) The side slopes of the stormwater management area(s) shall be no steeper than four (4) horizontal to one (1) vertical (4:1).
- (6) In addition to the applicable evaluation factors set forth in Section 24-48.3(1)(a) through (i) above and the fill quality requirement set forth in Section 24-48.3(4) above, for projects located within Basin B, the total volume of fill material placed on a property between existing land elevation and elevation 7.58 NGVD shall not exceed the following formula: Area of site in square feet × 1.8. As an alternative to the foregoing formula other engineering approaches consistent with the requirements of full on-site retention without exceeding established stages for the 100-year,

three-day storm shall be approved by the Director of the Department of Environmental Resources Management or the Director's designee.

- (a) The side slope of stormwater management area(s) shall be no steeper than four(4) horizontal to one (1) vertical (4:1).
- (7) In addition to the applicable evaluation factors contained within Section 24-48.3(1)(a) through (i) above, the following requirements shall apply to all work requiring a Class II Permit:
 - (a) Wet retention shall not be utilized without prior pretreatment by means of dry detention or retention of the first inch of runoff from the proposed project's drainage area.
 - (b) An on-site retention system of applicable design shall be utilized as the first priority for the disposal of stormwater runoff at any location in Miami-Dade County with the exception of projects located in the North Trail Basin, Bird Drive Basin, East Turnpike Basin, Western C-9 Basin or any other area subject to Miami-Dade County's cut and fill criteria.

The on-site retention systems required by this section shall include the following:

- (i) Surface infiltration through grassed swales, or
- (ii) Underground disposal through exfiltration, or
- (iii) Disposal by drainage wells, or
- (iv) Disposal through dry retention ponds, or
- (v) Any combination of any of the foregoing as approved by the Director or the Director's designee.
- (c) On-site retention combined with an overflow outfall may be used as an alternative to on-site retention in those cases where complete on-site retention is not feasible as determined by the Director or the Director's designee, when there is inade-

quate exfiltration capability of the soil or in cases where a higher degree of flood protection is desired by the applicant.

All inlet structures located within grassed areas or landscaped strips may receive a 0.2 inch retention credit.

- (d) Existing positive drainage systems which for any reason require modification or relocation shall be constructed in accordance with the standards set forth in Section 24-48.3(7)(a) and (b) above, except for those portions of the existing project which will remain unaltered under the new plan.
- (8) In addition to the applicable evaluation factors contained within Section 24-48.3(1)(a) through (i) above, the following requirements shall apply to all work requiring a class VI permit:
 - (a) Drainage systems for all non-residential projects shall be designed and built to comply with the following standards:
 - (i) All requirements set forth in Section 24-48.3(7).
 - (ii) All inlet structures located within grassed areas or landscaping strips may receive a 0.2 inch retention credit. Furthermore, at least one (1) inch of pretreatment by means of dry detention or retention shall be provided as part of the required retention or detention prior to authorization of an overflow outfall.
 - (iii) Existing positive drainage systems which for any reason require modification or relocation shall be installed in a manner to comply with the standards set forth in Section 24-48.3(8)(a)(i) and (ii) above, except for those portions of the existing project which will remain unaltered under the new plan.
- (9) An incomplete permit application shall become deactivated when the Department has notified the applicant by certified mail of the incomplete status of the application, and only if the applicant has failed to request continued activa-

tion of the permit application within ninety (90) days of receipt of the Department's notification. The applicant's request for continued activation shall be made by certified mail to the Department.

- (a) Upon receipt by the Department of a certified mail request for continued activation, the permit application shall remain activated for one hundred twenty (120) days after the original deactivation date. If the application is not completed within said one-hundred-twenty-day period, the Department shall again notify the permit applicant of incomplete application status, pursuant to the provisions of Section 24-48.3(3). In no event shall an incomplete permit application be deemed activated more than three hundred thirty (330) days from the original deactivation date.
- (b) A new application shall be required for obtaining a permit for all work previously proposed under a permit application which has been deactivated.
- (c) The Department shall not process any permit application which has been deactivated.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.4. Mitigation plans for projects otherwise acceptable but having adverse environmental impact.

For any project that is otherwise acceptable under the evaluation factors contained herein and permittable under all applicable laws, but that nevertheless results in adverse environmental impact, the applicant shall be required to mitigate this impact. The purpose of mitigation is solely to compensate for unavoidable adverse environmental impacts. Mitigation should not be used to make an otherwise nonpermittable project permittable. Mitigation plans must maximize the preservation of existing natural resources. In determining mitigation procedures the term mit-

igation includes the following methods, in the order of priority in which they should be utilized:

- (1) Avoiding the impact altogether by not taking a certain action or parts of an action;
- (2) Minimizing impacts by limiting the degree or magnitude of the action or its implementation;
- (3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- (4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
- (5) Compensating for the impact by replacing or providing substitute resources or environments.

After-the Fact permits that require mitigation shall provide twice as much mitigation as would have been required if a class I, II, or III permit was obtained prior to the commencement of construction.

The Department of Environmental Resources Management shall adopt rules by ordinance to implement the foregoing evaluation factors. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.5. Permit issuance; waiver of bonding requirements.

- (1) Issuance of a Department permit does not relieve the applicant from obtaining all required federal, State and local permits.
- (2) Following approval by the Board of County Commissioners or after submitting a short form application, a construction permit may be issued to the permit applicant and a contractor holding an applicable certificate of competency, provided:
 - (a) Construction plans, calculations and specifications are submitted which have been prepared by an engineer or architect or land surveyor where applicable registered in the State of Florida and which comply with the requirements of this Chapter

- and other particular conditions, including, but not limited to, requirements for riprap, and monitoring programs.
- (b) The permit fee has been paid.
- A performance bond and a mitigation bond, if applicable, is posted in an amount determined by the Director. The maximum amount of said performance bond shall be one hundred (100) percent of the estimated cost of the work or one hundred thousand dollars (\$100,000.00) whichever is less. The performance bond being to guarantee compliance with terms of the permit and to protect the interest of the public and of landowners in the vicinity of the work. The Director or the Director's designee may waive the performance bond if the Director or the Director's designee determines that the proposed project is not expected to affect the interests of the public or landowners in the vicinity of the work and noncompliance with the terms of the permit will only affect the permit applicant. The Director or the Director's designee may also waive performance bonds for work performed by utility companies, for work performed by governmental agencies pursuant to Section 24-48.8 of this chapter and for work approved under a short form permit application pursuant to Section 24-48.2(I)(A)(22) and (23).

A separate mitigation bond may be required by the DERM to be posted in order to insure that environmental enhancement features associated with the project and required by the permit are completed in a satisfactory manner. These include, but are not limited to, the placement of riprap, the replanting of mangroves or seagrass, the installation of sewage pumpout stations, the construction of public piers or shoreline walkways and the construction of artificial reefs. The maximum amount of said mitigation bond shall be one hundred (100) percent of the cost of the environmental enhancement features of the project. The required performance and mitigation bonds may be required to

- remain in force for up to six (6) months after the approved completion date of the work covered by the bond.
- (d) Evidence of ownership, a lease, a consent of use or an easement for the submerged lands upon which the proposed work in tidal waters will occur under a class I permit. For proposed work on submerged lands owned by a federal, state, county, municipal, or other governmental entity, evidence of ownership or a lease of the upland and a.) the written consent of the federal, state, county, municipal, or other government entity owning the submerged lands upon which the work is proposed or, b.) lease from the federal, state, county, municipal, or other governmental entity owning the submerged lands upon which the work is proposed, shall be required. Written consent shall be in a form prescribed by the Director of the Department of Environmental Resources Management or the Director's designee.
- (e) For all work to be performed in the North Trail Wetland Basin or the Bird Drive Everglades Wetland Basin within the Urban Development Boundary Line (as shown on the Land Use Plan Map of the Comprehensive Development Master Plan, as adopted December 6, 1988), a contribution as mitigation to compensate for all unavoidable adverse environmental impacts associated with the proposed work has been made to the Department. The amount of said contribution shall be set by administrative order approved by the Board of County Commissioners and shall provide for the acquisition, restoration, enhancement, management or monitoring of wetlands in Miami-Dade County.
- (3) The Department may require inspections by a registered engineer employed by the permittee as part of the permit procedure. The engineer may be required to furnish a report to the Department a minimum of every three (3) months on the progress of the work and will produce appropriate drawings of record or other type of documentation as required by the Director.

- (4) If the engineer who provided certification pursuant to Section 24-48.2(I)(B)(2) or pursuant to Section 24-48.2(II)(A)(4) is discharged by the property owner or his agent, or if said engineer ceases to work on the proposed or approved work, the property owner shall be required to obtain a new engineer who shall meet all the requirements of an engineer required by this article.
- (5) If the engineer who provided certification pursuant to Section 24-48.2(I)(B)(2) or pursuant to Section 24-48.2(II)(A)(4) is discharged by the property owner or his agent, or if said engineer ceases to work on work allowed under a permit, all work allowed by the permit shall immediately cease and shall not be resumed until a new engineer is obtained pursuant to the requirements of this article.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 07-175, § 2, 12-4-07; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.6. Owner-builder permits in lieu of owner-contractor permits.

At the discretion of the Director or the Director's designee, owner-builder permits may be issued for the following types of work, and thereby waive the requirement that the permit be issued jointly to the owner and a certified contractor:

- (1) Repair of seawalls: Repair of seawalls or bulkheads at the mean high water line or at their existing location (excluding pile-driving operations and/or panel installations).
- (2) Placement of riprap: The placement of riprap in front of an existing or new seawall, bulkhead or shoreline, provided there is no adverse environmental impact associated with the project.
- (3) Where the upland property is zoned as single-family residential:
 - (a) Repair, replacement or restoration of docks which are limited to or less than their original dimensions and which together with associated tie-up facilities, do not protrude into the water more than twenty-five (25) percent of the width of the waterway

- (excluding pile-driving operations and any associated dredging and filling).
- (b) Installation of buoys, when it is determined that the proposed installation will not present a hazard to navigation.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.7. Permit fees—Schedule.

The Department shall charge and collect application and permit fees at the rate established by separate administrative order which shall not become effective until approved by the Board of County Commissioners.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.8. Same—Waiver.

The Department may waive the permit fee for all work covered under this article and performed by a federal, State, municipal or other local governmental agency, whether this work is performed by employees of said agency or by a private firm or corporation under contract with the agency. However, such federal, State, municipal or other local governmental agency or private firm or corporation under contract therewith shall not be relieved of the responsibility of obtaining a permit for work covered under the provisions of this article. The Director of said Department also may waive all requirements concerning posting of a performance bond by any governmental agency whenever the work is to be performed by employees of said agency, provided that, in lieu of the posting of a performance bond, said agency shall furnish said Department satisfactory written assurances that the work performed by its employees will comply fully with all requirements of the permit; and provided, further, that the Director of said Department may waive the posting of a performance bond by any private firm or corporation under contract with any governmental agency when said firm or corporation shall have posted a satisfactory and acceptable bond with the said governmental agency, proof of such bond having been furnished by said agency to the Department. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.9. Time of completion of work; extension of completion time and new permits for incomplete work.

(1) All work authorized by a permit issued pursuant to this article shall be completed within the time periods set forth in the permit in accordance with the following schedule, unless another period of time is permitted as set forth in the resolution granting approval of the permit by the Board of County Commissioners:

Class I and Class IV short form permits	2 years
Class I and Class IV short form permits for which a public hearing has been requested pursuant to Section $24\text{-}48.2(I)(B)(1)\dots$	2 years
Class I and Class IV standard form permits	3 years
Class I short form permits for trimming, cutting or any other alteration of mangrove tree(s)	3 years
Class I short form permits for trimming, cutting or any other alteration of mangrove tree(s), for which a public hearing has been requested pursuant to Section $24-48.2(I)(B)(1)$	3 years
Class I standard form permits for trimming, cutting or any other alteration of mangrove tree(s)	3 years
Class IV short form permits for rockmining	10 years
Class IV short form permits for rockmining for which a public hearing has been requested pursuant to Section 24-48.2(I)(B)(1)	10 years
Class IV standard form permits for rockmining	10 years
Class II permits	1 year
Class II permits for which a public hearing has been requested pursuant to Section 24-48.2(I)(B)(1)	1
Class III permits	1 year 1 year
Class 221 Politics	1 3 3 41

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Class III permits for which a public hearing has been requested pursuant to Section 24-48.2(I)(B)(1) 1 year Class V permits 120 days

- (2) Extensions of time for completion of work being performed pursuant to a permit issued pursuant to this article may be granted by the Director or the Director's designee provided that:
 - (a) The application for the extension of time is in a form prescribed by the Director of the Department of Environmental Resources Management and is accompanied by the fee for such application.
 - (b) The application for the extension of time is filed in the form prescribed by the Director or the Director's designee with the Director or the Director's designee at least thirty (30) calendar days prior to the time of expiration of the time period set forth in the permit or in a prior extension of time.
 - (c) The Director or the Director's designee has determined that the applicant for the extension of time has affirmatively established by competent factual data and information in the application that:
 - (i) There have been no substantial changes in the environment at the location of the work authorized by the permit occurring subsequent to the date of issuance of the permit or prior extension of time.
 - (ii) Neither an adverse environmental impact nor cumulative adverse environmental impact will occur if the extension of time is granted.
 - (iii) The work authorized by the permit as well as authorized under any prior extension of time has been performed, to date, substantially in accordance with the permit and any restrictions, limitations or conditions which are part of the permit.
 - (iv) The applicant for the extension of time has agreed to any additional

conditions, limitations or restrictions to the issued permit required by the Director or the Director's designee which are consistent with the approval of the Board of County Commissioners or, in the case of short form permits, consistent with the original approval of the issued short form permit by the Director or the Director's designee. In the case of rock mining, such conditions, limitations, or restrictions shall not reduce the deep mining area and volume previously permitted.

- (d) The requested time period for the extension of time when combined with all time periods previously approved for performance of authorized work pursuant to the original permit and prior extensions of time shall not exceed a total of twenty-five (25) years duration for rock mining and ten (10) years duration for all other work, unless another period of time is permitted as set forth in the resolution granting approval of the permit by the Board of County Commissioners.
- (3) Applications for extensions of time which are not timely filed pursuant to Section 24-48.9(2)(b) hereinabove shall be returned to the applicant. The applicant shall be required to file an application for a new permit pursuant to the provisions of this article to obtain the authorization to complete the previously authorized incomplete work. The fee for the new permit shall be based upon the nature and amount of the incomplete work.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.10. Maintenance of permitted work; abatement of hazard-ous conditions.

Any privately owned work or structure authorized by a permit issued pursuant to the requirements of this article shall be privately maintained by the applicant, his successors and assigns. Whenever, in the opinion of the Director, said work or structures are not maintained in such a manner as to prevent deterioration to the extent

that they become a hazard to the public or to navigation, [or] an obstruction of flow, or prevent access for drainage maintenance purposes, or may damage adjacent property, then the Director shall notify the owner in writing to remedy the same by alteration, adjustment or removal at the owner's expense; provided, however, that within fifteen (15) days after receipt of written notice from the Director, the owner may appeal the matter by requesting in writing a hearing before the Environmental Quality Control Board. If no appeal is taken to the Environmental Quality Control Board and the owner has not performed remedial work within thirty (30) days from the date of such notice, or if an appeal is taken and the Board, after hearing and notice thereof, shall determine that remedial work is necessary and the owner does not perform the remedial work within the time established by the Board for the performance, the Director shall have the same or any other remedial work that in the Director's opinion will alleviate or eliminate the situation, including, but not limited to, total demolition of the structure, performed at the County's expense; and the County shall have a lien prior in dignity to all other liens, excepting city and County taxes and liens of equal dignity therewith, on the real property of the owner to the extent of the cost to the County, including administrative cost for the remedial work. Notice of such lien, executed in the name of the County Commission, shall be recorded in the proper books kept by the Clerk of the Circuit Court of the County and shall remain in full force and effect for a period of twenty (20) years from the date thereof, unless sooner paid and satisfied; and the Director shall, in writing, advise the County Attorney at least one (1) year prior to the expiration of the twenty-year period of any such liens that have not been satisfied, in order that the same may be foreclosed if neces-

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.11. Inspection of permit work; notice of failure to comply with approved plans and specifications.

(1) Any duly authorized representative of the Department may enter and inspect any property, premises or place, except a building, on or at which work is located or is being conducted, at any reasonable time for the purpose of ascertaining the state of compliance with this article, or rules and regulations of the Department. No person shall refuse immediate entry or access to any authorized representative of the Department who requests such entry or access for the purpose of inspection, and who presents appropriate credentials; nor shall any person obstruct, hamper or interfere with any such inspection. If requested, the owner of the premises shall receive a report setting forth all facts found which relate to compliance status.

- (2) During work for which a permit has been issued, the Department shall make periodic inspections to insure conformity with the approved plans and specifications referred to in Section 24-48.5 of this chapter.
- (3) If during the work, the Department finds that the work is not being done in accordance with the said approved plans and specifications, it shall give the permittee and/or contractor and the engineer of record written notice, stating with which particulars of the approved plans and specifications the work is not in compliance. Failure to act in accordance with the requirements of the Department after receipt of written notice may result in the initiation of revocation proceedings in accordance with Section 24-48.13 of this article.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.12. Filing of statement of completion of permitted work; exemptions; release of bonds; forfeiture of bonds.

(1) Within thirty (30) days after completion of the work, the permittee or contractor shall file record drawings certified by the engineer of record with the Department. Work exempt from submitting plans prepared by an engineer and an architect under this article shall also be exempt from the requirements of this provision. Work which has been determined by the Department, during its final inspection of the project, to be in compliance with the approved plans for the project with no significant deviation, as determined by the

Director or the Director's designee, may be exempted by the Director or the Director's designee from the filing of record drawings as required above. The Florida Departments of Transportation and Environmental Protection are exempt from the requirement to submit record drawings for projects authorized by class I, class II, class III, class IV, class V, or class VI permits.

- (2) At the discretion of the Director or the Director's designee the performance and mitigation bonds may be released upon completion of the final inspection by the Department and the submittal of the record drawings, if required, or for a period up to six (6) months after the approved completion date of the work covered by the bond.
- (3) If the Director or the Director's designee determines that work authorized by a class I, class II, class III, class IV, class V or class VI permit has not been performed in accordance with the approved plans upon which the permit was issued or has not complied with all of the conditions or special conditions of the permit, the Director or the Director's designee shall notify the permittee of such noncompliance and specify a period of time in which the permittee shall correct or otherwise bring the project into compliance with the permit. In the event that the permittee fails or is unable to comply with the requirements of the notice, the Director or the Director's designee may, in addition to available enforcement remedies, call the performance and/or mitigation bonds for the project. Funds from the forfeiture of said bonds shall be placed into the Biscayne Bay Environmental Enhancement Trust Fund for use in the general restoration and enhancement of Biscavne Bay.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.13. Suspension, revocation, modification, change of permit; notice.

(1) If the Director or the Director's designee determines that the permittee or contractor is not performing the work in accordance with the provisions of the permit or the approved plans upon which the permit was issued, the Director or the Director's designee may order suspension of the permit or the stopping of work until such time as the permittee and/or contractor has complied with the permit or plans. In such cases, the permittee and/or contractor shall take all necessary precautions to leave the work area in a safe and secure condition.

- (2) Modification(s) to a permit issued for work hereunder must be approved by the Department. If, in the opinion of the Director, the proposed modification(s) will result in a substantial change to the project, said modification(s) shall be subject to a public hearing before the Board of County Commissioners.
- (3) A violation of the conditions, restrictions or limitations imposed by the Board of County Commissioners or the Department and made part of the permit, and/or failure of the permittee or contractor to perform said work in accordance with the approved plans and specifications thereof, or any material false statement in the application may result in the revocation in whole or in part of a permit issued for work hereunder.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.14. Judicial review of decisions concerning permits.

Any person aggrieved by any decision of the Board of County Commissioners with regard to the granting, denial, granting with limitations, restrictions or conditions, or the revocation or modification of any permit in this article may seek judicial review in accordance with the Florida Rules of Appellate Procedure.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-48.15. Comprehensive environmental impact statement.

- (1) Procedure.
- (a) The Director shall determine which of the comprehensive environmental impact statement assessment points described in Section 24-5 shall be addressed by a particular comprehensive environmental impact statement. The Director's decision shall be based upon a preapplication conference held between a permit applicant

- and the Department and based upon any other relevant information submitted by the applicant or available to the Department.
- (b) The criteria to be used at a preapplication conference for determining the scope of a comprehensive environmental impact statement shall include the following:
 - (i) The relevance of the proposed work to each of the items described in Section 24-48.3(1)(a). Relevance shall be based upon both direct and indirect factors such as but not limited to location of the proposed work, proximity of the work to environmentally sensitive areas, past experience with similar work, and scope and magnitude of the proposed work.
 - (ii) The extent to which each of the comprehensive environmental impact statement assessment points may provide useful information and data relating to each of the items for which the proposed work is determined to be relevant.
- (2) The format for a comprehensive environmental impact statement shall follow guidelines established by the Director.
- (3) A comprehensive environmental impact statement shall not be required for any of the following work:
 - (a) Construction of one (1) single-family residence consistent with existing zoning regulations.
 - (b) Access driveway to a single-family residence within a lot zoned for one (1) single-family residence.
 - (c) Agriculture on five (5) acres of land or less, ancillary to an existing single-family residence, or ancillary to a single-family residence under construction, as allowed under Miami-Dade County zoning regulations.
 - (d) Rockplowing or other agricultural development in the East Everglades area of critical environmental concern when said agriculture is allow-

- able under Chapter 33B of the Code of Miami-Dade County, Florida, and is consistent with the best management practices under Chapter 33B of the Code of Miami-Dade County, Florida.
- (e) Rockmining within the transitional Northeast Everglades when said rockmining is consistent with Miami-Dade County lake criteria.
- (f) Elevated boardwalks.
- (g) Class I short form permit applications.
- (4) The Director may, in his discretion, exempt an applicant from the requirement of preparing a new comprehensive environmental impact statement for a permit application for proposed work which work has been previously the subject of a deactivated application by the same applicant.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.16. Prohibition of top pruning of mangrove trees.

It shall be unlawful for any person to top prune or authorize, allow, suffer or permit the top pruning of mangrove trees in a coastal band community. No class I permit shall be approved or issued for the top pruning of coastal band mangrove trees except for that top pruning which is necessary for the protection of overhead power lines. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-48.17. Registration, examination, and certification requirements for professional mangrove trimmers.

Pursuant to the authority granted by Section 403.9324, Florida Statutes, it shall be unlawful for any person to perform mangrove trimming or to authorize, allow, suffer, permit, or supervise mangrove trimming anywhere in Miami-Dade County without first having registered with the Department and having paid the registration fee authorized by Section 403.9329, Florida Statutes, in an amount established by administrative order of the County Manager and approved by the

Board of County Commissioners. Prior to undertaking to perform any trimming activities authorized under the exemption provided by Section 403.9326(1)(a), Florida Statutes, a registered professional mangrove trimmer shall:

- (1) Provide written notice to the Department a minimum of ten (10) days prior to the commencement of trimming activities on each property. The notice shall include the location, the property owner's name, principal address and phone number, and the date of the proposed commencement of work; and
- (2) Personally supervise the trimming activity; and thereafter notify the Department within twenty-four (24) hours if any mangroves are "altered" (as defined in Section 403.9325(1), F.S.) as a result of the work. The professional mangrove trimmer's registration shall be valid for a period of one (1) year and may be renewed by the Department prior to its expiration upon prior payment of the registration renewal fee in an amount established by administrative order of the County Manager and approved by the Board of County Commissioners.

Upon the effective date of the ordinance from which this section derives, all applicants for certification as professional mangrove trimmers shall be required to have passed an examination designed to test the applicant's knowledge and ability in this field. The Department shall offer a written, oral or practical examination, or a combination of the aforesaid. The fee for examination and certification shall be in an amount established by administrative order of the County Manager and approved by the Board of County Commissioners. A person who has paid the required fee and obtained certification shall be exempt from the registration requirements and fees described in Section 24-48.17 of the Code of Miami-Dade County, Florida, for the time period the certification is valid.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.18. Transfer of permits.

- (1) The Director, or the Director's designee, is hereby authorized and empowered to transfer, in whole or in part, short form and standard form class I, class II, class IV, class V or class VI permits issued pursuant to this Article from the person (transferor) who has obtained the issued permit to another person (transferee) and shall transfer same, provided:
 - a) The completed application for transfer is filed in writing with the Director, or the Director's designee, on or before one hundred and twenty (120) days after the date of transfer of fee simple ownership of the property which is the subject of the permit, and
 - (b) The application for transfer is determined by the Director, or the Director's designee, to be completed on or before one hundred and twenty (120) days after the date of transfer of fee simple ownership of the property which is the subject of the permit approval, and
 - (c) That all of the requirements of (3) below are fulfilled.
- (2) The Director, or the Director's designee, is hereby authorized and empowered to transfer, in whole or in part, short form and class I, class II, class III, class IV, class V or class VI permit approvals by the Board of County Commissioners from the person (transferor) who obtained the permit approval from the Board of County Commissioners to another person (transferee) and shall transfer same, provided:
 - (a) The completed application for transfer is filed in writing with the Director, or the Director's designee, on or before one hundred and twenty (120) days after the date of transfer of fee simple ownership of the property which is the subject of the permit approval, and
 - (b) The application for transfer is determined by the Director, or the Director's designee to be completed on or before one hundred and twenty (120) days after the date of

- transfer of fee simple ownership of the property which is the subject of the permit approval, and
- (c) All of the requirements of (3) below are fulfilled.
- (3) Requirements for transfer:
- (a) The subject project shall be in compliance with all of the restrictions, limitations, and conditions of the issued Class I, Class II, Class III, Class IV, Class V or Class VI permit or permit approval and any related covenants running with the land at the time of submittal of the application for transfer, and continuously throughout the time period during which the application for transfer is being processed by the Department.
- (b) The completed application for transfer shall be filed jointly in writing by the proposed transferor and transferee in a form prescribed by the Director, or the Director's designee, not later than ninety (90) days prior to the expiration date of the issued permit and, for permit approvals granted by the Board of County Commissioners for which a permit has not yet been issued, not later than ninety (90) days prior to expiration of the permit approval.
- (c) If the person to whom the permit has been issued or permit approval granted transfers fee simple ownership of the property which is the subject of the permit or permit approval prior to submittal to the Department of the application for transfer, the proposed transferee shall be the current fee simple property owner and evidence of such fee simple property ownership shall be provided to the Department as part of the application for transfer.
- (d) The proposed transferee shall agree in writing, in a form prescribed by the Director or the Director's designee, to comply with all the existing conditions, limita-

- tions, and restrictions of the issued permit or granted permit approval as part of the application for transfer.
- (e) The proposed transferee shall post a performance and mitigation bond, if applicable, in the same amount and form as is currently required in the existing permit for the subject project as part of the application for transfer.
- (f) All applicable fees for such transfer shall be paid as part of the application for transfer.
- (g) All additional information requested by the Director or the Director's designee with respect to the subject property shall be provided to the Department as part of the application for transfer within the time period required by the Director or the Director's designee.
- The proposed transferee shall agree to any additional conditions, limitations or restrictions to the issued permit required by the Director or the Director's designee, which are consistent with the issued short form or issued standard form permit and, for permit approvals granted by the Board of County Commissioners, any additional conditions, limitations or restrictions which are consistent with the original granting of the approval by the Board of County Commissioners, as part of the application for transfer. In the case of rockmining, such conditions, limitations, or restrictions shall not reduce the deep mining area and volume previously permitted.
- (i) The proposed transferee has not been convicted of a violation of any provision of Chapter 24 of the Code of Miami-Dade County, Florida within the seven (7) year time period prior to the filing of the application for transfer.
- (j) The proposed transferee has not been adjudicated in violation of any provision of Chapter 24 of the Code of Miami-Dade County, Florida, within the five-year time period prior to the filing of the application for transfer.

- (k) The proposed transferee shall provide evidence of compliance with all of the following provisions of the Code of Miami-Dade County, Florida as part of the application for transfer:
 - (i) Section 24-48.2(I)(B)(1)
 - (ii) Section 24-48.2(I)(B)(2)
 - (iii) Section 24-48.2(II)(A)(2)
 - (iv) Section 24-48.2(II)(A)(3)
 - (v) Section 24-48.2(II)(A)(4)
 - (vi) Section 24-48.2(II)(A)(7)
 - (vii) Section 24-48.2(II)(A)(8)
 - (viii) Section 24-48.2(II)(A)(9)
 - (ix) Section 24-48.5(a)
 - (x) Section 24-48.5(b)
 - (xi) Section 24-48.5(c)
 - (xii) Section 24-48.5(d)
 - (xiii) Section 24-48.5(e)
- (4) The Department is hereby prohibited from processing any application for transfer of a permit or permit approval which is:
 - (a) Incomplete, or
 - (b) Not timely filed, or
 - (c) Not timely completed in accordance with the provisions of Sections 24-48.18 (1), (2) and (3).
- (5) The Department is hereby prohibited from approving any application for transfer of a permit or permit approval which does not fulfill each and every requirement set forth in this section.
- (6) No later than sixty (60) days after the approval by the Director, or the Director's designee, of the date of transfer of a class I, class II, class III, class IV, class V, or class VI permit or permit approval, the transferee shall provide to the Department the same evidence of fee simple ownership of the property by the transferee required pursuant to the provisions of Section 24-48.2(I)(B)(1)(c) or Section 24-48.2(II)(A)(1) of the Code of Miami-Dade County, Florida if such evidence of fee simple ownership of the property by the transferee has not already been provided to the Department.

- (7) A mortgagee or lien-holder who obtains fee simple ownership and possession of real property through foreclosure or settlement of an action for foreclosure shall be eligible to be a transferee after acquisition of the fee simple ownership of the property, subject to the fulfillment of all the requirements in (3) above, provided a complete application for transfer is filed in writing with the Department not later than one hundred and twenty (120) days after the mortgagee or lien-holder obtains the fee simple ownership of the property and not later than ninety (90) days prior to the expiration date of the issued permit or granted permit approval. The signature of the prior property owner shall not be required on the application for transfer.
- (8) All transfers of class I, class II, class III, class IV, class V, and class VI issued permits and granted permit approvals by the Board of County Commissioners which have been processed by the Department prior to the effective date of Ordinance No. 90-130 are hereby approved, confirmed, and made effective retroactive to the dates of such transfers.
- (9) It shall be unlawful for any person to perform work, or authorize, allow, suffer or permit work to be performed requiring a Class I, Class II, Class IV, Class V, or Class VI permit after a fee simple transfer of a property unless the Department has approved an application for transfer of the issued permit authorizing the current fee simple property owner to perform the work.
- (10) The Environmental Quality Control Board shall not have any jurisdiction pursuant to Section 24-11, Section 24-8 or Section 24-12 of the Code of Miami-Dade County with respect to any of the provisions of this section contained herein. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.19. Permit issuance.

Approvals of class I, class II, class III, class IV, class V and class VI permits by the Board of County Commissioners shall only be valid for a period of thirty (30) months, in the case of rockmining, or for a period of eighteen (18) months, for all other work, from the date of the approval unless

another time period is stated in the resolution granting approval. If the applicant has not obtained a permit issued by the Department within thirty (30) months, in the case of rockmining, or within eighteen (18) months, for all other work, from the date of the approval by the Board of County Commissioners or within the time period stated in the resolution granting approval, then a new application for a permit shall be filed. Upon the timely application of any person, other than the person seeking the permit, filed in a court of competent jurisdiction which seeks judicial review in accordance with Section 24-48.14 of the Code of Miami-Dade County, Florida, of a decision granting or granting with limitations, restrictions or conditions of any permit in this article, the time periods hereinabove shall be tolled until disposition of the judicial review. All approvals of class I, class II, class III and class IV permits by the Board of County Commissioners prior to December 7, 1990 for which the applicant has not obtained a permit issued by the Department within twelve (12) months from the effective date of this ordinance shall be null and void and no permit shall be issued by the Department. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55,

§ 2, 5-6-08)

Sec. 24-48.20. North Trail Basin Plan.

Except as provided in Section 24-48.3(5)(e), all work performed in the North Trail Basin shall be consistent with the North Trail Basin Plan, which is hereby adopted by reference in its entirety. The Clerk of the Board of County Commissioners is directed to keep a copy of the North Trail Basin Plan on file as an attachment to this ordinance. All work in the North Trail Basin shall be consistent with the goals, guidelines, standards, and project design criteria set forth in the North Trail Basin Plan to ensure the maintenance of, or mitigation for the loss of, biological resources. All work in the North Trail Basin shall conform to the North Trail Basin cut and fill criteria which have been set forth in Department Technical Document 89-4 to ensure proper water management.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.21. Bird Drive Everglades Wetland Basin Plan.

Except as provided in Section 24-48.3(5)(e), all work performed in the Bird Drive Everglades

Wetland Basin shall be consistent with the Bird Drive Everglades Basin Plan, which is hereby included by reference in its entirety. The Clerk of the Board of County Commissioners is directed to keep a copy of the Bird Drive Everglades Basin Plan on file as an attachment to this ordinance. All work in the Bird Drive Everglades Wetland Basin shall be consistent with the goals, guidelines, standards, and project design criteria set forth in the Bird Drive Everglades Basin Plan to ensure the maintenance of, or mitigation for the loss of, biological resources. Work in the Bird Drive Everglades Wetland Basin shall also conform with the Bird Drive Everglades Fill Encroachment and Water Management Criteria which have been set forth to ensure proper water management.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-48.22. Biscayne Bay and environs designated aquatic park and conservation area.

- (1) In recognition that is in the interest of the public welfare to protect and preserve unique, natural, aesthetic and recreational values. Biscavne Bay and its environs is hereby declared to be an "aquatic park and conservation area" for the use and benefit of the citizens of Miami-Dade County.
- (2) The County Manager is hereby empowered to develop a plan for the protection and preservation of said "aquatic park and conservation area" including the initiation and coordination of appropriate research and analysis, the development of both short and long-range plans, and the promulgation of rules and regulations which, after ratification by the Board of County Commissioners and the appropriate agencies of the State of Florida and of the federal government, shall have the force and effect of law.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.23. Prohibition of floating structures.

It shall be unlawful for any person to construct, place, maintain, permit, let, allow, suffer or cause the construction, placement, maintenance or existence of any floating structure in, on, or upon any of the tidal waters of Miami-Dade County. This prohibition shall not apply to any floating structure placed, maintained or in existence in, on, or upon any of the tidal waters of Miami-Dade County on the effective date of Ordinance No. 84-56. This prohibition furthermore shall not apply to residential houseboats, floating boat docks, floating fishing docks, or other floating structures upon which only water dependent uses occur or exist. All floating structures which are not prohibited by this section, except residential houseboats, shall be required to obtain a class I permit. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-48.24. Prohibition of non-water-dependent fixed structures.

It shall be unlawful for any person to construct, place, install, maintain, permit, allow, suffer or cause the construction, placement, installation, maintenance or existence of any fixed structure in, on, over or upon any of the tidal waters of Miami-Dade County which does not have a waterdependent use. Fixed structures which do not have a water-dependent use include, but are not limited to, residences, offices, hotels, motels, restaurants, lounges, retail or wholesale stores, club houses, helicopter pads, meeting facilities, commercial signs, transmitting or receiving antennas and towers, or storage or parking facilities. This prohibition shall not apply to fixed structures that were fully permitted on the effective date of this section or to their repair providing permits are obtained.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-48.25. Procedure governing variances for prohibited floating structures and prohibited fixed structures.

All applications for variances of floating structures and fixed structures prohibited by Sections 24-48.23 and 24-48.24 of this Code shall be heard and ruled upon by the Board of County Commissioners. Any person requesting said variance shall submit a standard form class I coastal construction application and application fee to the Department, which shall review said application and make a recommendation to the Board of County

Commissioners for approval, denial or approval subject to conditions, limitations or restrictions for the proposed variance. The Board of County Commissioners shall hold a public hearing concerning the proposed variance. A notice of the time and place of said public hearing shall be published in a newspaper of general circulation in Miami-Dade County a minimum of seven (7) days prior to the public hearing. Said notice shall include a brief description of the proposed work and the location of the proposed work. A courtesy notice containing substantially the same information set forth in said published notice shall be mailed to those parties whose names appear on the application as the owners of all riparian or wetland property within three hundred (300) feet of the proposed work. Failure to mail or receive said courtesy notice shall not affect any action or proceeding taken thereunder. The Director, when making the Director's recommendation to the Board of County Commissioners, and the Board of County Commissioners, when considering the variance request, may consider any or all of the following factors: Visual or physical access by the general public to Biscayne Bay and its adjacent tidal waters, historical significance, the need for covered vessel repair facilities, environmental impact or cumulative environmental impact, navigation, public safety, aesthetics, the provisions of Section 258.397 F.S., which established the Biscayne Bay Management Plan (Section 33D-1 through 33D-4), the Biscayne Bay Aquatic Preserve Act (Section 258.397 F.S.), the Rules of the Biscayne Bay Aquatic Preserve (Chapter 18-18 F.A.C.) as well as the evaluation factors contained within Section 24-48.3. The Board of County Commissioners shall, after holding the public hearing, approve, deny or approve subject to conditions, limitations or restrictions, the variance proposed under the application.

If the Board of County Commissioners approves a variance, the procedures concerning issuance of a permit contained within Section 24-48.5 shall be followed.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

DIVISION 2. TREE PRESERVATION AND PROTECTION

Sec. 24-49. Permits for tree removal and relocation, improperly issued permits, violation of permit conditions, exemptions from tree removal permits; mortgagee exemption from liability.

- (1) It shall be unlawful for any person, unless otherwise permitted by the terms of this article, to do tree removal work or to effectively destroy any tree, or to effectively destroy any understory in a natural forest community, without first obtaining a permit from the Department.
- (2) No municipal or County official shall issue a tree removal permit that does not comply with the provisions of this article. Any such permit shall be void.
- (3) It shall be unlawful for any person to violate or not comply with any of the conditions of a Miami-Dade County tree removal permit.
- (4) The following activities are exempt from tree removal permits:
 - (a) Removal of trees within the yard area of an existing single-family residence, provided the trees are not within a natural forest community, and are not specimen trees. This exemption does not apply to trees which are growing on County rightsof-way adjoining existing single-family residences;
 - (b) Removal of trees for the construction of a new single-family residence, provided that:
 - (i) The lot is one (1) acre or less in size (43,560 square feet), if an AU zoned lot, or one-half (¹/₂) acre or less in size (21,780 square feet), for any other zoned lot; and
 - (ii) The lot is being developed as the principal residence of the owner-builder; and
 - (iii) The lot is not within an area designated as a natural forest community; and
 - (iv) The trees are not specimen trees.

- (c) Removal of any dead tree.
- (d) Removal of trees within State-approved plant nurseries and botanical gardens, provided said trees were planted and are growing for the display, breeding, propagation, sale or intended sale to the general public in the ordinary course of business.
- (e) Removal of trees for the establishment, maintenance and operation of a bona fide grove or bona fide tree nursery, except when the proposed tree removal is to occur in a natural forest community designated under Resolution No. 1764-84 or under subsequent revisions of the natural forest community maps or when the proposed tree removal will affect specimen trees as defined herein. Any person desiring to remove trees pursuant to this provision shall obtain written approval from the Department prior to the commencement of any such activities under this exemption.
- (f) Removal of any of the following tree species (provided the activity is not within a natural forest community, in which case a permit shall be required, but all application and permit fees shall be waived by the Department):
 - (i) Melaleuca quinquenervia (cajeput or paperbark tree).
 - (ii) Casuarina spp. (Australian pine, beefwood).
 - (iii) Schinus terebinthifolius (Brazilian pepper).
 - (iv) Bischofia javanica (bishopwood).
 - (v) Ricinus communis (castorbean).
 - (vi) Psidium guajava (guava).
 - (vii) Albizia lebbek (woman's tongue).
 - (viii) Acacia auriculaeformis (earleaf acacia).
 - (ix) Schefflera actinophylla (Queensland Umbrella Tree).
 - (x) Araucaria heterophylla (Norfolk Island Pine).

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- (xi) Metopium toxiferum (poison wood).
- (xii) Adenanthera pavonina (red sandalwood).
- (xiii) Cupaniopsis anacardioides (carrotwood).
- (xiv) Dalbergia sissoo (Indian dalbergia, sissoo).
- (xv) Ficus microcarpa (=R. nitida; =F. retusa varnitida) (laurel fig).
- (xvi) Flacourtia indica (governor's plum).
- (xvii) Hibiscus tiliaceus (mahoe).
- (xviii) Leucaena leucocephala (lead tree).
- (xix) Mimosa pigra (catclaw mimosa).
- (xx) Thespesia populnea (seaside mahoe).
- Removal of any tree which has been destroved or effectively destroyed by an Act of God, or by acts outside of the control of any person, individually or otherwise, who has or had a legal, beneficial or equitable interest in the real property upon which such tree is located, which acts could not have been prevented by the exercise of reasonable care by any such person, individually or otherwise, who has or had a legal, beneficial or equitable interest in the real property upon which such tree is located. Where a tree has been destroyed or effectively destroyed by acts outside of the control of a person who has or had a legal, beneficial or equitable interest in the real property upon which such tree is located, which acts could not have been prevented by the exercise of reasonable care by such person, this provision shall be construed to impose joint and several liability upon the person(s) destroying or effectively destroying such tree, and to exempt from liability for such destruction or effective destruction the person who has or had a legal, beneficial or equitable interest in the real property upon which such tree is located.
- (h) Removing, trimming, cutting or altering of any mangrove tree or removal of any tree located upon land which is wetlands as defined in Section 24-5. Trees located

- upon land which is wetlands as defined in Section 24-5 and mangrove trees located anywhere in Miami-Dade County shall be subject to the permitting requirements of Article IV of this chapter.
- Removal of a tree or trees within a bona fide fruit grove for the express purpose of converting said bona fide fruit grove to another bona fide agricultural purpose, provided however, that the owner of the real property upon which the bona fide fruit grove is planted has entered into a covenant agreement with Miami-Dade County in the form approved by the Board of County Commissioners, which covenant requires that said property shall only be used for bona fide agricultural purposes for a period of five (5) years from the date of execution. The form for said covenant agreement shall be approved by the Board of County Commissioners by resolution concurrently with the approval of this ordinance so that all covenant agreements submitted pursuant to this provision can be executed and accepted by the Director and then recorded in the Official Records of Miami-Dade County without the necessity of additional public hearings. In the event that the provisions of said covenant are not complied with, the Director may commence an action in law or equity to ensure adherence with the replanting requirements contained in Section 24-49.4 of the Code of Miami-Dade County.
- (5) Any mortgagee with respect to property upon which any violation of this tree ordinance has occurred shall not be liable for such violation unless, prior to said violation, said mortgagee has foreclosed upon said property or participated in the management or control of said property, or unless said mortgagee has effected or caused the tree ordinance violations occurring on said property.
- (6) Notwithstanding the provisions of Section 24-31(7) herein, if actions or omissions constituting a violation of this article occurred at a time when the completed actions or omissions were not

prohibited by law, such completed actions or omissions shall not constitute a violation of this article.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-49.1. Permits generally.

Tree removal permits are required for the removal or relocation of any tree not specifically exempted under Section 24-49(4). The Department shall provide permit application forms which shall be used by permit applicants. An owner, agent of the owner, or lessee of a property may apply for a tree removal permit. If the permit application is a lessee or agent of the owner, a statement from the owner of the property indicating that the owner has no objection to the proposed tree removal shall be submitted with the application. The permit applicant shall submit to the Department a completed application form. Permit application forms shall be accompanied by two (2) sets of site plans which are subject to review and approval by the Department. The site plan shall include the locations of all existing tree resources and all proposed structures or utilities which may require removal or relocation of trees. The Department may require that said plans be prepared by either a landscape architect, architect or an engineer registered in the State of Florida. If the submitted site plan does not provide sufficient information to determine which trees will be affected by the proposed development, the Department may require that a tree survey of the site be prepared and submitted to the Department for review.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-49.2. Review and evaluation of permit applications, natural forest community standards, specimen tree standards.

A review of each completed tree removal permit application shall be conducted by the Department. This review and all actions taken by the Department under the provisions of this article shall be conducted using best available practices from biology, botany, forestry, landscape architecture and other relevant fields, and shall be conducted in a manner that is consistent with all

applicable goals, objectives and policies in the Comprehensive Development Master Plan for Miami-Dade County, Florida. Upon receipt of a completed permit application, the Department shall determine whether the site contains any portion of a natural forest community, specimen trees or any other trees subject to the provisions of this article as follows:

1) If a site contains any portion of a natural forest community, then the provisions of Section 24-49.2(I) shall apply. If any person is in doubt as to whether a particular property has been designated as a natural forest community, said person may request a written determination from the Department. Said written determination shall state whether or not a particular property has been so designated by the Board of County Commissioners in the forest community maps under Resolution 1764-84 and shall be prepared by the Department within twenty (20) days of receipt of said request.

Any property owner of a designated natural forest community site may request that the Department verify the designated boundaries of a specific natural forest community site or may request that a specific site be deleted from the approved natural forest community maps. Requests for verification of the designated boundaries of a specific natural forest community site or the deletion of a specific site from the approved maps shall be made in writing to the Department. Upon receipt of such requests, Departmental staff shall inspect the site and make a determination whether the approved boundaries accurately reflect the current boundaries of a natural forest community as defined herein, or whether a site should be deleted from the approved maps. If it is determined that the approved boundaries of a specific natural forest community site are no longer accurate, the Director or the Director's designee shall modify the approved boundary of the natural forest community. One (1) copy of the modified boundary shall be furnished to the person

who originated the request within thirty (30) days of receipt of the original request and another copy shall be made permanently available at the Department for reference by the public. If it is determined that a specific natural forest community site in its entirety no longer meets the definition of a natural forest community as defined herein, the Director shall recommend to the Board of County Commissioners that the site be deleted from the approved natural forest community maps.

- (2) If a site contains any specimen trees, then the provisions of Section 24-49.2(II) shall apply.
- (3) If there are trees present on a site other than any portion of a natural forest community or specimen trees, then the replacement provisions of Section 24-49.4 shall apply.
- (4) In the event that a site contains any combination of natural forest community, specimen trees or other trees, then Sections 24-49.2(I), 24-49.2(II), and 24-49.4 shall be applied in proportion to the presence of each type of tree or community.

The standards to be applied in reviewing tree removal permit applications involving natural forest communities or specimen trees are as follows:

- (I) Natural Forest Community Standards.
 - Upon receipt of an application (1) for tree or understory removal work in a natural forest community, Departmental staff shall verify that the site currently meets the definition of a natural forest community as defined herein. If Departmental staff determine that a site no longer meets the definition of a natural forest community, then the Director shall recommend to the Board of County Commissioners that the site be deleted from the natural forest community maps. Upon approval by

resolution of the Board of County Commissioners, the site will no longer be subject to the provisions of Section 24-49.2(I), but may nevertheless be subiect to the provisions of Sections 24-49.2(II) and 24-49.4. In the event that Departmental staff determine that the site currently meets the definition of a natural forest community as defined herein, but the boundary line shown on the approved maps no longer accurately reflects the boundary of a natural forest community as defined herein, the boundary of the natural forest community as shown on the approved maps shall be modified by the Director or the Director's designee. One (1) copy of the modified boundary shall be furnished to the property owner and another copy shall be made permanently available at the Department for reference by the public. If the boundaries of a natural forest community are modified, only that area encompassed within the modified boundary of the natural forest community shall be subject to the provisions of this section.

(a) Except as provided in Section 24-49.2(I)(1)(c) below, a permit shall not be issued to clear more than ten (10) percent of the canopy and understory of any hardwood hammock natural forest community or more than twenty (20) percent of the canopy and understory of any pineland natural forest community, provided said sites are five (5) acres or greater. If a site has a total area of less than five (5) acres and the

- natural forest community covers all or a portion of the site, a permit may be issued to clear up to one-half ($\frac{1}{2}$) acre within a hammock natural forest community and up to one (1) acre within a pineland natural forest community, only if the clearing of ten (10) percent or twenty (20) percent, respectively, does not allow some use of the property.
- (b) The remaining portions of all natural forest community sites, outside of the areas where tree and understory removal have been permitted by the Department, shall be deemed preserve areas and shall be left in a natural state. Additional clearing of trees or understory shall be prohibited in these preserve areas, except as authorized by other provisions of this article. Firebreaks for pineland natural forest community preserves shall be permitted, and the total area encompassed by the firebreaks (up to a maximum of ten (10) percent of the natural forest community site) shall not be included in the total area which is permitted to be cleared, pursuant to Section 24-49.2(I)(1)(a) and (c). Required dedicated public rights-of-way and required public utility easements in pineland and hammock natural forest communities shall be excluded (up to a maximum of ten (10) percent of the natural forest community

- site) from the total areas permitted to be cleared, pursuant to Section 24-49.2(I)(1)(a) and (c). The criteria for determining which portion of a natural forest community shall be preserved are as follows:
- (i) Whether the preservation area affords maximum protection to rare, threatened and endangered species.
- (ii) Whether the preservation area affords maximum protection to areas of high wild-life utilization such as, but not limited to, nesting or breeding areas.
- (iii) Whether the preservation area is located to minimize the number of trees and understory vegetation that is to be removed and disturbed for development.
- (iv) Whether the preservation area is located to protect the geological and archaeological value of the site.
- (v) Whether the preservation area is located contiguous with another natural forest community.
- (c) Permits for tree and understory removals within natural forest communities that are issued in accordance with Section 24-49.2(I)(1)(a) and (b) above shall not require any tree or understory replacement. As an alternative to

Section 24-49.2(I)(1)(a). above, a permit may be issued to clear up to an additional ten (10) percent of a pineland natural forest community, provided that tree and understory replacement are a requirement of the permit. Said tree and understory replacement shall provide for the replacement of one hundred (100) percent canopy coverage equal to the square footage of the additional area to be cleared regardless of the actual tree canopy contained therein to account for the replacement of the trees and understory, pursuant to the provisions of Section 24-49.4(1)(b)(i).

- Any permit issued for the removal of trees and understory within a natural forest community shall include a specific requirement which allows a minimum of fifteen (15) days for the salvaging of native plant materials within the area which is permitted to be cleared. However, any person desirous of salvaging plant materials must first have authorization from the permittee or owner of the property, which authorization shall not be unreasonably withheld. The Department shall maintain a list of persons interested in salvaging native plant materials and shall notify them immediately upon issuance of such a permit.
- (2) Alternatives to the provisions of Section 24-49.2(I)(1). In or-

- der to provide for unique design considerations for the replacement requirements in Section 24-49.2(I)(1)(c) above, and to address natural forest community sites which are within the 1990 Urban Development Boundary, the following shall apply:
- (a) Alternative tree and understory replacement plans may be submitted for projects which require mitigation, pursuant to Section 24-49.2(I)(1)(c)above, that are outside of the 1990 Urban Development Boundary. Said alternative plan shall be prepared by a landscape architect or other individual knowledgeable in the field of natural area restoration, and shall indicate the deviations from the standard requirement and justification for approval.
- Alternative tree and understory replacement and preservation plans may be submitted for projects which affect natural forest communities which are located within the 1990 Urban Development Boundary and which cannot meet the express terms of Section 24-49.2(I)(1). In such cases. the applicant shall have the burden of demonstrating that a proposed project meets the intent of this article and that the provisions of Section 24-49.2(I)(1) cannot be met.
 - (i) At a minimum, an alternative tree and understory replace-

ment and preservation plan shall include:

- 1. Α statement sealed by a landscape architect registered in the State of Florida that indicates that he has prepared the submitted plan and that the intent of this article can effectively be met through the submission of an alternative plan; provided, however, if the project only encompasses single family residence with ancillary facilities, then said statement and plan may be made by an individual knowledgeable in the field of natural area restoration;
- 2. The proposed location of all vegetation preservation and replantings (consisting exclusively of native species), all property lines, and all proposed existing or structures, driveways and utility easements; and

- 3. tabulation that identifies any deviations from the requirements of Section 24-49.2(I)(1) and explicitly provides for equivalent compensation by alternative replanting (consisting exclusively of native species) or trust fund contributions.
- (ii) Approval of the plan shall be determined by the Department. The Department shall consider the following factors in evaluating the alternative preservation plan:
 - Whether the proposed plan preserves a portion of the natural forest community.
 - 2. Whether the proposed plan provides for onsite or off-site replanting, including understory replanting.
 - 3. Whether the proposed plan provides for an equitable contribution to the Miami-Dade County Tree Preservation

Trust Fund when the minimum preservation standards of Section 24-49.2(I)(1) are not met.

(3)Modified preservation and replacement plan based upon justifiable, detrimental reliance allowed. In order to address these cases in which a person has purchased natural forest community property in justifiable, detrimental reliance upon written representations of Department staff made prior to the enactment of Chapter 24-49 of the Code of Miami-Dade County regarding replacement and preservation requirements for said property, the following shall apply:

> Any owner of a natural forest community property who has purchased natural forest community property in justifiable, detrimental reliance upon written representations of Department staff made prior to the enacting of Chapter 24-49 [Article IV] of the Code of Miami-Dade County may submit to the Department an application for approval of a modified replacement and preservation plan which shall incorporate the replacement and preservation requirements reflected in the agreement relied upon. In such cases, the applicant shall have the threshold burden of demonstrating to the Department and the **Board of County Commis**sioners the detrimental,

- justifiable reliance which provides the basis for his application.
- (a) The Department shall make its recommendation to the Board of County Commissioners, and the Board of County Commissioners shall make its decision, for denial or approval with conditions of the modified replacement and preservation plan. In evaluating the proposed modified preservation and replacement plan, and in making the threshold determination of whether the applicant has purchased natural forest community property in justifiable, detrimental reliance upon written representations of Department staff made prior to the enactment of Chapter 24-49 [Article IV] of the Code of Miami-Dade County, the Department shall make its recommendation, and the Board of County Commissioners shall make its decision, based upon the following factors:
 - (i) At a minimum, the application for modified replacement and preservation plan shall reflect that the elements provided for Section 24in 49.2(I)(2)(b)(i)1, 2, and 3 above are included in the proposed plan, provided, however, that, if the Board of County Commissioners determines that the applicant purchased nat-

- ural forest community property in justifiable, detrimental reliance upon written representations of Department staff made prior to enactment of Chapter 24-49 of the Code of Miami-Dade County, and if the written representations relied upon did not address tree replacement or tree compensation quirements, then the tree replacement or tree compensation requirements applicable at the time of such justifiable, detrimental reliance may be made a part of the modified replacement and preservation plan.
- (ii) In addition to the elements provided for in Section 24-49.2(I)(2)(b)(i)1, 2, and 3, the application for modified replacement and preservation plan shall include information regarding the following factors:
 - 1. The nature of the written representations relied upon: Whether the representations by the Department could be construed to be a final determination regarding preser-

- vation and replacement requirements for the subject property; and
- 2. The existence of a permit or written consent agreement with Departthe ment: Whether a tree removal permit or consent agreement with the Department was entered into by the owner of the subject property or his immediate predecessor in title prior to purchase of the subject property; and
- 3. The circumstances of the property purchase: Whether (a) the purchase of the subject property curred before or after enactment of Chapter 24-49 of the Code of Miami-Dade County, and (b) the purchase of the subject property occurred close in time to the date of the written representations relied upon, and (c) the owner has legal representation or other

- professional assistance in negotiating and concluding said purchase; and
- Subsequent dealings with the Department: Whether the applicant had dealings with the Department occurring subsequent to the date of the written representations relied upon and prior to the date of purchase of the subject property.

The Board of County Commissioners shall hold a public hearing concerning the application. A notice of the time and place of said public hearing shall be published in a newspaper of general circulation in Miami-Dade County a minimum of seven (7) days prior to the public hearing. Said notice shall include a brief description of the proposed replacement and preservation plan and the location of the subject natural forest community property.

(iii) Appeal from denial of modified preservation and replacement plan. Any person aggrieved by any decision of the Board of County Commissioners pursuant to this Section 24-49.2(I)(3) may seek judicial review in accordance with the Florida Rules of Appellate Procedure.

(II) Specimen Trees Standards.

- 1) Specimen trees application. Specimen trees shall be preserved whenever reasonably possible. Upon receipt of an application to remove a specimen tree, the Department shall consider the following factors in evaluating said application:
 - (a) Size and configuration of the property.
 - (b) Size and configuration of any proposed development.
 - (c) Location of the tree relative to any proposed development.
 - (d) Whether or not the tree can be preserved under the proposed plan or any alternative plan.
 - (e) Health, condition and aesthetic qualities of the tree.
 - (f) Whether the tree poses a threat to persons or property.
- of the factors enumerated in Section 24-49.2(II)(1), the Department determines that a specimen tree cannot reasonably be preserved under the proposed plan, then the applicant shall provide an alternate plan when feasible, which shall include preservation of the specimen tree and design alterations consistent with the scope and intent of the initially-proposed plan. Alterations consis-

tent with the scope and intent of the initially-proposed plan may include, but shall not be limited to:

- (a) An adjustment of building orientation on a site.
- (b) An adjustment of lot lines within a site proposal for more than one (1) lot when said adjustment will not cause an unreasonable loss of usable space. An applicant shall have the burden of proof in the determination of what constitutes an unreasonable loss of usable space.
- (3) Specimen tree relocation. If preservation of the specimen tree and any alternate design consistent with the scope and intent of the initial plan are mutually exclusive, then the Department may issue a permit to relocate the specimen tree. If the tree removal permit requires relocation, then the applicant shall be required to relocate the tree in accordance with the standards set forth in Section 24-49.6.
- (4) Removal of specimen trees. If relocation of the specimen tree is not feasible, due to the size, health, location, species or any other factor, then a permit may be issued for removal, and tree replacement shall be required.
- (5) Replacement requirements for specimen trees. As a condition of the issuance of a tree removal permit for the removal of a specimen tree, tree replacement requirements shall be twice those specified in Section 24-49.4(2)(c). In the event that replacement is not feasible onsite, then alternative off-site replacement shall be required, or,

- as a last alternative, there shall be a contribution to the Miami-Dade County Tree Trust Fund for the full value of the replacement trees. Notwithstanding the above, there shall also be an equitable contribution to the Miami-Dade County Tree Trust Fund for the irreplaceable loss of the aesthetic and environmental contributions of the specimen tree(s), according to the contribution schedule established by the Board of County Commissioners, pursuant to Section 24-49.9.
- (6) Exemptions from specimen tree replacement requirements. An applicant may be exempt from the replacement requirements of Section 24-49.2(II)(5), but subject to the tree replacement requirements in Section 24-49.4(2)(c), under the following circumstances:
 - Upon submittal of a statement from a landscape architect registered in the State of Florida which indicates that a specimen tree, due to disease, condition, growth habit or any other reasonable botanical factor, does not provide the aesthetic or environmental contribution associated with a specimen tree. Said statement shall include the specific reason(s) for the claimed exemption from the provisions of Section 24.49.4(2).
 - (b) When preservation of the specimen tree would cause a foreseeable risk to property.
 - (c) When a site contains more than one (1) specimen tree, and fifty (50) percent or

more of the existing specimen trees and at least fifty (50) percent of the existing specimen tree canopy area is preserved.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-49.3. Preliminary review of projects involving tree removal or relocation.

The Department shall review and comment on the following actions: Any application for zoning relief which requires a public hearing before the Miami-Dade County Community Zoning Appeals Board or the Board of County Commissioners: applications for plat approval; administrative site plan review; applications for approval of development plans by the developmental impact committee and the South Florida Regional Planning Council; proposed plans for new roadways or improvements to highway design projects; proposed plans for new public park and recreational areas and other public facilities. This review procedure shall determine if a tree removal permit is required under Section 24-49, and whether the following standards, when applicable, are adhered to:

- (1) Any proposed action that does not involve specimen trees or development in a natural forest community shall be subject to the replacement standards in Section 24-49.4.
- (2) Development within natural forest communities or involving specimen trees:
 - (a) If it is determined that the proposed development site is within a natural forest community or involves removal of a specimen tree, the standards set forth in Section 24-49.2 shall apply. Proposed site actions that are not in accordance with said standards shall receive a recommendation of denial from the Department.
 - (b) Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall ap-

prove, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action requiring a public hearing before the Miami-Dade County Community Zoning Appeals Board or the Board of County Commissioners for any land use involving division of property into parcels less than five (5) acres within natural forest communities without obtaining the prior written recommendation of the Director or the Director's designee. The Director or the Director's designee shall issue his written recommendation of approval only if the Director or the Director's designee determines that a preservation area equivalent in size to the minimum preservation area required for the site under Section 24-49.2(I) has been designated prior to the proposed action.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-49.4. Replacement requirements for tree removal.

- (1) Tree replacement requirements. As a condition of the issuance of a tree removal permit, the permittee shall be required to replace trees that are authorized to be removed under the provisions of this article. The number of trees and number of species of trees required for replacement shall be determined according to the procedures contained herein. When the replacement canopy area exceeds ten thousand (10,000) square feet, replacement shall be described in a land-scape replacement plan which shall meet the minimum requirements of Section 24-49.4(3), and no tree removal permit shall be issued until said plan has been approved by the Department, except as provided in Section 24-49.4(4).
 - (a) The following are exempt from this section:
 - (i) All tree removal activities included in Section 24-49(4).

- (ii) All tree removal permits affecting natural forest community sites which meet the specific preservation requirements of Section 24-49.2(I)(1)(a) and (b).
- (iii) Trees which have been successfully relocated, pursuant to Section 24-49.6.
- (b) Natural forest community replacement requirements.
 - (i) Pursuant to Section 24-49.2(I)(1)(c)., tree and understory replacement for pineland natural forest communities shall include the following:
 - All species proposed for replanting shall be native to Miami-Dade County's pinelands.
 - 2. For each additional one-half $(\frac{1}{2})$ acre which is permitted to be cleared, fifty (50) replacement pine trees (Pinus elliotti var. densa) shall be provided. Said pine trees shall meet the standards in either Section 24-49.4(4)(a)(i) or (ii); if the pine trees meet the standards of Section 24-49.4(4)(a)(i), then six hundred twenty-six (626) pineland understory and ground cover plants which meet the standards of Section 24-49.4(4)(a)(ii) shall be provided; if the pine trees meet the standards of Section 24-49.4(4)(a)(ii). then six hundred seventy-six (676) pineland understory and ground cover plans which meet the standards of Section 24-49.4(4)(a)(ii) shall be provided. The number of replacement plants for areas which are less than one-half (1/2) acre shall be determined on a prorated ba-
 - 3. The diversity of understory and ground cover species provided

- shall be maximized to the greatest extent possible based on availability of materials.
- 4. An eighty (80) percent survival rate after one (1) year shall be guaranteed for all pineland natural forest community replacement plantings.
- (ii) As an alternative to Section 24-49.4(1)(b)(i) above, a monetary contribution, equal to the cost of the replacement plants, labor costs for installation, and survival rate guarantee costs, may be made to the Miami-Dade County Tree Trust Fund. Said funds shall be utilized by the County to reestablish pineland on County-owned property or to purchase pinelands for preservation purposes.
- (iii) All other applications for the removal of trees or understory within natural forest communities which meet the requirements of Section 24-49.2(I)(1)(a) and (b) or Section 24-49.2(I)(2) shall not require any tree or understory replacement.
- (c) Specimen tree replacement requirements. As required in Section 24-49.2(II)(5), the replacement requirements for the removal of a specimen tree shall be twice those specified in this section, except as noted in Section 24-49.2(II)(6).
- (2) Procedures for determining tree replacement requirements. The Department shall determine the total number of replacement trees required for the issuance of a tree removal permit according to the following procedural steps:
 - (a) Step 1: Determining existing tree canopy coverage on-site. The area of existing tree canopy coverage of a site shall be determined by the Department, using one (1) or any combination of the following methods: Review of aerial photography; on-site inspection; and review of a tree survey. The Department may require the applicant to submit a tree survey for the purpose of this determination.

- (b) Step 2: Determining impact area of proposed project. The area of existing canopy coverage which will be affected (impact area) by the applicant's proposed development shall be determined by the Department. This determination shall be based on a site plan and completed tree removal permit application form submitted to the Department by the applicant.
- (c) Step 3: Determining number of replacement trees required to be planted. The total number of trees required for replacement shall be based on the area of impact and the category of replacement tree selected by the applicant. Each replacement tree shall compensate for a portion of the tree canopy lost in the impact area. The following table shall be used as a standard for determining the required number of replacement trees:

	Portion of Impact
	Area that each re-
	placement tree com-
Category Replace-	pensates for in
ment Tree:	square feet:
Shade Tree 1	500
Shade Tree 2	300
Palm Tree 1	300
Palm Tree 2	100
Small Tree	200

Any combination of shade trees, palm trees, or small trees shall be acceptable replacement, provided the total number of trees from all replacement categories compensate for the lost canopy. In the event that a replacement tree actually has more canopy coverage at the time of planting than the amount of credit allowed under the tree replacement formula above, then the applicant shall receive full credit for the canopy coverage provided by the replacement tree at the time of planting. The applicant shall submit a list of proposed replacement trees on a form provided by the Department. except when the total number of replacement trees exceeds twenty (20), and then the applicant shall be required to submit a landscape replacement plan consistent

- with the provisions of Section 24-49.4(3). Proposed replacement lists or plans are subject to Departmental approval. The Department shall approve proposed replacement trees that are consistent with the standards of Section 24-49.4(3).
- Step 4: Location of replacement trees. Specific placement of replacement trees onsite shall be determined by the applicant. If the site cannot accommodate the required replacement trees because of insufficient planting area as determined by the Department, then the applicant shall be required to plant replacement trees at an off-site location subject to Departmental approval, or, as a last alternative, shall provide an equitable contribution to the Miami-Dade County Tree Trust Fund to compensate for those replacement trees which cannot be accommodated on site. The amount of the contribution shall be determined according to the provisions of Section 24-49.8. If any applicant is in doubt as to whether a particular site can sufficiently accommodate the required number and species of replacement trees as initially determined by the Department, then the applicant shall submit a statement prepared by a landscape architect registered in the State of Florida, indicating whether, in his professional opinion, the site can accommodate the required number of trees and species. Upon receipt of said statement, the Department shall reevaluate its initial determination and provide the applicant with a revised determination of requirements. In the event that the landscape architect is in agreement with the Department's determination of available planting space, however, due to design considerations, the applicant would elect to propose an alternative landscape enhancement plan or an equitable contribution to the Miami-Dade County Tree Trust Fund, then the provisions of Section 24-49.4(4) or 24-49.2(II)(5), respectively, shall apply.
- (e) Step 5: Minimum species diversity standards. When more than ten (10) trees are

required to be planted in accordance with the provisions of this section, a diversity of species shall be required. The number of species to be planted shall be based on the overall number of trees required. The applicant shall be required to meet the following minimum diversity standards:

Required Number of	Minimum Number
Trees	Species of
11—20	2
21—50	4
51 or more	6

Permittees shall not be required to plant in excess of six (6) species. The number of trees of each species planted shall be proportional to the number of species required. A minimum of fifty (50) percent of all replacement trees planted shall be native to Miami-Dade County, and no more than thirty (30) percent of the replacement trees shall be palms. However, when native trees are removed, all replacement trees shall be native species. As an alternative to the minimum species diversity required herein, an applicant may propose an alternative species diversity in an alternative landscape enhancement plan described in Section 24-49.4(4).

- (f) Step 6: Minimum standards for replacement trees.
 - All replacement trees shall have a minimum quality of a Florida No. 1 grade or better.
 - (ii) The Department shall maintain a list of species for each category of replacement tree. This list may be amended from time to time, as necessary. Replacement tree heights shall be determined by overall height measured from where the tree meets the ground to the top-most branch.
 - 1. All category 1 replacement shade trees shall be a minimum of twelve (12) feet in height at the time of planting and at maturity should have a canopy

- coverage of five hundred (500) square feet under normal growing conditions.
- 2. All category 2 replacement shade trees shall be a minimum of eight (8) feet in height at the time of planting and at maturity should have a canopy coverage of five hundred (500) square feet under normal growing conditions.
- 3. All category 1 replacement palm trees shall have a minimum height of ten (10) feet at the time of planting and at maturity should have a canopy coverage of three hundred (300) square feet under normal growing conditions.
- 4. All category 2 replacement palm trees shall have a minimum height of three (3) feet at the time of planting and at maturity should have a canopy coverage of one hundred (100) square feet under normal growing conditions.
- 5. All replacement small trees shall have a minimum height of six (6) feet at the time of planting and at maturity should have a canopy coverage of two hundred (200) square feet under normal growing conditions.
- (3) Requirements for a landscape replacement plan. Except as provided in Section 24-49.4(4), a landscape replacement plan shall be submitted to the Department by the permit applicant when a minimum of ten thousand (10,000) square feet of replacement canopy is required under the provisions of Section 24-49.4(2). All landscape replacement plans shall meet the following minimum standards:
 - (a) The number of trees, number of species of trees, and size of trees proposed for planting shall be consistent with Section 24-49.4(2).

- (b) The applicant shall submit a site plan that includes the proposed replacement locations of all replacement plantings and tree relocations, all property lines, and all proposed and existing structures, driveways and utility easements.
- (c) The canopy spread of any tree that is proposed for preservation shall be shown on the plan. Where a portion of the canopy of a tree or trees shall be removed without removal of the trees, a notation shall be made on the plan.
- (4) Alternatives to the provisions of Sections 24-49.4(2) and 24-49.4(3). Instead of replacing all affected trees pursuant to the provisions of Sections 24-49.4(2) and 24-49.4(3), an applicant may propose to relocate existing trees or propose a unique project design which provides reasonable assurance that the project complies with the intent to maintain tree canopy.
 - Generally, as an exception to the requirements of Section 24-49.4(2), and in order to provide for development of exceptional or unique landscape designs which cannot meet the express terms of Section 24-49.4(2), an applicant may submit an alternative landscape enhancement plan. As an alternative to the requirements in Section 24-49.4(2)(c), tree replacement credit may be granted for planting shrubs or ground covers, based upon the following table, provided, however, that a minimum of fifty (50) percent of the required canopy replacement is achieved by using shade trees and palm trees as required by Section 24-49.4(2)(c).

	Portion of Impact
	Area that Each Tree
	Alternative Shrub,
Category of Tree Al-	or Ground Cover
ternative Shrub or	
Ground Cover:	Square Feet:
Shrub 1 (including	60
small palms)	
Shrub 2/Ground	30
Cover	

(i) All category 1 tree alternative shrubs shall be a minimum of two (2) feet in

- height at the time of planting and at maturity should have a canopy coverage of sixty (60) square feet under normal growing conditions.
- (ii) All category 2 tree alternative shrubs or ground covers shall have a root system sufficient to sustain growth and at maturity should have a canopy coverage of ten (10) to twenty (20) square feet under normal growing conditions.
- (b) The applicant shall have the burden of demonstrating that a design meets the intent of this article. At a minimum, an alternative landscaping enhancement plan shall include, without limitation:
 - (i) A statement, prepared by a landscape architect registered in the State of Florida, which indicates that the intent of this article can be effectively met through the submission of the alternative design; and
 - (ii) A site plan, prepared by a landscape architect registered in the State of Florida, that includes the proposed location, scientific name or description of all vegetation to be preserved or planted, all property lines, and all proposed or existing structures, driveways and utility easements; and
 - (iii) A tabulation that identifies any deviations from the requirements of Section 24-49.4(2) and explicitly provides tree replacement alternatives.
- (c) The Department shall approve an alternative landscape enhancement plan when:
 - (i) The design preserves and incorporates existing vegetation; and
 - (ii) The design exceeds the minimum requirements or equivalent of Section 24-49.4(2).
- (d) Preservation credit for relocated trees.
 Permittees who successfully relocate trees shall receive full credit for the relocated trees and the tree replacement requirements herein shall not apply to such relo-

cated trees. All relocated trees shall meet the standards set forth in Section 24-49.6 for tree relocation.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-49.5. Tree protection requirements during construction.

- (1) During site development, protection requirements for trees designated for preservation under an approved tree removal permit shall include, but not be limited to, the following:
 - (a) Protective barriers shall be placed around each tree, cluster of trees, or the edge of the preservation area no less than six (6) feet (in radius) from the trunk of any protected tree, cluster of trees, or preservation area unless a lesser distance is specified by the Department. Protective barriers shall be a minimum of four (4) feet above ground level and shall be constructed of wood, plastic or metal, and shall remain in place until development is completed and the Department has authorized their removal. Protective barriers shall be in place prior to the start of any construction.
 - (b) Understory plants within protective barriers shall be protected.
 - (c) No excess oil, fill, equipment, building materials or building debris shall be placed within the areas surrounded by protective barriers, nor shall there be disposal of any waste material such as paints, oils, solvents, asphalt, concrete, mortar or any other material harmful to trees or understory plants within the areas surrounded by protective barriers.
 - (d) Trees shall not be braced in such a fashion as to scar, penetrate, perforate or otherwise inflict damage to the tree.
 - (e) Natural grade shall be maintained within protective barriers. In the event that the natural grade of the site is changed as a result of site development such that the safety of the tree may be endangered, tree wells or retaining walls are required.

- (f) Underground utility lines shall be placed outside the areas surrounded by protective barriers. If said placement is not possible, disturbance shall be minimized by using techniques such as tunneling or overhead utility lines.
- (g) Fences and walls shall be constructed to avoid disturbance to any protected tree. Post holes and trenches located close to trees shall be dug by hand and adjusted as necessary, using techniques such as discontinuous footings, to avoid damage to major roots.
- (2) Exceptions to the provisions of Section 24-49.5(1). Exceptions to the requirements of Section 24-49.5(1) shall be approved only when the permittee receives specific written authorization from the Director or the Director's designee. The Director or the Director's designee shall not issue written approval unless the Director or the Director's designee determines that the affected tree(s) can be adequately protected without meeting the requirements of Section 24-49.5(1), or due to exceptional circumstances it is not practical or reasonable to meet the requirements of Section 24-49.5(1).
- (3) If the requirements of Section 24-49.5(1)(a) through (g) are not adhered to by the permittee and the trees are effectively destroyed, then all such trees shall be replaced according to the standards of Section 24-49.4(2), in addition to being subject to the penalty provisions of Sections 24-29, 24-30 and 24-31 of the Code of Miami-Dade County.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-49.6. Tree relocation standards.

The relocation of any tree that is subject to the provisions of this article shall be consistent with the following minimum standards:

- (1) Trees other than palms:
 - (a) Tree roots shall be severed in such a manner as to provide a root ball which is sufficient to ensure survival of the tree when relocated. A suffi-

ciently-sized planting hole shall be provided at the relocation site to ensure successful regrowth.

- (b) After root severing, adequate time shall be allowed prior to replanting to ensure survival of the tree(s). After root severing and prior to relocation, tree(s) shall be watered a minimum of twice weekly. After relocation, tree(s) shall be watered a minimum of twice weekly until the tree(s) are established.
- (c) During removal and transportation of the tree, the root ball and vegetative portions of the tree shall be protected from damage from wind or injury.
- (d) Any tree that dies or becomes nonviable within one (1) year of relocation shall be replaced according to the standards set forth in Section 24-49.4(2).

(2) Palms:

- (a) A ball of earth at least one (1) foot from the base of the tree shall be moved with the tree.
- (b) Fronds shall be securely tied around the bud prior to relocation and shall remain securely tied around the bud during the entire relocation process and for a minimum of one (1) week after relocation.
- (c) The bud shall be protected from damage or injury during relocation.
- (d) Any palm that dies or becomes non-viable within one (1) year of relocation shall be replaced according to the standards set forth in Section 24-49.4(2).

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-49.7. Permit issuance, confirmation of natural forest community maps, existing permits, approvals and consent agreements.

- (1) The Department shall deny an application, or approve an application and issue a permit (subject to conditions, limitations or restrictions), for the activity proposed under the permit application, provided:
 - (a) The required application fee and permit fee is submitted to Miami-Dade County.
 - A performance bond, if required, has been posted. As a condition of issuing a tree removal permit, the Department may require the posting of a performance bond to guarantee compliance with all other conditions, limitations, and restrictions of the tree removal permit (the permitted activity), including, without limitation, planting of all required replacement trees. The bond shall be equivalent to one hundred (100) percent of the estimated cost of the permitted activity and may be in the form of a letter of credit, surety, cash, or certificate of deposit. All performance bonds shall remain in force for a minimum of either one (1) year after the actual completion date of the permitted activity (to ensure that any replanted trees which perish are replaced), or until viability of all replanted trees has been achieved, whichever occurs last. However, at the discretion of the Director or the Director's designee, performance bonds may be partially released in phases based upon partial completion of planting or other permit requirements.
 - (c) All required plans or covenants are submitted and are in compliance with the standards herein.
- (2) All permits shall clearly specify all conditions, limitations and restrictions required by the Department. The permit applicant shall acknowledge that the permit applicant fully understands and agrees to comply with all of said conditions, limitations or restrictions by signing the permit prior to its issuance.

- (3) All tree removal permit applications which remain incomplete for a period of one hundred twenty (120) days shall be denied. A new tree removal permit application shall be required for all work previously proposed under a permit application which has been denied.
- (4) The natural forest community maps approved by the Board of County Commissioners on December 12, 1984, by Resolution No. 1764-84, all tree removal permits issued pursuant to Chapter 26B, Department approvals, and all consent agreements executed in order to resolve alleged violations of Chapter 26B of the Code of Miami-Dade County, Florida, are hereby confirmed and shall remain in full force and effect, and all conditions, restrictions and limitations contained therein shall continue to apply, and compliance therewith shall be enforceable pursuant to the provisions of this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-49.8. Permit fees; schedule.

The Department shall charge and collect application and permit fees and trust fund contributions at the rates established by separate administrative order which shall not become effective until approved by the Board of County Commissioners. Applications from government agencies for tree removals in areas dedicated to public use may, in the discretion of the Director, be exempted from application fees and permit fees.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-49.9. Prohibited plant species.

(1) With exception of Ficus benjamina, the list of exotic pest plant species that may not be sold, propagated or planted anywhere in Miami-Dade County pursuant to Policy 8I of the Conservation Element of the Comprehensive Development Master Plan for Miami-Dade County, Florida, as may be amended from time to time, is hereby incorporated by reference. If present on a development site, they shall be removed prior to development, and their sale, propagation, planting, importation or transportation shall be prohibited.

- (2) Definitions for Section 24-49.9(1), Sections 24-49.9(3)(a), 3(b), and 3(c):
 - (a) *Importation* shall mean the conveyance by any means of plants into Miami-Dade County.
 - (b) *Planting* shall mean the placing on or setting into the ground of live plant material.
 - (c) *Propagation* shall mean the physical act of causing plants to multiply by any process of reproduction from plant stock.
 - (d) Sale shall mean the act of transferring or conveying plants to a purchaser for consideration.
 - (e) *Transportation* shall mean the act of carrying or conveying plants from one (1) place to another for the purpose of sale, planting, importation or propagation.
 - (3) Variances.
 - (a) A variance by the Director from the transportation, propagation and planting prohibitions of this section may be requested, subject to the conditions justifying variance approval outlined below in Section 24-49.9(3)(b)(i) and (ii). Said variance request shall be made in writing to the Director and shall include the following information:
 - (i) Name and address of the person or persons requesting the variance.
 - (ii) Location of the property for which the variance is requested.
 - (iii) A sketch or drawing indicating the location within the subject property where the planting or field propagation of the otherwise prohibited plant species will occur. (Container propagation shall be exempt from said sketch or drawing requirements.)
 - (iv) The reason or reasons for requesting the variance.

- (b) The Director may, in the Director's discretion, issue a variance from the provisions of this section based upon the following factors:
 - Proximity of the subject planting or propagation to any environmentally sensitive areas (e.g., wetlands, hammocks, pinelands, dunes).
 - (ii) Lack of appropriate alternative plant species to fulfill the same purpose or purposes for planting.
- (c) The Director shall issue or deny a variance request within thirty (30) days of receipt of the variance request, provided the required information described in Section 24-49.9(3)(a)(i) through (iv) above has been submitted.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

DIVISION 3. ENVIRONMENTALLY ENDANGERED LANDS PROGRAM

Sec. 24-50. Title.

This section shall be known as the Environmentally Endangered Lands Program. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-50.1. Legislative intent.

The historic loss, fragmentation, and degradation of native wetland and upland forest communities in Miami-Dade County are well documented, and remaining native wetland and upland forest communities are collectively endangered. On May 8, 1990, the electorate of Miami-Dade County authorized the county to exceed the constitutional millage limitation by levying an ad valorem tax of three-quarters of one mil, for a period not to exceed two (2) years, for acquisition, preservation, enhancement, restoration, conservation and maintenance of environmentallyendangered lands for the benefit of present and future generations; and limiting all uses of, and all investment earnings on, such levies to such purposes. It is the intent of the Board of County Commissioners of Miami-Dade County to establish the Environmentally Endangered Lands Program to implement this mandate and to support its purposes to the fullest.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-50.2. Definitions.

The following words and phrases, when used in this chapter, shall have the meanings ascribed to them in this section:

- Acquisition proposal shall mean (a) parcel(s) of land which has/have been nominated or recommended for acquisition in accordance with procedures provided for hereinbelow.
- (2) Acquisition project shall mean (a) parcel(s) of land approved by the Board of County Commissioners for acquisition by the county in accordance with procedures provided for hereinbelow.
- (3) Ancillary land shall mean that land which is adjacent to environmental land and which is necessary to the management and protection of the environmental land for such purposes as fence installation, access of maintenance equipment, firebreaks, parking, or other management activities which are indicated in the management feasibility evaluation.
- (4) Bona fide organization shall mean an organization which has an elected board of directors, has adopted a charter, bylaws, or rules of procedure, conducts a meeting of its membership at least annually, and which has been in existence in Miami-Dade County for at least two (2) years prior to the adoption of the ordinance from which this chapter derives.
- (5) Buffer land shall mean that land which is adjacent to publicly-owned environmental land or to an environmental land acquisition proposal or project, or that land which is an inholding within publicly-owned environmental land or within an environmental land acquisition proposal or project, and which, if not acquired, would threaten the environmental integ-

- rity of the existing resource, or if acquired, would enhance the environmental integrity of the resource.
- (6) Environmental land shall mean that land which contains natural forest or wetland communities, native plant communities, rare and endangered flora and fauna, endemic species, endangered species habitat, a diversity of species, or outstanding geologic or other natural features, or that land which functions as an integral and sustaining component of an existing ecosystem.
- (7) Management shall mean the preservation, enhancement, restoration, conservation, monitoring, or maintenance of the natural resource values of environmentally-endangered lands which have been acquired or approved for management under the Environmentally Endangered Lands Program.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-50.3. Environmentally Endangered Lands Program established.

The Miami-Dade County Environmentally Endangered Lands Program (hereinafter referred to as the EEL Program) is hereby established to acquire, preserve, enhance, restore, conserve, and maintain threatened natural forest and wetland communities located in Miami-Dade County, for the benefit of present and future generations. The County Manager shall administer this program in accordance with the procedures and criteria provided for hereinbelow.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-50.4. Purpose.

The purpose of the EEL Program shall be:

(1) To acquire environmentally-endangered lands which contain natural forest or wetland communities, native plant communities, rare and endangered flora and fauna, endemic species, endangered species habitat, a diversity of species, or outstanding geologic or other natural features:

- (2) To acquire environmentally-endangered lands which function as an integral and sustaining component of an existing natural system;
- (3) To protect environmentally-endangered lands which are publicly owned by acquiring inholdings or adjacent properties which, if not acquired, would threaten the environmental integrity of the existing resource, or which, if acquired, would enhance the environmental integrity of the resource;
- (4) To implement the objectives and policies of the Comprehensive Development Master Plan for Miami-Dade County which have been promulgated to preserve and protect environmental protection areas designated in the Plan and other natural forest resources, wetlands, and endangered species habitat;
- (5) To identify Miami-Dade County's best and most endangered environmental lands for acquisition and management by evaluating the biological characteristics and viability of the resource, the vulnerability of the resource to degradation or destruction, and the feasibility of managing the resource to maintain its natural attributes;
- (6) To manage environmentally-endangered lands with the primary objective of maintaining and preserving their natural resource values by employing management techniques that are most appropriate for each native community so that our natural heritage may be preserved for present and future generations;
- (7) To use the acquired sites, where feasible within financial constraints and with minimal risk to the environmental integrity of the site, to educate Miami-Dade County's school-age population and the general public about the uniqueness and importance of Miami-Dade County's subtropical ecosystems and natural communities; and
- (8) To cooperate actively with other acquisition, conservation, and resource management programs, including, but not limited

to, such programs as the State of Florida Conservation and Recreation Lands program, the Land Acquisition Trust Fund, and Save Our Rivers program, where the purposes of such programs are consistent with the purposes of the EEL Program as stated hereinabove.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-50.5. Environmentally Endangered Lands Trust Funds.

- (1) Creation of the Environmentally Endangered Lands Acquisition Trust Fund.
 - (a) There is hereby created the Environmentally Endangered Lands Acquisition Trust Fund (hereinafter referred to as the EEL Acquisition Trust Fund) for use in acquiring environmentally-endangered lands in Miami-Dade County. The Finance Director is hereby authorized to establish the EEL Acquisition Trust Fund and to receive and disburse monies in accordance with the provisions of this section.
 - (b) The EEL Acquisition Trust Fund shall receive monies from the following sources:
 - (i) All revenues collected by the Miami-Dade County Tax Collector pursuant to the extraordinary millage of threequarters of one mil of ad valorem tax levied in 1990 and 1991, as approved by referendum on May 8, 1990, except for those revenues dedicated to the Environmentally Endangered Lands Management Trust Fund provided for herein by Section 24-50.5(b)(ii).
 - (ii) All monies accepted by Miami-Dade County in the form of federal, State, or other governmental grants, allocations, or appropriations, as well as foundation or private grants and donations for acquisition of environmentally-endangered lands as provided for by this section.

- (iii) Such additional allocations as may be made by the Board of County Commissioners from time to time for the purposes set forth herein.
- (iv) All interest generated from the sources identified in Section 24-50.5(1)(b)(i), (ii), and (iii) hereinabove, except where monies received have been otherwise designated or restricted.
- (c) The EEL Acquisition Trust Fund shall be maintained in trust by the Board of County Commissioners solely for the purposes set forth herein, in a separate and segregated fund of the County which will not commingle with other County funds until disbursed for an authorized purpose pursuant to Section 24-50.5(1)(d).
- (d) Disbursements from the EEL Acquisition Trust Fund shall be made only for the following purposes:
 - (i) Acquisition of properties which have been approved for purchase by resolution of the Board of County Commissioners in accordance with the provisions of Sections 24-50.7 through 24-50.11.
 - (ii) All costs associated with each acquisition including, but not limited to, appraisals, surveys, title search work, real property taxes, documentary stamps and surtax fees, and other transaction costs.
 - (iii) Costs of administering the EEL Program, which will be funded from the interest proceeds of the EEL Acquisition Trust Fund until such time as the fund is closed.
 - (iv) Supplementation of the Environmentally Endangered Lands Management Trust Fund, but only by resolution of the Board of County Commissioners.
- (e) Where any property acquired with EEL Acquisition Trust Fund monies is leased or sold by the County, the proceeds from said lease or sale shall, as determined by

the Board of County Commissioners, be committed either to the EEL Acquisition Trust Fund or to the EEL Management Trust Fund for the purposes provided for herein. Such proceeds shall neither be committed to any other fund, nor be used for any other purpose.

- (2) Creation of the Environmentally Endangered Lands Management Trust Fund.
 - There is hereby created the Environmentally Endangered Lands Management Trust Fund (hereinafter referred to as the EEL Management Trust Fund) for the preservation, enhancement, restoration, conservation and maintenance of environmentally-endangered lands which either have been purchased with monies from the EEL Acquisition Trust Fund (established pursuant to Section 24-50.5(1), or have otherwise been approved for management pursuant to Section 24-50.7(2). The Finance Director is hereby authorized to establish the EEL Management Trust Fund and to receive and disburse monies in accordance with the provisions of this section.
 - (b) The EEL Management Trust Fund shall receive monies from the following sources:
 - (i) A principal in the amount of ten million dollars (\$10,000,000.00) from those revenues collected by the Miami-Dade County Tax Collector pursuant to the extraordinary millage of three-quarters of one mil of ad valorem tax levied in 1990 and 1991, as approved by referendum on May 8, 1990. The principal may be increased as a result of a specific grant, donation, allocation or appropriation therefor.
 - (ii) All monies accepted by Miami-Dade County in the form of federal, State, or other governmental grants, allocations, or appropriations, as well as foundation or private grants and donations, for management of lands acquired with the EEL Acquisition Trust Fund or otherwise approved

- for management pursuant to Section 24-50.7(2). Unless otherwise stated at the time of acceptance, all grant and donation monies received and the interest therefrom shall not be part of the principal and shall be available for disbursement in accordance with Section 24-50.5(2)(d).
- (iii) Such additional allocations as may be made by the Board of County Commissioners from time to time, including allocations from existing trust funds or mitigation funds, or special allocations from the EEL Acquisition Trust Fund as provided for in Section 24-50.5(1)(d)(i). Unless otherwise stated at the time of the allocation, all allocations received shall be available for disbursement in accordance with Section 24-50.5(2)(d).
- (iv) All interest generated from the sources identified in Sections 24-50.5(2)(b)(i), (ii), and (iii) hereinabove, except where monies received have been otherwise designated or restricted.
- (c) The EEL Management Trust Fund shall be kept and maintained in trust by the Board of County Commissioners solely for the purposes set forth herein, in a separate and segregated fund of the County which will not commingle with other County funds until disbursed for an authorized purpose pursuant to this section.
- (d) Disbursements from the EEL Management Trust Fund shall be made by the County Manager only in accordance with this Section 24-50.5(2)(d).
 - (i) No disbursements shall be made from the principal established under Section 24-50.5(2)(b)(i) except by ordinance amending this subsection.
 - (ii) Disbursements shall be made only from those monies defined in Section 24-50.5(2)(b)(ii), (iii), and (iv) hereinabove.

(iii) Disbursements shall be made only for the preservation, enhancement, restoration, conservation or maintenance of those environmentally-endangered lands which have been acquired with monies from the EEL Acquisition Trust Fund or which have been approved for management pursuant to Section 24-50.7(2). Disbursements shall be made in accordance with (a) project management plan(s) which has/have been approved pursuant to Section 24-50.12.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-50.6. Land Acquisition Selection Committee.

- (1) Land Acquisition Selection Committee established; qualifications of members.
 - (a) There is hereby established an Advisory Board in accordance with Sections 2-11.36 through 2-11.40 of this Code to be known as the Miami-Dade County Land Acquisition Selection Committee (hereinafter referred to as the LASC).
 - (b) The LASC shall be composed of seven (7) members and one (1) alternate member.
- (2) Method of appointment; terms of membership.
 - (a) The County Manager shall recommend to the Board sixteen (16) candidates for the seven (7) regular members' seats on the LASC and the one (1) alternate member's seat. Preference will be given to candidates who have a record of service in environmental or civic affairs in Miami-Dade County and who have been recommended by one or more bona fide environmental, civic, or professional organizations.
 - (b) The Board of County Commissioners shall appoint, from the list of candidates recommended by the County Manager, four (4) members and the alternate to serve for two (2) years and three (3) members to serve for three (3) years. At the end of the

- two (2) years, the successors to the initial two-year appointments shall be appointed for three (3) years.
- (3) Quorum; conduct of Committee and rules of procedure; meetings.
 - (a) A quorum of the Committee shall be five (5) persons.
 - (b) At its first meeting, the Committee shall establish its rules of procedure and shall elect a Chairperson and a Vice-Chairperson. The Chairperson and Vice-Chairperson shall be elected annually thereafter.
 - (c) The alternate member shall enjoy the same privileges and responsibilities as the regular members, except that the alternate member cannot vote unless a regular member is absent.
 - (d) An extraordinary majority of five (5) votes shall be required for determining sites for acquisition as provided for in Sections 24-50.8 through 24-50.11 hereinbelow.
 - (e) The LASC shall hold at least four (4) regular meetings each year.
 - (i) Notwithstanding the provisions of Sections 2-11.38 through 2-11.39 of the Code of Miami-Dade County, any member or alternate member of the LASC who is absent from three (3) meetings in any one (1) year shall forfeit membership and shall not be eligible to be reappointed to the LASC. In the event a member shall resign or forfeit his membership on the LASC, a quorum of the members in good standing may, by majority vote, elect the alternate to become a permanent voting member.
 - (ii) Within thirty (30) days from the date a vacancy occurs, the County Manager shall recommend to the Board of County Commissioners two (2) candidates who meet the qualifications set forth in Section 24-50.6(2)(a) above to fill that vacancy. The Board shall select one of the two (2) candidates to serve the remainder of the term.

- (4) Responsibilities of the Land Acquisition Selection Committee.
 - (a) The primary responsibility of the LASC is to recommend to the Board of County Commissioners a semi-annual acquisition list pursuant to Section 24-50.9 hereinbelow.
 - (b) In developing its recommendations, the LASC shall act in accordance with the procedures and requirements set forth in Sections 24-50.7 through 24-50.11 and in furtherance of the purposes of the EEL Program as set forth in Section 24-50.4.
 - (c) The LASC may, from time to time, recommend to the Board (or to the County Manager, as appropriate) proposed expenditures from the EEL Trust Funds; additional selection or acquisition policies, procedures, standards, criteria, strategies, schedules, and programs; and other such matters as may be necessary to fulfill the purposes of the EEL Program.
 - At its first meeting, or within fourteen (14) days thereafter, the LASC shall recommend action on those Miami-Dade County projects which are ranked on the State of Florida 1991 Conservation and Recreation Land Priority List or which appear on the State of Florida Land Acquisition Trust Fund List with particular regard for the joint acquisition of these projects by the State of Florida and the EEL Program, as set forth in R-1262-90. So that the LASC may act expeditiously, this recommendation is exempted from the procedural requirements provided for in Sections 24-50.10 and 24-50.11, but shall be based upon the considerations set forth in Sections 24-50.7 and 24-50.8.
- (5) Limitation of powers of Committee. The LASC shall have no power or authority to commit Metropolitan Miami-Dade County to any policies, to incur any financial obligations or to create any liability on the part of the County. The actions and recommendations of the LASC are advisory only and shall not be binding upon the County unless approved or adopted by the Board of County Commissioners.

(6) Termination of the Committee. At such time as there are insufficient uncommitted funds in the EEL Acquisition Trust Fund to conclude another acquisition and all acquisition projects have been closed, the LASC shall report to the County Commission that its business is concluded. All remaining EEL Acquisition Trust Fund monies shall then be transferred to the EEL Management Trust Fund and shall be added to the principal thereof as provided for in Section 24-50.5(2)(b)(i). (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-50.7. Property eligible for acquisition and management.

- (1) Properties eligible to be considered for acquisition and management under the EEL Program shall be only environmental land, ancillary land, and buffer land.
- (2) Any environmental, ancillary, or buffer land not on the acquisition list which is offered for conveyance or donation to Miami-Dade County and is proposed for management by the EEL Program shall be evaluated as provided for in Section 24-50.8 hereinbelow and may only be accepted and approved for management under the EEL Program by resolution of the Board of County Commissioners.

Any land on the Priority A Acquisition List which is owned by a public agency where said agency is willing and able to lease the property to Miami-Dade County for a term not less than thirty (30) years may be accepted and approved for management under the EEL Program by resolution of the Board of County Commissioners. Upon approval for management under the EEL Program, the said public entity must agree to, and execute, a covenant running with the land which provides for continued maintenance of the property as a natural preserve.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-50.8. Considerations for evaluating lands for acquisition and management; EEL Program Manual.

- (1) Evaluation of each acquisition proposal shall be based upon the following considerations:
 - (a) The primary considerations for evaluating environmental land shall be:
 - (i) The biological value and viability of the resource;
 - (ii) The vulnerability of the resource to degradation or destruction; and
 - (iii) The requirements (including costs) for managing the resource to maintain its natural attributes, and the feasibility of meeting those management requirements.

Ancillary land shall be evaluated in conjunction with the adjacent environmental land.

- (b) The primary considerations for evaluating buffer land shall be:
 - (i) The biological value and viability of the environmental land;
 - (ii) The vulnerability of the buffer land to development; and
 - (iii) The existing and potential impact on the environmental land if the buffer land were not acquired.
- (2) The Board of County Commissioners hereby approves and makes a part hereof the Criteria for Evaluating EEL Acquisition Proposals attached hereto. The County Manager, pursuant to Section 4.02 of the Code of Miami-Dade County, shall propose to the Board of County Commissioners an Environmentally Endangered Lands Program Manual (hereinafter referred to as the EEL Program Manual) which shall be used as a guide for implementing the provisions of this chapter, and shall include the criteria for evaluating EEL Acquisition Proposals which are adopted hereby. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-50.9. Acquisition list.

The EEL Acquisition List shall consist of the Priority A List and the Priority B List and shall be approved semi-annually by the Board of County Commissioners in accordance with the procedures set forth in Sections 24-50.10 and 24-50.11 hereinbelow.

- (1) Priority A List.
 - (a) The Priority A List shall contain no more than ten (10) projects which shall be selected by the Board of County Commissioners from those acquisition proposals which receive the highest evaluations pursuant to the criteria provided for in Section 24-50.8 and for which acquisition is feasible. No rank order shall be assigned to Priority A projects. The County shall actively pursue the acquisition of Priority A projects.
 - (b) A project shall be removed from the Priority A List only after purchase by the County, upon approval of the next succeeding acquisition list as provided hereinbelow or by resolution of the Board of County Commissioners. Projects removed from the Priority A List for any reason except purchase by the County shall be placed on the Priority B List.
- Priority B. List. The Priority B list shall contain all acquisition proposals which are deemed worthy of acquisition based upon the evaluation criteria provided in Section 24-50.8, and which may feasibly be acquired, but which have not been assigned to the Priority A List. The County may not actively pursue acquisition of a property on the Priority B List unless the share of the purchase price paid from the EEL Acquisition Trust Fund is no more than fifty (50) percent of the total purchase price of the property or unless the seller donates fifty (50) percent or more of the value of the property as estimated in an appraisal report prepared by an independent fee appraiser and accepted by the County.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-50.10. Nomination of acquisition proposals.

- (1) Public applications nominating properties for acquisition may be submitted on an annual basis by any person or organization, including any federal, State, municipal, or regional government agency. Miami-Dade County applications nominating properties for acquisition may be submitted on a semi-annual basis by any agency of Miami-Dade County.
- (2) All nominations shall be made by filing an application provided by the County Manager.
- (3) The first submittal of applications from agencies of Miami-Dade County shall occur no later than December 1, 1991. In 1993, the application deadline shall be no later than June 30. Subsequent submittals shall occur semi-annually thereafter.
- (4) The first public application period shall be opened within ten (10) months from the effective date of the ordinance from which this chapter derives. In 1993, the application deadline shall be no later than December 31. Subsequent submittals shall occur annually thereafter.
- (5) A thirty-day period shall be provided each year for the submittal of public applications. Public notice of the application period shall be given at least two (2) weeks before the period opens and a second notice shall be given at least two (2) weeks before the application period closes.
- (6) If the applicant has an ownership interest in any real property covered by an application for proposed acquisition, such interest shall be disclosed in the same manner as required of zoning applicants by Section 33-304(a) of the Code of Miami-Dade County. If the applicant is acting as agent or attorney for a principal, the principal's interest shall be disclosed in the same manner as required of zoning applicants in Section 33-304(a) of the Code of Miami-Dade County. Section 24-50.10(6) shall not apply to governmental applicants.
- (7) If the applicant does not have an ownership interest in the real property covered by an application or if the applicant is a governmental agency,

the name and address of the owner as listed in the Property Appraiser's records shall be provided with the application.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-50.11. Procedure for selection of acquisition proposals for placement on the acquisition list.

- (1) Upon receipt of a completed property nomination application, the County Manager shall forward the application to designated staff for initial review.
 - (a) Upon completion of initial review, acquisition proposals accepted by the County Manager shall be evaluated by staff based upon the criteria provided in Section 24-50.8. The staff evaluation shall be completed within sixty (60) days of receipt by the County Manager of the completed application.
 - (b) If, upon initial review, staff finds that the biological value of a candidate environmental land is low, that management is not feasible, or that the proposed acquisition would not fulfill the purposes of the EEL Program set forth herein, the County Manager shall be notified immediately and may order that no further evaluation be undertaken. Notwithstanding the County Manager's order, the LASC may, by extraordinary majority of five (5) votes, require a complete evaluation of said property.
- (2) Upon completion of the staff evaluation process, the Environmentally Endangered Lands Project Review Committee, created pursuant to Section 24-50.13 hereinbelow, shall define the preliminary boundaries for each acquisition proposal and shall assist the County Manager in preparing his recommendation on each proposal for the LASC. Within sixty (60) days of the completion of this staff evaluation process, the County Manager shall transmit his recommendation to the LASC along with a map of each site, a description of the biological characteristics of the site, a description of the development potential of the site and adjacent land, an assessment of the

management needs and costs, the assessed value, and other information as may be deemed relevant for each proposal evaluated.

- (3) Within sixty (60) days of receiving the County Manager's transmittal, the LASC shall hold a duly-noticed public hearing to consider the recommendations regarding each site, the applicant's comments, and comments from the public. A courtesy notice shall be provided to the owner(s) of properties which are the subject of the hearing. Failure to notify said owner(s) shall not invalidate these proceedings.
- (4) Within thirty (30) days of its public hearing, the LASC shall meet to adopt its recommended acquisition list for consideration by the Board of County Commissioners as provided for in Section 24-50.9 hereinabove. In developing its recommendation, the LASC shall consider all information received from County staff, the County Manager's recommendation, information that has been submitted in writing through the date of the public hearing, and testimony received at the public hearing. The LASC shall forward the recommended acquisition list to the County Manager for scheduling on the County Commission agenda for consideration and action by the Board.
- (5) Deadlines established in Sections 24-50.11(1) through (4) hereinabove shall be waived in processing applications filed in 1992. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-50.12. Management plan and use of environmentally endangered lands.

- (1) No later than thirty (30) days from the date of acquisition, an interim management plan for the property shall be submitted to the Environmentally Endangered Lands Project Review Committee for approval. Upon approval, interim management plans shall be implemented by the County Manager; provided, however, that such interim management plan(s) shall not be implemented for more than two (2) years after acquisition of the property.
- (2) A ten-year management plan shall be prepared for each property acquired by the EEL Program which shall:
 - (a) Identify such management activities as are necessary to preserve, enhance, restore, conserve, maintain, or monitor the resource, as appropriate; and

- (b) Identify such uses as are consistent with the preservation, enhancement, restoration, conservation, and maintenance of the resource; and
- (c) Estimate the annual costs of managing the project.
- (3) Annually, the ten-year management plans prepared during the preceding year shall be submitted to the Board of County Commissioners for its approval. Each ten-year management plan shall be updated at least every five (5) years from the last date of Board approval, and may be amended as often as required. Management plan updates and amendments shall be submitted to the Board of County Commissioners for approval.
- (4) All management plans shall be consistent with the purposes set forth in Section 24-50.4 herein. All properties acquired or managed by the EEL Program shall be managed in accordance with the approved management plan for that property.
- (5) No use, infrastructure, or improvement shall be permitted on any property acquired or managed under the EEL Program that is inconsistent with the purposes of the program or that is not provided by an approved management plan for the property.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-50.13. Responsibilities of the manager.

The County Manager shall facilitate such activities, designate such staff, and assign such responsibilities as are necessary to fulfill the purposes of this chapter. The manager shall, at a minimum, do the following:

- (1) Designate staff to evaluate acquisition proposals in accordance with the approved criteria and prepare and implement project management plans.
- (2) Make recommendations to the LASC on acquisition proposals.
- (3) Designate an Environmentally Endangered Lands Project Review Committee to assist with the coordination of interdepartmental and interagency activities, to as-

sist in the preparation of recommendations on acquisition proposals, and to approve interim management plans. The Project Review Committee shall be chaired by the County Manager or his designee and shall include at least one (1) representative each from the Department of Environmental Resources Management, the Park and Recreation Department, and the Department of Planning and Zoning.

Designate a negotiation resource committee to develop negotiation strategies for approved acquisition projects, to monitor negotiations, and to assist in coordinating all activities relating to negotiations, purchase agreements and closings, as needed. The Negotiation Resource Committee shall include at least one (1) representative from the Department of Environmental Resources Management, the Department of Development/Facilities Management, the Park and Recreation Department, and the Property Appraiser's Office. The County Attorney shall also designate (a) representative(s) to serve on the Negotiation Resource Committee.

(Ord. No. 04-214, §§ 1, 5, 12-2-04)

ARTICLE V. STORMWATER UTILITY*

Sec. 24-51. Short title.

This article shall be known as the Miami-Dade County Stormwater Utility Ordinance. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-51.1. Legislative intent; construction.

(1) The purpose of this article is to implement the provisions of Section 403.0893(1), Florida Statutes, by creating a Countywide stormwater utility and adopting stormwater utility fees sufficient to plan, construct, operate and maintain stormwater management systems set forth in the local program required pursuant to Section 403.0891(3), Florida Statutes.

(2) This article shall be liberally construed to protect the public health, safety, and welfare and to effectuate the purposes set forth herein. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-51.2. Applicability.

- (1) The provisions of this article shall be effective in both the unincorporated and incorporated areas of Miami-Dade County.
- (2) Notwithstanding the provisions of Section 24-51.2(1) above, the provisions of this article shall not apply within any municipality which files with both the Clerk of the Board of County Commissioners and the Director certified copies of a resolution of the governing body of such municipality which notifies the Board of County Commissioners and the Director that the municipality exercises thereby its option to exempt that the municipality exercises thereby its option to exempt the municipality from the provisions of this article, provided, however, (1) such certified copies are filed as set forth above no later than ninety (90) days from the date of enactment of this article and (2) the municipality commits in said resolution to implement within said municipality the provisions of Section 403.0893(1), (2), or (3), Florida Statutes, as amended from time to time, no later than two (2) years from the effective date of this article. Failure to file such certified copies or to implement Section 403.0893(1), (2) or (3), Florida Statutes, as amended from time to time, within the aforesaid respective time periods shall render the municipality's exemption from the provisions of this article null and void. Notwithstanding the foregoing, any municipality, at any time after the effective date of this article, may request, by resolution, that the Board of County Commissioners render the municipality's exemption from the provisions of this article null and void or grant the municipality an exemption from the provisions of this article subject to conditions determined by the Board of County Commissioners. Upon receipt of such a resolution of a municipality the Board of County Commissioners may, by resolution, render the municipality's exemption from the provisions of this article null and void or grant the municipality an exemption

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from the provisions of this article subject to conditions determined by the Board of County Commissioners.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-51.3. Creation of Miami-Dade County Stormwater Utility; governing body; organization.

- (1) There is hereby created and established by the authority of Section 403.0893(1), Florida Statutes, and the Home Rule Charter of Miami-Dade County, Florida, a Countywide stormwater utility implementing the provisions of Section 403.0893(1), Florida Statutes, which shall be named and known as the "Miami-Dade County Stormwater Utility" (hereinafter also referred to as the "Utility"). The Utility shall be a public body corporate and politic which, through its governing body, the Board of County Commissioners of Miami-Dade County, Florida, may exercise all those powers specifically granted herein, those powers granted by law and those powers necessary in the exercise of those powers herein enumerated.
- (2) The governing body of the Utility shall be the Board of County Commissioners of Miami-Dade County, Florida.
- (3) The Utility, acting through its governing body, shall be responsible for the operation, maintenance, and governance of a Countywide stormwater utility to plan, construct, operate and maintain stormwater management systems set forth in the local program required pursuant to Section 403.0891(3), Florida Statutes. The governing body may create by ordinance one (1) or more districts and subdistricts within the service area of the Utility.
- (4) The County Manager shall be the Director of the Utility.
- (5) The organization and operating procedures of the Utility shall be prescribed by administrative orders and regulations of the County Manager. The County Manager shall appoint such employees as may be necessary to operate the Utility. The salaries and compensation of all per-

sonnel of the Utility shall be determined by the Board of County Commissioners upon the recommendation of the County Manager. (Ord. No. 04-214, §§ 1, 5, 12-2-04)

Sec. 24-51.4. Fees.

- (1) The Miami-Dade County Stormwater Utility is hereby authorized and directed to establish, assess, and collect stormwater utility fees upon all residential developed property and all nonresidential developed property in Miami-Dade County, Florida, sufficient to plan, construct, operate, and maintain stormwater management systems set forth in the local program required pursuant to Section 403.0891(3), Florida Statutes. Such fees shall be in an amount set forth in administrative orders of the County Manager after approval by the Board of County Commissioners.
- (2) Each residential developed property shall be assessed a stormwater utility fee calculated by multiplying the rate for one (1) ERU by the number of the dwelling units on the parcel.
- (3) Each nonresidential developed property shall be assessed a stormwater utility fee calculated by multiplying the rate for one (1) ERU by a factor derived by dividing the actual impervious area of the particular nonresidential developed property by the statistically estimated average horizontal impervious area of residential developed property per dwelling unit, to wit, the square footage base equivalent established for one (1) ERU. Notwithstanding the foregoing, each nonresidential developed property classified by the Miami-Dade County Property Appraiser as land use type 71 shall be assessed a stormwater utility fee which is fifty (50) percent of the fee for nonresidential developed property calculated as described in the preceding sentence.
- (4) The fees payable hereunder shall be deposited in a separate County fund and shall be used exclusively by the Miami-Dade County Stormwater Utility to pay for the costs of planning, constructing, operating and maintaining stormwater management systems set forth in the local program required pursuant to Section 403.0891(3), Florida Statutes. No part of said fund shall be used for purposes other than the aforesaid.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-51.5. Billing; liens.

- (1) Fees shall be billed to the owner, tenant, or occupant of each developed property in accordance with the administrative orders of the County Manager. If the fees are not fully paid by said owner, tenant or occupant on or before the past due date set forth on the bill, a ten (10) percent late charge may be added to the bill and imposed by the Utility in accordance with regulations prescribed by the County Manager. Any unpaid balance for such fees and late charges shall be subject to an interest charge at the rate of eight (8) percent per annum. Imposition of said interest charge shall commence sixty (60) days after the past due date of the fees set forth on the bill.
- (2) Fees and late charges, together with any interest charges, shall be debts due and owing the Utility and all of same shall be recoverable by the County or its assignee, on behalf of the Utility, in any court of competent jurisdiction.
- (3) The Utility shall establish procedures to notify owners, tenants, occupants, and managers of developed property of delinquent fee accounts. Subscribers to this service shall pay in advance a fee in an amount set forth in the administrative orders of the County Manager.
- (4) All fees, late charges, and interest accruing thereupon, due and owning to the Utility which remain unpaid sixty (60) days after the past due date of the fees shall become a lien against and upon the developed property for which the fees are due and owing to the same extent and character as a lien for a special assessment. Until fully paid and discharged, said fees, late charges, and interest accrued thereupon shall be, remain, and constitute a special assessment lien equal in rank and dignity with the liens of County ad valorem taxes and superior in rank and dignity to all other liens, encumbrances, titles, and claims in, to or against the developed property involved for the period of five (5) years from the date said fees, late charges, and interest accrued thereupon, become a lien as set forth in this article. Said lien may be enforced and satisfied by the County, on behalf of the Utility, pursuant to Chapter 173, Florida Statutes, as amended from time to time, or by any other method permitted by law. The lien provided for herein shall not be deemed to be in lieu of any

- other legal remedies for recovery of said fee, late charges, and accrued interest available in the County and to the Utility.
- (5) For fees which become more than sixty (60) days past due and unpaid, the County or the Utility shall cause to be filed in the Office of the Clerk of the Circuit Court of Miami-Dade County, Florida, a notice of lien or statement showing a legal description of the property against which the lien is claimed, its location by street and number, the name of the owner, and an accurate statement of the fees and late charges then unpaid. A copy of such notice of lien shall be mailed within a reasonable time to the owner of the property involved as shown by the records of the Tax Collector of Miami-Dade County.
- (6) Liens may be discharged and satisfied by payment to the County, on behalf of the Utility, of the aggregate amounts specified in the notice of lien, together with interest accrued thereon, and all filing and recording fees. When any such lien has been fully paid or discharged, the County shall cause evidence of the satisfaction and discharge of such lien to be filed with the Office of the Clerk of the Circuit Court of Miami-Dade County, Florida. Any person, firm, corporation, or other legal entity, other than the present owner of the property involved, who fully pays any such lien shall be entitled to receive an assignment of lien and shall be subrogated to the rights of the County and the Utility with respect to the enforcement of such lien.
- (7) Notwithstanding other provisions to the contrary herein, the County, on behalf of the Utility, shall have the discretion not to file notices of lien for fees, late charges, and interest accrued thereupon in an amount less than fifty dollars (\$50.00). If the County or the Utility elects not to file a notice of lien, said fees, late charges, and accrued interest shall remain as debts due and owing in accordance with (2) above.
- (8) The Utility is authorized and directed to execute and deliver upon request written certificates certifying the amount of fees, late charges and interest accrued thereupon, which are due and owing to the Utility and the County, for any developed property which is subject to payment of said fees, or the Utility may certify that no fees,

late charges or accrued interest are due and owing. Said certificates shall be binding upon the County and the Utility. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)