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March 9, 1987

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State of Florida
Department of Environmental Regulation
North Broward County Resource Recovery Facility
Case No. PA 86-22
CONDITIONS OF CERTIFICATION

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State of Florida North Broward County Resource Recovery Facility Case No. PA 86-22 CONDITIONS OF CERTIFICATION

## I. CHANGE IN DISCHARGE

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any anticipated facility expansions beyond the certified initial nameplate capacity of 2,200 TPD, production increases, or process modifications which may result in new, different, or increased discharges of pollutants, change in type of fuel as described in Condition XIV.B., or expansion in steam generating capacity must be reported by submission of a supplemental application pursuant to Chapter 403, Florida Statutes.

## II. NON-COMPLIANCE NOTIFICATION

If, for any reason, the Permittee (defined as the Applicant, North Broward County Resource Recovery Project, Inc., or assigns) does not comply with or will be unable to comply with any limitation specified in this certification, the Permittee shall notify the Southeast Florida District Office of the Department of Environmental Regulation (Southeast District Office) by telephone within a working day that said noncompliance occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

- A. A description of the discharge and cause of noncompliance; and
- B. The period of noncompliance, including exact dates and times;

or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying event.

## III. FACILITIES OPERATION

The Permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the Permittee to achieve compliance with the terms and conditions of this certification. In the event of a malfunction of a resource recovery boiler's pollution control system that unit's furnace emissions must be shifted to the extent feasible to the remaining unit having a properly functioning pollution control system. the event of a prolonged (thirty (30) days or more) equipment malfunction or shutdown of air pollution control equipment, operation could be permitted to continue to take place under a consent order, only if the Permittee demonstrates that such operation will be in compliance with all applicable ambient air quality standards and PSD increments, solid waste rules, domestic waste rules and industrial waste rules. Additionally, during such malfunction or shutdown, the source shall comply with all other requirements of this certification and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the consent order. Administrative action will not be initiated in the event of such a malfunction for twenty-five (25) days following a malfunction unless there is an imminent health threat. However, if at thirty (30) days following a malfunction compliance has not been achieved by the source, an Order for Corrective Action may be immediately imposed upon the Applicant, subject to the provisions of Chapter 120 of the Florida Statutes. Operational stoppages exceeding two hours for air pollution control systems or four hours for other systems or operational malfunctions as noted below exceeding two hours for

air pollution control systems or four hours for other systems and as defined in the operational contingency plans as specified in Condition XX are to be reported as specified in Condition II.

Identified operational malfunctions which do not stop operation but do compromise the integrity of the operation shall be reported to the Southeast District Office as specified in Condition II.

## IV. ADVERSE IMPACT

The Permittee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

## V. RIGHT OF ENTRY

The Permittee shall allow during operational hours the Secretary of the Florida Department of Environmental Regulation and/or authorized representatives, upon the presentation of credentials:

- A. To enter upon the Permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this certification, and
- B. To have access during normal business hours (Mon.-Fri., 9:00 A.M. to 5:00 P.M.) to any records required to be kept under the conditions of this certification for examination and copying, and
- C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, and
- D. To assess any damage to the environment or violation of ambient standards.

## VI. REVOCATION OR SUSPENSION

This certification may be suspended or revoked for violations of any of its conditions pursuant to Section 403.512, Florida Statutes.

## VII. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve the Permittee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of the Department or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve the Permittee from any responsibilities or penalties established pursuant to any other applicable State Statutes, or regulations.

## VIII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, nor any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights nor any infringement of Federal, State or local laws or regulations.

## IX. SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification or the application of any provision of this certification to any circumstances, is held invalid, the application of such provisions to other circumstances and the remainder of the certification shall not be affected thereby.

## X. DEFINITIONS

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes and any regulations adopted pursuant thereto. In the event of any dispute over the meaning of a term in these conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation. Words or phrases used herein dealing with conditions of the South Florida Water Management District (SFWMD) shall be defined by reference to Chapter 373, Florida Statutes or applicable rules of the SFWMD. Contaminated water shall include leachate and runoff that have been in contact with ash or solid waste.

## XI. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked or suspended pursuant to law. At least every five years from the date of issuance of certification the Department shall review all monitoring data that has been submitted to it during the preceding five-year period for the purpose of determining the extent of the Permittee's compliance with the conditions of this certification and the environmental impact of this facility. The Department shall submit the results of its review and recommendations to the Permittee. Such review will be repeated at least every five years thereafter.

## XII. MODIFICATION OF CONDITIONS

Pursuant to Subsection 403.516(1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, boiler capacity, related time schedules, emission limitations (subject to notice and opportunity for hearing), or any special studies conducted, as

necessary to attain the objectives of Chapter 403, Florida Statutes. Requests for modifications of monitoring requirements shall not be unreasonably withheld by the Department.

All other modifications to these conditions shall be made in accordance with Section 403.516, Florida Statutes.

## XIII. CONSTRUCTION

The facility shall be constructed, at a minimum, pursuant to the design standards presented in the application and the standards or plans and drawings submitted and signed by an engineer registered in the State of Florida. The Applicant shall present upon request, specific facility plans, as developed, for review by the Southeast District Office and South Florida Water Management District prior to construction pursuant to the portions of the plans then being submitted. Specific Southeast District Office approval of plans will be required based upon a determination of consistency with approved design concepts, regulations and these Conditions prior to initiating construction of the: air pollution control equipment; wastewater treatment and disposal systems, domestic waste handling and treatment systems; stormwater runoff system; and hazardous, toxic or pathological handling facilities or areas. Review and action by the Southeast District Office or SFWMD on said plans shall be accomplished in no longer than ninety (90) days from the date of a complete submittal of such plans and any action may be subject to review pursuant to Chapter 120, Florida Statutes. Approvals shall not be unreasonably withheld.

## A. Control Measures

#### 1. Stormwater Runoff

To control runoff during construction which may reach and thereby pollute Waters of the State, necessary measures shall

be utilized to settle, filter, treat or absorb silt-containing or pollutant-laden stormwater to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units above background in Waters of the State. Control measures may consist of sediment traps, barriers, berms, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment laden runoff. The pH of the runoff shall be kept within the range of 6.0 to 8.5. The Permittee shall comply with Florida Administrative Code Chapters 17-3, 17-25 and 40E-4. Permittee shall complete the forms required by 17-25.09(1) and 40E-4 and submit those forms and the required information to the SFWMD and Southeast District Office for approval no later than ninety (90) days prior to start of construction including design drawings indicating flow drainage plans during facility construction and operation.

## 2. Burning

Open burning in connection with land clearing shall be in accordance with Chapter 17-5, FAC, and Uniform Fire Code Section 33.101 Addendum. No additional permits shall be required, but prior to each act of burning, the Division of Forestry shall be contacted to determine if satisfactory conditions exist for burning. Open burning shall not occur if the Division of Forestry or Broward County Fire and Rescue Department has issued a ban on burning due to fire hazard conditions.

#### 3. Sanitary Wastes

Disposal of sanitary wastes from construction toilet

facilities shall be in accordance with applicable regulations of the appropriate local health agency.

## 4. Solid Wastes

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 17-7, FAC.

#### 5. Noise

Construction noise shall not exceed either local noise ordinance specifications, or those noise standards imposed by zoning.

#### 6. Dust

The Permittee shall employ proper dust-control techniques to minimize unconfined emissions.

#### 7. Transmission Lines

The directly associated transmission lines from the Resource Recovery Facility electric generators to the existing Florida Power and Light Company transmission system shall be cleared, maintained and prepared without the use of herbicides.

## 8. Monitoring

The following surface water monitoring program shall be implemented during construction for:

Parameter: Dissolved oxygen, temperature (CO), pH, total and fecal coliform bacteria, salmonella, iron, lead, copper, mercury, cadmium, zinc, silver and turbidity.

Frequency: Quarterly throughout the year except that the samples shall be collected monthly for April, June, August and September. Sampling shall begin at least 30 days prior to initial construction for background levels. All samples shall be taken for a 24 hour period, at 4 hour intervals beginning one hour before sunrise.

Sampling Locations:

At the discharges to the existing canal or ditch systems.

Analyses:

Water quality analyses should be performed at detection levels commensurate with water quality criteria for Class III waters (F.A.C. rule 17-3.121). Samples shall be collected in accordance with Standard Methods for Examination of Water and Wastewater and analyzed by a DHRS certified laboratory.

If a violation occurs for any sampled parameter, the Permittee shall, after notifying the Department, institute corrective action to abate the violation if it is the result of activities of the Permittee. Corrective action may include further monitoring to determine the extent and degree of violation. Any modifications shall be coordinated with the Southeast District Office. Department approval shall be obtained prior to any action constituting a modification of this permit.

All monitoring reports shall be submitted to the DER Bureau of Permitting, Tallahassee, Southeast District Office and the SFWMD under a cover letter containing the following information: (1) certification number; (2) handling, storage and methods of analysis of the samples; (3) a map indicating the sampling locations; and (4) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data. Monitoring reports shall also include the following information for each sample that is taken:

- (1) time of day samples taken;
- (2) depth of water body;
- (3) depth of sample;
- (4) antecedent weather conditions;
- (5) wind direction and velocity.
- (6) status of flow from site stormwater discharge structure (flowing or not flowing).

Monitoring reports shall be submitted to the Southeast District and SWFMD within 2 weeks of completion of analyses for each sampling period.

## 9. Dewatering Operations

There shall be no dewatering operations during construction without approval of SFWMD pursuant to Condition XVII.C.2. Such approval may be obtained by submitting an application to SFWMD at least ninety (90) days prior to start of dewatering operations. Any discharge of water from dewatering operations shall not violate water quality standards. Water from dewatering ditches filled or constructed shall be adequately treated prior to discharge. The Permittee shall provide a complete waste water discharge application to the DER and SFWMD for approval at least ninety (90) days prior to start of dewatering operations.

## B. Environmental Control Program

An environmental control program shall be established under the supervision of a qualified individual to assure that all construction activities conform to applicable environmental regulations and the applicable conditions of certification.

If harmful effects or irreversible environmental damage not anticipated by the application or the evidence presented at the certification hearing is detected during construction, the Permittee shall notify the Southeast District Office as required by Condition II.

## C. Reporting

- l. Notice of commencement of construction shall be submitted to the Southeast District Office and SFWMD within fifteen 15 days of initiation. Starting three (3) months after construction commences, a quarterly construction status report shall be submitted to the Southeast District Office. The report shall be a short narrative describing the progress of construction.
- 2. Upon or immediately prior to completion of construction of the resource recovery facility or a phase thereof, the Southeast District Office and SFWMD will be notified of a date on which a site or facility inspection should be performed in accordance with Condition V, and the inspection shall be performed within fourteen (14) days of the date of notification by the Permittee.

## XIV. OPERATION

## A. Air

The operation of the Resource Recovery Facility shall be in accordance with all applicable provisions of Chapters 17-2, 17-5, and 17-7, Florida Administrative Code. In addition to the foregoing, the Permittee shall comply with the following specific conditions of certification:

- 1. Emission Limitations upon Operation of Units 1-4
- a. Stack emissions from each unit shall not exceed the following, assuming a Btu content of 4500 Btu/lb of MSW:
  - (1) Particulate matter: 0.015 grains per standard cubic foot dry gas corrected to 12% CO<sub>2</sub>.
  - \* (2) SO<sub>2</sub>: 0.55 lbs/MBtu average heat input for each unit. Compliance with SO<sub>2</sub> emission limits shall be determined by annual stack tests and by averaging three or more stack test runs for each unit.

- (3) Nitrogen Oxides: 0.56 lbs/MBtu heat input
- (4) Carbon Monoxide: 400 ppmvd corrected to 7%  $0_2$ , 8 hour average, 130 ppmvd corrected to 7%  $0_2$ , 4 day average
- (5) Lead: 0.00056 lbs/MBtu heat input
- \* (6) Mercury: 9.2 x E-4 lb/Mbtu
  - (7) Odor: there shall be no objectionable odor at the site boundary.
  - (8) Visible emissions: opacity shall be no greater than 15% except that visible emissions with no more than 20% opacity may be allowed for up to three consecutive minutes in any one hour except during start up or upsets when the provisions of 17-2.250, FAC, shall apply.

    Opacity compliance shall be demonstrated in accordance with Florida Administrative Code Rule 17-2.700(6)(a)9, DER Method 9.
- \* (9) Fluoride: 0.018 lb/MBtu heat input
  - (10) Beryllium: 9.3xE-7 lb/MBtu heat input
  - (11) VOC: 0.013 lb/MBtu heat input
  - (12) Arsenic: 3.1 x E-5 lb/MBtu heat input
- \* (13) Sulfuric Acid Mist: 4.7 x E-2 lb/MBtu heat input
- b. The height of the boiler exhaust stack shall not be less than 200 feet above grade.
- c. The incinerator boilers shall not be loaded in excess of their rated nameplate capacity of 50,400 pounds of MSW or 226.9 x  $10^6$  Btu per hour each.
- d. The incinerator boilers shall have a metal nameplate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certifica-.
  tion number.
- e. Compliance with the limitations for particulates, sulfur oxides, nitrogen oxides, carbon monoxide, fluoride,
- \* Subject to change in accordance with current state rulemaking for resource recovery facilities or by petition under 403.516.

sulfuric acid mist, VOC and lead shall be determined in accordance with Florida Administrative Code Rule 17-2.700, DER Methods 1, 2, 3, 4, and 6 and 40 CFR Part 60, Appendix A, Methods 5, 7, 8, (modified with prefilter), 10, 12, 13A or 13B (or modified method 5 for fluorides), and 18 or other methods as approved by the DER. The stack test for each unit shall be performed at +10% of the maximum heat input rate of 226.9 x 106 Btu per hour or the maximum charging rate of 50,400 pounds of MSW per hour. Compliance with the beryllium emission limitation shall be determined in accordance with 40 CFR Part 61, Method 103 or 104, Appendix B. Particulate testing shall include one run during representative soot blowing which shall be averaged proportionally to normal daily operations. Visible emission testing shall be conducted simultaneously with soot blowing and non-soot blowing runs. Compliance with the opacity limit shall be demonstrated in accordance with Florida Administrative Code Rule 17-2.700(6)(a)9, DER Method 9.

f. Combustion efficiency calculated by:  $\CE = (1/(1+(CO/CO_2))) \times 100 \text{ shall be at least } 99.8\% \text{ for an } 8 \text{ hour average.}$ 

## 2. Emission Control Equipment

- a. The boiler particulate emission control devices shall be designed and constructed to achieve a maximum emission rate of 0.015 grains per dscf corrected to 12%  $\rm CO_2$ . All other particulate control devices shall be designed to meet the provisions of section 17-2.610.
- b. The Facility shall be designed to allow installation of an acid gas scrubbing system if such a system should become required by regulation.
- c. The Permittee must submit to the Department within thirty (30) days after it becomes available, copies of technical data pertaining to the selected emissions control systems. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters. The data shall be processed and approved or denied in accordance with F.S. 120.60.

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## 3. Air Monitoring Program

- a. The Permittee shall install and operate continuously monitoring devices for combustion temperature, flue gas O<sub>2</sub>, CO, CO<sub>2</sub> and opacity. The monitoring devices shall be installed, calibrated and maintained in accordance with the applicable requirements of Chapter 17-2, Section 17-2.710, FAC, and 40 CFR 60.45, and 40 CFR 60.13, including certification of each device in accordance with 40 CFR Part 60, Appendix B, Performance Specifications and 40 CFR 60.7 (a)(5). The CEM's (continuous emission monitors) must be installed and operational prior to compliance testing. Re-certification shall be conducted annually from initial certification. Data on monitoring equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location after the economizer or in the air pollution control equipment shall be provided to the Department for approval prior to installation.
- b. The Permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with Section 17-2.700, FAC. Drawings of testing facilities including sampling port locations as required by Section 17-2.700 shall be submitted to the Department for approval at least ninety (90) days prior to construction of the sampling ports and stack.
- c. The Permittee shall have a sampling test of the emissions performed by a commercial testing firm within sixty (60) days after achieving the maximum rate at which the boilers will be operated but not later than 180 days of the start of operation of the boilers and annually from the date of testing thereafter. Thirty days' prior notice of the initial sampling test shall be provided to the Southeast District Office and Broward County Environmental Quality Control Board (BCEQCB). Fifteen days' prior notice shall subsequently be provided for annual sampling tests.

## 4. Reporting

a. Two copies of the results of the emissions tests for the pollutants listed in Condition XIV.A.l.e.shall be submitted within forty-five days of the last sampling run to the Southeast District Office and the Broward County Environmental Quality Control Board.

- b. Emissions monitoring shall be reported to the South-east District Office and BCEQCB on a quarterly basis in accordance with Section 17-2.710, FAC, and 40 CFR, Part 60, Subsection 60.7.
- c. Notice of anticipated and actual start-up dates of each incinerator boiler shall be submitted to the DER Southeast District Office and BCEQCB.

#### 5. Unconfined Emissions

Proper dust control techniques such as water sprays or chemical wetting agents or other containment method shall be used to control visible unconfined (Fugitive) emissions to the outside air at no more than 10% opacity as determined by DER Method 9 for unconfined resource recovery processes. Proper techniques shall also be used to control such emissions to prevent them from crossing the property line to no more than three (3) minutes (cumulative) in any fifteen (15) minute period as determined by 40 CFR, Part 60, Appendix A, Method 22, with observations being made along the property line. Visible emissions shall not include uncombined water vapor or engine exhausts.

#### B. Fuel

The Resource Recovery Facility shall utilize refuse such as garbage and trash (as defined in Chapter 17-7, FAC) and natural gas recovered from landfills as its fuel. Use of alternate fuels except for distillate fuel oil or natural gas in start-up burners would necessitate modification of these Conditions of Certification. Refuse as fuel shall not include "hazardous waste" as defined in Chapter 17-30, FAC. The alternate fuel shall not contain more than 0.3% sulfur and shall not be used more than required during boiler startup or shutdown.

## C. Wastewater Disposal

Plans, drawings, and specifications for pumps, lift stations, sewage collection systems, wastewater treatment systems, and

wastewater collection systems shall be furnished to the Southeast District Office and the SFWMD for approval at least ninety (90) days prior to start of construction of each such particular component.

## D. Water Discharges

#### 1. Surface Water

a. Any discharges from the site stormwater system via the emergency overflow structure which result from an event LESS than a ten-year, 24-hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet applicable State Water Quality Standards, Chapter 17-3, FAC, the Standards of Chapter 17-25, FAC, and Chapter 40E-2 and 40E-4, FAC.

## 2. Monitoring Surface Water

a. Sampling of water quality in the surface water management system shall be sampled at the point of discharge (POD) to the concrete-lined ditch.

#### Monitoring Type and Schedule

#### Parameters

## General (Quarterly)

Total Organic Carbon, Dissolved Oxygen, pH, Turbidity, Specific Conductance, Chemical Oxygen Demand, Alkalinity, Total Sus-pended Solids, Ammonium N, oxitrate-N, Total Kjeldahl Nitro, gen, Oil and Grease, Detergents Total Coliform, Fecal Coliform, Fecal Streptococcus, Salmonella Biochemical Oxygen Demand, Total Phosphorus, and Chlorides

Metals (Semi-annual)

Aluminum, Antimony, Beryllium, Cadmium, Copper, Cyanide, Iron, Lead, Mercury, Nickel, Selenium, Silver, Zinc, Arsenic, and Chromium

- c. Water quality reports shall be submitted within thirty (30) days of receipt of analysis results to the Southeast District Office and SFWMD for distribution to the appropriate review personnel.
- d. The monitoring program may be reviewed annually by the Department, and a determination made as to the necessity and extent of continuation of the program. Aspects of the program related to sampling, monitoring, reporting, and related time schedules may be modified in accordance with the provisions of Condition XII.

## 3. Groundwater Monitoring Program

- a. Sampling of the shallow aquifer groundwater quality shall be conducted in at least three shallow wells in the immediate vicinity of the stormwater control pond to verify the integrity of the impermeable liner. The wells shall monitor the zone from elevation 0 to elevation 10. All wells shall be surveyed by a state certified land surveyor and the locations of each well depicted on a topographical aerial map with the appropriate elevations noted for each well.
- b. Operational background monitoring shall commence at least one year prior to operation of the resource recovery facility. Construction of monitoring wells and the collection of samples shall be in accordance with EPA recommended methods as contained in Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities (EPA/530/SW-611). The wells shall be deep enough to ensure that groundwater samples can be obtained

with the groundwater table elevation at its estimated lowest point and shall be protected from damage and destruction. Samples shall be analyzed in accordance with the methods described in Chapter 17-4, FAC. Analyses shall be performed by laboratories which are approved by the Department of Health and Rehabilitative Services to conduct analyses pursuant to Section 403.863, F.S., the State Public Water Supply Laboratory Certification Program.

c. Sampling of groundwater quality of monitoring wells shall be performed quarterly for all parameters as stated below unless the value for any parameter should increase by more than 25% above the average background value:

## Monitoring Type and Schedule

## Parameters

1. General (Quarterly)

pH, Specific Conductance, Chloride, Nitrate, Total Iron, Total Dissolved Solids, and Oil and Grease

2. In the event that the value for any parameter should increase by more than 25% above the average background value, then the sampling frequency shall be increased to monthly and consideration be given to using a tracer dye in the stormwater control pond to assist in verifying whether the pond is leaking or the increase is due to other causes. If the pond is found to be leaking, appropriate measures to locate and repair the leak shall be made. If the pond is found not to be leaking, then quarterly sampling shall recommence.

- d. Water quality monitoring reports shall be submitted within thirty (30) days of receipt of analysis results to the Southeast District Office and SFWMD for distribution to the appropriate review personnel.
- e. The monitoring program may be reviewed annually by the Department, and a determination made as to the necessity and extent of continuation of the program. Aspects of the program related to sampling, monitoring, reporting, and related time schedules may be modified in accordance with the provisions of Condition XII.

## E. Solid/Hazardous Waste

- 1. The final plans for this Facility shall include provisions for the isolated temporary handling of suspected hazardous, toxic, or pathological wastes.
- 2. No suspected or known hazardous, toxic, or infectious wastes as defined by federal or state statutes, rules, or regulations or local ordinances shall be burned or stored at the site without prior approval of the department. The Permittee shall prepare and submit for approval to the South Florida District Office a written training program on the detection and handling of hazardous, toxic, or infectious wastes.

- 3. Rodent and insect control shall be provided as necessary to protect the health and safety of site employees and the public. Pesticides used to control rodents, flies, and other vectors shall be as specified by the Florida Department of Agriculture and Consumer Services.
- 4. Storage of putrescible waste for processing shall not exceed storage capacity of the refuse bunker or tipping floor as designed on the approved plan, or be stored on the tipping floor for more than forty-eight (48) hours.
- 5. Ash prior to transport to the landfill shall be stored in an enclosed building on an impervious surface or by another method approved by the Southeast District Office. Final disposal of the ash shall be into the lined landfill or by another method approved by the Southeast District Office. Any leachate generated within the building shall be collected and disposed of by a method approved by the Southeast District Office. The Southeast District Office shall notify the SFWMD of the plans and specifications regarding the above referenced method.
- 6. A monthly report shall be prepared detailing the amount and type (putrescible, special wastes, boiler residue, etc.) of materials processed at the site (see Condition XIV.E.2 above). These reports shall be furnished to the Southeast District Office quarterly, commencing 120 days after the Resource Recovery Facility becomes operational and is producing residues.
- 7. The temporary hazardous waste storage and transfer facility shall be designed, constructed and operated in conformance with Section 17-30.171, FAC. The design of the facility's operational procedures, personnel training program, contingency plans and closure plans shall be submitted to the department and SFWMD for review and approval.

- 8. An EP toxicity analysis of the ash residue being land-filled for the chemicals listed and using the prescribed method as set forth in 40 CFR Part 261, Appendix II, shall be conducted within 30 days after commencement of commercial operation. In addition, said ash residue shall be tested for zinc and dioxin (2, 3, 7, 8 TCDD) content.
- 9. Results from said residue analysis shall be sent to the Southeast District Office within thirty (30) days of receipt. Results will be used to determine whether or not these materials constitute a "Hazardous Waste" as defined by applicable federal or state regulations. Results of these analyses may also be used for correlation with groundwater monitoring information and in any subsequent modification of conditions.
- 10. If residue materials are determined to be a "Hazardous Waste" then measures shall be taken to treat or dispose of the residues pursuant to rules promulgated by Federal, State or Local authorities, as may be applicable.
- ll. If the nature of the materials received at the facility becomes altered, either due to modification of conditions, i.e., the facility is allowed to incinerate already known hazardous wastes such as pesticides, or if groundwater monitoring reveals abnormal groundwater conditions which may be attributable to the landfilling of this residue, then a subsequent analysis may be required at that time.
- 12. There shall be no discharge to waters of the State of polychlorinated biphenyl compounds.

## F. Operational Safeguards

The overall design and layout of the facilities shall be such as to mitigate potential adverse effects to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal

Occupational Safety and Health Standards will be complied with during construction and operation. The safety standards specified under Section 440.56, Florida Statutes, by the Industrial Safety Section of the Florida Department of Commerce will be complied with during operation.

## G. Transmission Lines

The directly associated transmission lines from the Resource Recovery Facility electric generators to the Florida Power and Light Company transmission system shall be kept cleared without the use of herbicides.

## H. Noise

Operational noises shall not exceed local noise ordinance limitations nor those noise standards imposed by zoning.

## I. Potable Water System

The potable water system (wells, pipes, pumps and treatment facilities) shall be designed, constructed and operated in conformance with the applicable provisions of Chapters 17-21 and 17-22, FAC. Plans and specifications for these facilities shall be provided to the Southeast District Office and the Broward County Environmental Quality Control Board for review and approval ninety (90) days prior to construction.

## XV. WATER MANAGEMENT DISTRICT - GENERAL CONDITIONS

## A. Professional Engineer Certificate

The operational phases of the surface water management system authorized under this Certification shall not become effective until a Florida registered professional engineer certifies upon completion of each phase that these facilities have been constructed in accordance with the design approved by the South

Florida Water Management District (SFWMD). Within thirty (30) days after completion of construction of each phase, the Permittee shall submit the engineer's certification and notify the SFWMD that the facilities are ready for inspection and approval.

## B. Minimum Standards

This Certification is based on the applicant's submitted information to the SFWMD which reasonably demonstrates that adverse off-site water resource related impacts will not be caused by the authorized activities. The plans, drawings, and design specifications submitted by the applicant shall be considered the minimum standards for compliance.

## C. Liability

The North Broward County Resource Recovery Project, Inc., or its successor(s) shall hold and save the SFWMD harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance or use of any facility authorized by this Certification, to the extent permitted under Florida law.

#### D. Enforcement

Authorized representatives of the SFWMD shall be allowed to enter the premises to inspect and observe the operation of the surface water management system in order to determine compliance with the conditions of this Certification.

## E. Water Quality Monitoring

Water quality data required by this Certification for the surface water management system shall be submitted to the SFWMD and Department of Environmental Regulation Southeast District Office. Parameters to be monitored include but are not limited to those listed in Chapters 17-3 and 17-4, FAC. If water quality data are required by any of the conditions thereof, the Permittee shall provide such data to the SFWMD as volumes of water discharged, including total volume discharged during the days of sampling and total discharges from the property or into surface waters of the state.

## F. Water Shortage

In the event of a declared water shortage, water use reductions may be ordered by the SFWMD in accordance with the Water Shortage Plan, Chapter 40E-21, FAC.

## XVI. WATER MANAGEMENT DISTRICT - CONSTRUCTION CONDITIONS

- A. The Permittee shall prosecute the work authorized under the Certification in a manner so as to minimize any adverse impact of the works on fish, wildlife, natural environmental values, and water quality. The Permittee shall institute necessary measures during the construction period, including full compaction of any fill material placed around newly installed structures, to reduce erosion, turbidity, nutrient loading and sedimentation in the receiving waters.
  - B. All roads shall be set at or above the elevation acceptable to Broward County, per Ordinance 81-16, as it may be amended.
  - C. All building floors shall be set at or above elevations required by Broward County, per Ordinance 81-16, as it may be amended.

D. Off-site discharges during construction and development shall be made only through the discharge structures authorized by this Certification.

## E. Agreements Required Prior to Construction

- 1. No construction authorized herein shall commence until the North Broward Resource Recovery Project, Inc. or its successor has agreed in writing, to the reasonable satisfaction of the SFWMD, that it will be responsible for the construction, operation, and maintenance of the entire surface water management system.
- 2. No construction authorized herein shall commence until the North Broward County Resource Recovery Project, Inc., or its successor(s) has agreed, in writing, by letter or resolution, or provides the District with evidence of indemnification and the indemnitor agrees in writing, that it will be responsible for the construction, operation, and perpetual maintenance of the entire surface water management system, both during operation of the facility and following the closure of the whole or any part of the facility.
- F. It is also the responsibility of the Permittee to ensure that adverse off-site water resource related impacts do not occur during construction.
- G. This project may be constructed in compliance with and meet all requirements set forth in Chapter 373, Florida Statutes, and Chapters 40E-2, 40E-3, and 40E-4, FAC.

## XVII. WATER MANAGEMENT DISTRICT - SITE SPECIFIC STANDARDS

## A. Design Conditions

Discharge structures shall include a baffle, skimmer, or other mechanism suitable for preventing oil, grease, or other floatable materials from discharging to and/or from retention/detention areas.

## B. Monitoring Conditions

Water quality samples shall be taken at the surface water discharge structure locations of the water management system during periods of discharge according to the schedule below. Flow shall be measured at the time of sample collection and the surface elevation of the water shall be provided. A laboratory certified by the State of Florida shall be responsible for all water quality sampling and analyses. Reports shall be submitted to this District on a semi-annual basis. Monitoring requirements will be evaluated by the SFWMD following two years of data collection.

## Monitoring

## Type Schedule

## Parameters

1. General
 (Quarterly)

Total Organic Carbon, Dissolved Oxygen, pH, Turbidity, Specific Conductance, Chemical Oxygen Demand, Alkalinity, Total Suspended Solids

 Trichloroethylene, Tetrachloro-Ethylene, Carbon Tetrachloride, Vinyl Chloride, 1,1,1-Trichloroethane, 1,2-Dichloroethane, Benzene, Ethylene Dibromide

3. Metals
 (Semi-annual)

Aluminum, Antimony, Beryllium, Cadmium, Copper, Cyanide, Iron, Lead, Mercury, Nickel, Selenium, Silver, and Zinc

#### C. Water Use

- 1. Final water use rates and sources of water for process and irrigation shall be submitted to the SFWMD when the final plant design is determined.
- 2. No dewatering operation shall be allowed, unless the Permittee can demonstrate to the District's written satisfaction that no adverse water resource impacts will occur as a result of the operation.

## XVIII. WATER MANAGEMENT DISTRICT - INFORMATIONAL REQUESTS

## A. Prior to Construction of

- 1. Resource Recovery Facility
  - a. At least sixty (60) days prior to the commencement of construction, the SFWMD staff must have received and reviewed any pertinent additional information required to be submitted under the SFWMD's site specific standards and the conditions of certification, and must issue a written approval for the desired construction.

    b. Prior to construction of the Resource Recovery Facility, the Permittee shall agree in writing to the Department of Environmental Regulation and the District that no incinerator ash from this Resource Recovery Facility will be disposed of in any landfill cell not previously approved by the Department of Environmental Regulation and South Florida Water Management District for said ash disposal.
  - c. Prior to construction of the Resource Recovery Facility, a complete set of paving, grading, and drainage plans with supporting calculations for each phase (if applicable) must be submitted to the SFWMD, for a determination of compliance with Chapter 40E-2 and 40E-4, FAC. Said plans shall include the following:
    - (1) Paving, grading and drainage plans with special attention to perimeter site grading; and
    - (2) Drainage calculations including:
      - (a) Design storms used including depth, duration and distribution;
      - (b) Off-site inflows;
      - (c) Stage-storage computations for the project and stage-discharge computations for the outfall structure(s);
      - (d) Acreages and percentage of property proposed as:

- (i) impervious surfaces (excluding water bodies)
- (ii) pervious surfaces (green areas)
- (iii) lakes, canals, retention areas, etc.
  - (iv) total acreage of the project
- (e) Runoff routing calculations showing discharges, elevations, and volumes detained during applicable storm events;
- (f) Calculations used to determine minimum building floor and road elevations; and
- (g) Description of liner specifications and installation procedures for the elastomeric liner under the dry detention area.

## 2. Hazardous Waste Storage Facility

Any on-site hazardous materials temporary storage and transfer facility constructed at this site pursuant to the Water Quality Assurance Act should be considered separate from the Certification process and may be subject to regulatory permits if required by applicable statutes, rules, and regulations. The design of the building and related infrastructure should be submitted to this District for review and verification that the proposed facility has been designed to prevent any stored or transferred hazardous materials from coming in contact with the surface water management system.

## 3. Transmission Line Corridor

Sixty days prior to the commencement of construction of the transmission line, the Permittee shall provide the District with the location of areas in which fill and associated facilities will be placed. Written confirmation that the fill and associated facilities will not cause adverse off-site impacts shall be received from the District prior to commencement of construction.

## 4. Wet Scrubbing System

If the installation of a wet scrubbing system for air pollution control is required, the Permittee shall submit the following to the SFWMD for review and approval:

- a. Design and supporting documentation for the wet scrubber system, including chemical and physical properties of any possible waste products generated by the system and the method of disposal of such waste.
- b. Calculations and supporting documentation of the effect, if any, that the disposal of the wet scrubber waste product will have on the surface water management system or storm water runoff quality.
- c. Calculations and supporting documentation for any additional water use as a result of construction and operation of the wet scrubber system.
- d. Proposed source of water for the wet scrubber system. If the proposed source of water is on-site withdrawal of groundwater, the applicant shall meet the requirements of Chapter 373, Part II, F.S.
- e. If the proposed source of wet scrubber water is a public water supply system, the Permittee shall receive approval by the SFWMD prior to construction of the wet scrubber system.

#### B. General

Subsequent modifications to the drawings and supporting calculations submitted to the SFWMD which alter the quantity or quality of the discharge of water off-site shall be pursuant to Section 403.516, F.S., and Rule 17-17.211, FAC, and shall be submitted to the SFWMD for a determination that the modifications are in compliance with Chapters 40E-2, 40E-3 and 40E-4, FAC.

# XIX. WATER MANAGEMENT DISTRICT - ADDITIONAL PERMITTING REQUIREMENTS

Off-site supporting facilities (landfill, part of previously permitted ditch, etc.) which are referenced in the North Broward Resource Recovery power plant application are considered by the SFWMD for permitting purposes as separate from this Certification and subject to permitting requirements of Chapter 373, Florida Statutes.

## XX. OPERATIONAL CONTINGENCY PLANS

## A. Operating Procedures

The Permittee shall develop and furnish the Southeast District a copy of written operating instructions for all aspects of the operation which are critical to keeping the facility working properly. The instructions shall also include procedures for the handling of suspected hazardous, toxic and infectious wastes.

## B. Contingency Plans

The Permittee shall develop and furnish the Southeast District Office written contingency plans for the continued operation of the system in event of breakdown. Stoppages which compromise the integrity of the operations must have appropriate contingency plans. Such contingency plans should identify critical spare parts to be maintained on site.

## C. Current Engineering Plans

The Permittee shall maintain a complete current set of modified engineering plans, equipment data books, catalogs, and documents in order to facilitate the smooth acquisition or fabrication of spare parts or mechanical modifications.

## D. Application Modifications

The Permittee shall furnish appropriate modifications to drawings and plot plans submitted as part of the application, including operational procedures for isolation and containment of hazardous wastes.

## XXI. TRANSFER OR ASSIGNMENTS OF RIGHTS, DUTIES, OR OBLIGATIONS

If contractual rights are transferred under this certification, Notice of such transfer or assignment shall immediately

be submitted to the Department of Environmental Regulation and South Florida Water Management District by the previous certification holder (Permittee) and Assignee. Included within the Notice shall be the identification of the entity responsible for compliance with the certification. Any assignment or transfer shall carry with it full responsibility for the limitations and conditions of this certification.

## XXII. PROPRIETARY DOCUMENTS OR INFORMATION - CONFIDENTIALITY

Proprietary or confidential data, documents or information submitted or disclosed to any agency shall be identified as such by the Permittee and shall be maintained as such pursuant to applicable Florida law.

## XXIII. COOLING TOWER

- A. The North Broward Resource Recovery Facility may utilize treated sewage or stormwater runoff as a source of cooling water. If the Permittee wishes to use another source of cooling water other than treated sewage or stormwater runoff, the Permittee must submit a modification request pursuant to 403.516(2), Florida Statutes, to the Department and to the South Florida Water Management District and obtain approval of the Siting Board.
- B. Prior to use in the cooling tower, treated sewage effluent shall be disinfected by use of chlorine or other suitable biocide to achieve a 1.0 mg/l concentration of total chlorine residual after a 15 minute contact time.