

Department of Environmental Protection

Jeb Bush Governor Northeast District 7825 Baymeadows Way, Suite B200 Jacksonville, Florida 32256-7590

David B. Struhs Secretary

July 18, 2000

In the matter of an Application for Permit by:

DEP File Nos. 0002870-002 & 0002870-003 Nassau County

Board of County Commissioners Nassau County Post Office Box 1010 Fernandina Beach, Florida 32034

NOTICE OF PERMIT

Enclosed is Permit Number 0002870-002-SC to construct and operate the West Nassau Class 1 North Landfill, including the vertical expansion, issued pursuant to Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4, 62-25, 62-522, and 62-701.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, MS #35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Michael J. Fitzsimmons

Waste Program Administrator

Northeast District

7825 Baymeadows Way, Suite B-200 Jacksonville, Florida 32256-7590

(904)448-4320

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT was mailed before the close of business on July 18, 2000.

FILING AND ACKNOWLEDGEMENT

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FILED, on this date, pursuant to \$120.52 Florid
Statutes, with the designated Department Clerk

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PERMITTEE:

Board of County Commissioners Nassau County Post Office Box 1010 Fernandina Beach, Florida 32034 I.D. Number: NED-45-00037140

Permit/Cert Number: 0002870-002-SC

Date of Issue: 07-18-2000 **Expiration Date:** 07-18-2005

County: Nassau

Lat/Long: 30°36'12"N/81°49'02"W Section/Township/Range: 8/2N/25E

Project: West Nassau Landfill, North Class I

Construction and Operation Renewal of SC45-286904

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-25, 62-522, 62-550 and 62-701. The above-named Permittee is hereby authorized to perform the work or maintain the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department of Environmental Protection (Department) and made a part hereof, and specifically described as follows:

To construct and operate the West Nassau Class I North Landfill, including the vertical expansion, with a total site area of 140± acres. The bottom liner system design for Cells 7, 9, 11 and 13 will be constructed of the following components, from top to bottom, a 12" protective soil layer, a 12" protective and leachate collection layer, a geocomposite drainage net, a primary 60-mil HDPE synthetic liner, a geocomposite drainage net, a secondary 60-mil HDPE synthetic liner placed over a Geosynthetic Clay Liner (GCL).

The West Nassau Landfill entrance is located on the east side of U.S. Highway 301 approximately three miles north of Callahan in Nassau County.

This permit is issued in accordance with the application received December 3, 1999, incorporating information previously provided on September 13, 1999, and additional information provided on February 7, March 17, and May 26, 2000, including Department File Numbers 0002870-002 and 0002870-003:

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GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- As provided in subsections 403.087(7) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither 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. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

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(c) Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to educe, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
- 11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300 F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:

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GENERAL CONDITIONS:

() Determination of Best Available Control Technology (BACT)

- () Determination of Prevention of Significant Deterioration (PSD)
- (X) Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards
- 14. The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the Permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

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SPECIFIC CONDITIONS:

1. The West Nassau Class I Landfill shall be constructed, operated and maintained in accordance with this permit and all applicable requirements of Chapters 62-4, 62-25, 62-520, 62-522, 62-550, 62-701, and 62-730 Florida Administrative Code (FAC) and the following documents submitted in support of Department File Numbers 0002870-002 and 0002870-003:

- a. **Document 1** "Request for Approval of Alternate Liner System," prepared by Golder and Associates, dated September 13, 1999, signed and sealed by Francis T. Adams, P.E.;
- b. **Document 2** "Approval of Alternate Procedures and Requirements," issued by the Florida Department of Environmental Protection, Division of Waste Management, SWAP99-5, dated November 24, 1999;
- c. **Document 3** "Application for Permit Renewal," prepared by Golder and Associates, dated November 1999, signed and sealed by Francis T. Adams, P. E., received on December 3, 1999;
- d. **Document 4** "Response to Comments on Permit Renewal Application," prepared by Golder and Associates, dated February, 2000, signed and sealed by Francis T. Adams, P. E., received on February 7, 2000;
- e. **Document 5** "Response to DEP Comments dated March 7, 2000," prepared by Golder and Associates, dated March 17, 2000, signed and sealed by Francis T. Adams, P.E., received on March 17, 2000; and
- f. **Document 6** Revised Permit Drawing No. 5, 6, and 8", prepared by Golder and Associates, dated May 25, 2000, signed and sealed by Francis T. Adams, P.E., received on May 26, 2000.
- 2. A copy of the Department approved engineering drawings, plans, reports, operation and contingency plans and all revisions, and supporting information, as well as a copy of this permit, shall be kept at the facility at all times for reference and inspections.
- 3. Applicable Permits. Receipt of any permits from the Department does not relieve the applicant from obtaining other federal, state, and local permits required by law including those of the St. Johns River Water Management District.
- 4. Other Regulatory Requirements. If any other regulatory agency should require revisions or modification to the permitted project, the Department is to be notified of the revisions so that a determination can be made as to whether a permit modification is required.

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5. **Permit Renewal.** Pursuant to FAC Rule 62-4.090, the Permittee shall apply for a renewal of the permit no later than May 19, 2005, on forms and in a manner prescribed by the Department, in order to assure conformance with all applicable Department rules. Permits shall be renewed at least every five (5) years as required by FAC Rule 62-701.330(3).

- 6. Transfer of Permit. The Department must be notified, in writing, using Application for Transfer of Permit Form (Attachment 6), within thirty (30) days of any sale, conveyance, or other transfer of the facility or within thirty (30) days of any transfer of ownership or control of the real property at which the facility is located. All transfers of ownership or transfers of a permit are subject to the requirements of F.A.C. Chapter 62-4.
- 7. **Notification in Case of Emergency.** The Permittee shall immediately notify the Department by telephone whenever a serious problem occurs at the facility, including a fire or other emergency that poses an unanticipated threat to the public health or the environment. During regular business hours, notification shall be made to the Northeast District Office at (904) 448-4320. If an emergency occurs outside regular business hours, the Permittee shall telephone the 24-hour emergency phone number (800) 320-0519. This number is for emergencies only. Within seven (7) days of any emergency, the Permittee shall submit to the Department, a written report explaining the extent of the problem, the cause, and what actions have been or will be taken to correct the problem, or prevent its recurrence.
- 8. **Provision of Temporary Source of Potable Water.** The Permittee shall provide a temporary source of potable water within seven (7) days and a permanent safe drinking water supply within 180 days of discovery of contamination to replace any potable water well that is shown by chemical and hydrogeologic analysis to be contaminated by the facility. This water shall meet all drinking water standards set forth in F.A.C. Chapter 62-550 and shall be provided at the Permittee's expense.
- 9. Use of Closed Landfill Areas. Pursuant to F.A.C. Rule 62-701.610(7), the Department retains regulatory control over any activities, which may affect the integrity of the environmental protection measures such as the landfill cover, drainage, liners, monitoring system, leachate and stormwater controls. The Permittee shall consult with the Department prior to conducting any activities on the landfill other than the activities approved in the permit application.
- 10. **Financial Assurance.** The Permittee shall maintain financial assurance for closure and long-term care in accordance with FAC Rule 62-701.630. Proof that the financial assurance mechanism is funded in accordance with FAC Rule 62-701.630 (effective 5-19-94) shall be submitted to the Department annually. All submittals in response to this specific condition shall be submitted to: Financial Coordinator, Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

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As required by Specific Condition 19m. of Permit Modification No. 255877 of Permit No. SC45-174427, the Permittee established an escrow account for corrective actions. The escrow-funding rate of \$2.25 per ton shall continue to be collected until August 1, 2000. After August 1, 2000, continued funding of the escrow account may be ceased. However, the Permittee shall maintain the escrow account balance as funded through August 1, 2000. Interest accrued by the escrow account funds subsequent to August 1, 2000 is not required to be returned to the escrow account. The Permittee shall maintain the amount accumulated in the escrow account established for corrective actions. The Permittee is authorized to use any future interest earned in this account.

11. **Annual Cost Adjustments.** The Permittee shall submit to the Department's Northeast District office, annual cost adjustments for closure construction and long-term care for the Class I landfill, certified by a professional engineer, as required by FAC Rule 62-701.630(4). For landfill owners or operators using an escrow account, the cost adjustment statement must be submitted between July 1 and September 1 of each year of this permit. The Permittee shall also include in the annual cost adjustments, an annual estimate of the remaining life and capacity in cubic yards of the existing permitted landfill. All estimate update submittals shall be sent to: Northeast District, Department of Environmental Protection, 7825 Baymeadows Way, Suite B200, Jacksonville, FL 32256-7590.

The Permittee shall also include in the annual cost adjustments, an annual estimate of the remaining life and capacity in cubic yards of the existing, constructed landfills and remaining capacity and site life of other permitted areas not yet constructed.

- 12. Landfill Final Closure. At least 90 days before the date when waste will no longer be accepted at the facility for disposal, the permittee shall submit a closure permit application to the Department for review and approval. The application shall be on the appropriate form (62-701.900(1)) and shall include the information required in Chapter 62-701.
- 13. **Design Elevation and Annual Survey.** The maximum elevation for the West Nassau Class I Landfill is elevation 170 feet MSL. The specified elevation shall include the final cover system. A survey of the waste disposal area shall be conducted at the end of each year from the date of permit issuance until it is within ten (10) feet of design height after which it shall be conducted quarterly. This information is to be submitted to the Department within 30 days of conducting the survey and shall include the maximum elevation at the design high point, all points designed for terraces, and the location of the toe of the slope.
- 14. **Fill Phasing Plan.** The facility shall be constructed in the following order: Cell 7, Cell 9, Cell 11, and Cell 13. The construction sequence shall be in accordance with the landfill filling sequence described in Section 6.9 and shown in Drawing Sheets No. 9 throught 13 included in Document No. 3.

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15. Construction Specifications and Certification. The liner systems shall be constructed in accordance with the facility's Construction Quality Assurance Plan that is consistent with EPA Document 600-R-93-182. Following completion of all significant construction activities, i.e., each cell, the Permittee or authorized representative shall complete and submit to the Department, DEP Form 62-701.900(2), entitled "Certification of Construction Completion of a Solid Waste Management Facility." The Permittee shall submit to the Department Record Drawings signed and sealed by a professional engineer registered in the State of Florida and a Quality Assurance Report on liner installation prepared, signed, and sealed by a professional engineer registered in the state of Florida. At such time the Permittee shall arrange for Department representatives to inspect the facility in the company of the Permittee, engineer, and on-site operator. The facility shall not accept waste in an area until the Department has notified the Permittee in writing that it has received and found acceptable all applicable submissions required for the permit, including financial responsibility documentation.

- 16. **Initial Placement of Waste.** Waste handling at the landfill shall be in accordance with the requirements of FAC Rule 62-701.500(7). The first layer of waste placed above the liner system shall be of "selected" waste and a minimum of four (4) feet in thickness. No rigid or sharp objects that may damage the liner system shall be included in this waste layer.
- 17. **Hours of Operation.** The facility shall be limited to operating 6:00 A.M. to 6:00 P.M. Monday through Saturday. However, the hours of operation may be extended during an emergency situation, in which case the facility shall notify the Department of the extended hours of operation at the first available opportunity. If operations are extended into non-daylight hours, the facility shall appropriately illuminate the site especially at the working face to ensure proper waste screening.
- 18. Maximum Daily Volume. The facility shall be limited to accepting up to 1000 tons of waste on any one day if one operations and one backup compactor is provided, at a minimum. The facility may accept waste in an amount in excess of 1000 tons, up to 1400 tons a day if two compactors (model 826) and two bulldozers for operations are provided, at a minimum. With the exception of during an emergency situation, i.e., after a hurricane, in which special accommodations are made to handle an additional amount of waste, no more waste may be accepted. The facility shall be limited to accepting the waste proposed and described in the operations plan and shall handle the waste in accordance with the operations plan and FAC Chapter 62-701. Additionally, sufficient personnel and equipment shall be provided as noted in the operations plan to adequately operate the facility.
- 19. **Reserve Equipment.** The facility shall provide sufficient reserve equipment onsite or have arrangements to obtain additional equipment within 24 hours of equipment breakdown.
- 20. Operating Personnel. At all times the facility is open for operation, a certified trained operator that satisfies the requirements of F.A.C. Chapter 62-701.500 shall be on duty at the landfill and shall be

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responsible for maintaining the site in an orderly, safe and sanitary manner. Additionally, at all times while waste is being discharged at the working face, a spotter shall be present and shall inspect for unauthorized waste that may inadvertently be unloaded. Prohibited waste discovered at the working face shall be removed and properly handled in accordance with the operations plan.

- 21. **Prohibited Waste.** Unacceptable waste, including, but not limited to white goods, waste oil, yard waste, whole tires and lead acid batteries shall not be disposed of in the Class I landfill. Special waste accepted at the facility shall be stored in the respective designated areas until removal which shall be on an asneeded basis and no less than once a year. Additionally, liquids shall not be disposed of in a manner that would violate the liquid restrictions of FAC Rule 62-701.300(10). Furthermore, liquids containing a polychlorinated biphenol (PCB) concentration of 50 parts per million or greater; and non-liquid PCB's at concentrations of 50 parts per million or greater in the form of contaminated soil, rags, or other debris shall not be accepted at the facility for disposal.
- 22. White Goods. Please note that this permit does not constitute authorization to remove CFCs from white goods. Any applicable local, state, or federal requirements shall be satisfied.
- 23. Yard Trash. Yard trash shall be separated and mulched in accordance with the operations plan included in Document No. 3.
- 24. Waste Tires. Tires collected at the facility shall be stored and handled in accordance with the operations plan. Storage shall be in a trailer. The total amount of waste tires stored at the facility shall not exceed nine hundred and ninety-nine (999) on any given day. Once this amount is reached or the trailer becomes full, whichever occurs first, the facility shall remove the tires from the site for recycling, processing, or disposal. Logs recording the amount, in tons, of tires removed from the facility shall be kept and maintained at the landfill office. The tire's destinations shall also be logged. Please note that this permit does not authorize the facility to process waste tires at the site.
- 25. Regulated Asbestos. Regulated asbestos accepted for disposal at the landfill shall be in a wetted condition and double bagged in 6-mil plastic bags to prevent escape of the material to the outside air. Regulated asbestos waste shall only be disposed of in a designated asbestos disposal area while an authorized, qualified landfill employee supervises the activity. Signs shall be posted identifying the designated area. Each disposal location shall be recorded in accordance with 40 CFR Part 61.154 and records shall be maintained at the facility. Asbestos waste shall immediately be covered with either one foot of clean soil or three feet of solid waste which does not contain asbestos, with a minimum of six inches of daily cover.

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26. Waste Quantity Reports. The facility shall record the amount in tons of waste received at the facility each day and shall also estimate and record the amount of the following types of waste received each day at the facility: household waste, commercial waste, ash residue, incinerator by-pass waste, construction and demolition debris, treated biohazardous waste, agricultural waste, industrial waste, sewage sludge, industrial sludge, water/air treatment sludges. The waste reports shall be compiled monthly and provided to the Department quarterly.

- 27. **Random Load Checks.** The facility shall conduct a random load checking program at the landfill that shall include the following, as a minimum:
 - (a) The facility supervisor or his appointee, shall select at least three random loads of incoming waste on random days of each week and shall supervise the inspection of these loads by qualified facility personnel. The load checking program shall be conducted within the footprint of the Class I landfill.
 - (b) Loads selected for the random load checking program, shall be inspected with acceptable waste materials disposed of in the respective working face the same day of receipt. Any hazardous or prohibited waste that may be discovered shall be handled in accordance with the facility operations plan and any applicable regulations.
 - (c) Information and observations resulting from each of the random load inspections shall be recorded in writing. The logs shall be retained on site for at least three years and shall be made available to the Department at the Department's request including during a routine inspection. The date and time of inspection, the hauler's identity, the source of the waste, and whether any unauthorized/prohibited waste was observed and a description if so, shall be included in the logs.
- 28. **Daily Inspections.** The facility shall be inspected of litter on a daily basis. Any litter discovered outside the working face shall be removed and appropriately disposed of within 24 hours of discovery. The facility shall inspect the facility each day it is open for operation for the items listed on the facility's Daily Operation Inspection Form (Document No. 3) and shall complete same form. Insufficiencies noted during the inspection shall be corrected within the times frames indicated on said forms.
- 29. **Daily Cover.** Initial cover shall be applied at the end of each work day over the working face. Initial cover, consisting of soil or the Department approved alternate daily cover, the Fabrene product G168, shall be placed at a minimum depth of 6 inches after installation. An alternate daily cover to soil or the Fabrene product G168 may be utilized; if the permittee provides documentation demonstrating that the proposed material will satisfy the initial cover requirements listed in F.A.C. Chapter 62-701, including, but not limited to functioning as a fire barrier, and obtains the Department's written approval.

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SPECIFIC CONDITIONS:

30. Gas Monitoring System.

- a. Gas monitoring wells for compliance, GP-1 through GP-29, shall be maintained at the locations reflected on Drawing No. 3 in Document No. 3. The wells shall be provided with identifiers and structures to landmark and prevent accidental damage to the wells during mowing or other facility operations.
- b. The integrity of the gas monitoring system shall be inspected during the quarterly monitoring event at a minimum. The Permittee shall repair damaged and gas monitoring wells. Repairs to gas monitoring wells shall be completed within sixty (60) days of discovery of damage. If the Permittee is unable to get a reading from a monitoring well during a normal monitoring event, it shall be monitored and the results submitted to the Department within thirty (30) days of the repair or replacement.
- c. Objectionable odors and gas migration shall be controlled at the site. Gas monitoring wells and points for compliance: GP-1 through GP-29 shall be properly monitored on a quarterly basis, at a minimum rate, throughout the duration of this permit. Specifically, the wells shall be monitored by March 31, June 30, September 30 and December 31 of each year of the permit. Methane concentration shall not exceed the Lower Explosive Limit (LEL) at the property boundary or 25% of the LEL within any structure on the property. The Permittee shall record these gas monitoring data results and shall submit same along with a summary report to the Department within 15 days of the monitoring event. The Permittee may be subject to more frequent monitoring based upon the Department's review of these data results.
- d. If, during a monitoring event, it is demonstrated that the LEL at the boundary or 25% of the LEL within a structure has been exceeded, the Permittee shall immediately take all necessary steps to ensure protection of human health and notify the Department, by telephone, of the violation within seventy-two (72) hours of the time that the violation is first discovered. Within seven (7) days of detection, the Permittee shall submit a report addressing the nature and extent of the problem. The report shall also include a proposed remedy for approval. The remedy shall be completed within sixty (60) days of detection unless otherwise approved by the Department.
- 31. **Groundwater Monitoring.** In accordance with FAC 62-701 and 62-522, the Permittee shall install, place into operation, and maintain a water quality monitoring system.
 - a. The groundwater monitoring system shall be designed, constructed, operated and maintained in accordance with FAC Chapters 62-3, 62-520 and 62-522 and with the Groundwater Monitoring Plan, as presented in the Permit Documents noted in Specific Condition 1 of this Permit, as modified by the conditions specified in this permit. Compliance monitoring wells may be constructed of either two-inch or four-inch diameter well casing.

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b. Pursuant to FAC Rule 62-522.410, the zone of discharge shall be limited horizontally to 100 feet from the waste management area; or to the property boundary; or to the shortest distance between the location of the compliance monitoring wells and the waste management area; whichever is less. This zone of discharge shall remain in effect unless it becomes necessary to seek a change in accordance with FAC Rule 62-522.410.

- c. The Permittee shall ensure that the water quality standards for Class G-II ground water will not be exceeded at the boundary of the zone of discharge pursuant to FAC Rule 62-522.410.
- d. The Permittee shall ensure that the minimum criteria for ground water specified in FAC Rule 62-520.400 shall not be violated within the zone of discharge.
- e. The Permittee shall continue to operate and maintain the existing groundwater monitoring wells and piezometers. The Groundwater Monitoring Plan consists of the following wells and piezometers:

Background Well: MW-25

<u>Detection Wells Inside Slurry Wall:</u> D-8 through D-17

Compliance Wells: C-8 through C-17

Approximate monitoring well locations and identifications shall be in accordance with Attachment 1. As an exception, compliance well C-11 may be relocated to a location that is somewhat southsouthwest of detection well D-11 and that is no more than 100 feet horizontally distant from detection well D-11.

Compliance wells are to be installed only if exceedance of groundwater standards or criteria are observed in the detection wells. All compliance wells installed shall be located no farther than 100 feet distant horizontally from the permitted limits of waste.

- f. All hydrogeologic piezometers and monitoring wells not included in the Groundwater Monitoring Plan shall be properly maintained and protected. A visual inspection of these wells and piezometers to assess visible damage shall be conducted in conjunction with the semi-annual detection sampling program.
- g. Upon completion of construction of any new ground water monitoring well(s), the following information shall be submitted for those new ground water monitoring wells (permanent and temporary) New ground water monitoring wells shall be designed and constructed in accordance with FAC Chapter 62-522 and ASTM Standard D-5092:

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SPECIFIC CONDITIONS:

Well identification Latitude/Longitude Aquifer monitored Screen type and slot size Elevation at top of pipe Elevation at land surface Driller's Lithologic Log
Total well depth
Casing diameter
Casing type and length
SJRWMD well construction
permit number

A surveyed drawing shall be submitted showing the location of all monitoring wells that will be horizontally located by metes and bounds or equivalent surveying techniques. The surveyed drawing shall include the monitor well identification number as well as location and elevation of all permanent benchmark(s) and/or corner monument marker(s) at the site. The survey shall be conducted by a Florida Registered Surveyor. All wells are to be clearly labeled and easily visible at all times.

- h. In the event any monitoring well becomes damaged or inoperable, the Permittee shall notify the Department within seventy-two (72) hours and a detailed written report shall follow within seven (7) days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent a recurrence. All monitoring well design and replacement shall be approved by the Department prior to installation.
- i. Groundwater level measurements shall be collected quarterly from monitoring wells and piezometers MW-25, D-8, D-9, D-10, D-11, D-12, D-13, D-14, D-15, D-16, D-17, PZ-CF-1, PZ-CF-2, PZ-CF-3, PZ-CF-4, MW-2, MW-3R, MW-3D, MW-4, MW-5, MW-10, MW-10D, MW-12 and MW-14. Elevation measurements, referenced to N.G.V.D., shall include groundwater surface elevation, the top of well casing, and land surface at each site at a precision of plus or minus 0.01 feet. A map must be constructed depicting locations of wells and piezometers and corresponding groundwater elevation. This information shall be submitted to the Department quarterly in conjunction with the groundwater sampling results.
- j. All sample collection and water quality analysis shall be in conformance with FAC Chapter 62-160 and FAC 62-522.600.
- k. All groundwater background and detection monitoring wells shall be sampled and analyzed semi-annually for the parameters listed in Attachment 2. Specifically, the wells shall be sampled before June 30 and December 31 during each year of this permit. However, additional samples, wells, and parameters may be required based upon subsequent analyses.
- 1. Groundwater sampling results shall be reported on the attached Groundwater Monitoring Report form [DEP Form 62-522.900(2)] (Attachment 3). In order to facilitate entry of this data into the state computer system, these forms or an exact replica must be used and must not be altered as to content.

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The original forms shall be retained by the Permittee so that the necessary information is available to properly complete future reports. The report forms received from the laboratory must be submitted along with the DEP Groundwater Monitoring Report forms described above. The Permittee shall submit to the Department the results of the groundwater monitoring well water quality analysis no later than the fifteenth (15th) day of the month immediately following the end of the sampling period. Analytical results shall be accompanied by a brief narrative summary. The results shall be sent to the Solid Waste Supervisor, Department of Environmental Protection, Northeast District, 7825 Baymeadows Way, Suite 200-B, Jacksonville, Florida, 32256-7590.

In addition to the information provided on the Groundwater Monitoring Report form, the following shall be generated:

- 1. The laboratory report shall indicate method on each data sheet, the detection limits and the dilution factor.
- 2. The report shall show, in columnar form, the analytical results and, where applicable, the corresponding Florida Groundwater Standards and/or criteria.
- 3. All peaks greater than the EPA specified detection limit for the analytical method shall be identified.

The Permittee shall submit to the Department a minimum of two complete reports and, upon request by the Department, four additional reports.

- m. Compliance with groundwater standards and/or criteria shall be determined by analysis of unfiltered groundwater samples, unless the requirements of FAC Rule 62-520.300(6) and the document entitled, "Determining Representative Ground Water Samples, Filtered or Unfiltered (January 1994)" are satisfied.
- n. Groundwater levels shall be recorded no less than forty-eight (48) hours after well installation and prior to evacuating the well for sample collection. Measurements, referenced to N.G.V.D., shall include groundwater surface elevation, the top of well casing, and land surface at each site at a precision of plus or minus 0.01 feet. A groundwater surface contour map shall be constructed by a professional geologist or qualified professional engineer from measurements collected from each well. The measurement data and the groundwater surface map shall be submitted to the Department concurrently with the groundwater monitoring report forms. In the event that the data indicates a variation in the horizontal or vertical flow directions such that existing wells are not adequate to intercept potential contaminants generated from the facility, the Permittee shall propose additional

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wells to correct that deficiency or the Department shall require wells to be installed to correct that deficiency.

o. If, at any time, groundwater standards and/or criteria are exceeded, or if parameter concentrations in detection wells are significantly above unaffected background water quality, the Permittee shall notify the Department within seventy-two (72) hours of discovery and resample the monitor well(s) to verify the contamination analysis within fourteen (14) days from the date the Permittee received the results. The Permittee shall submit to the Department the results of the resampled groundwater monitoring well water quality analysis and the original analysis no later than the fifteenth (15th) day of the following month.

Should the Permittee choose not to resample, the Department will consider the water quality analysis that exceeded the standards and/or criteria, or that significantly exceeded background water quality, as representative of current groundwater conditions at the facility.

If the groundwater standards and/or criteria are exceeded in a detection well or if parameters in a detection well are significantly above unaffected background water quality, the Permittee shall implement the Assessment Monitoring and Corrective Action requirements of FAC Rule 62-701.510, and shall, as required by the Department, initiate and implement the "Corrective Actions for Contamination Site Cases," attached and incorporated as Attachment 4, within the time frames specified therein.

- p. During the months of December 2000 and December 2004, the Permittee shall sample all wells for the parameters in Attachment 5. These results shall be submitted to the Department by January 15, 2005. This sampling event shall be in lieu of the routine semi-annual sampling for the last half of 2000 and 2004, respectively.
- q. F.A.C. Rule 62-522.600(3)(k) requires that the ground water monitoring program must inventory and map surface waters within one mile of the landfill. If there are any modifications to surface waters within one mile of the landfill, the Permittee shall, upon request, submit to the Department a revised inventory and map of surface waters within ninety (90) days.
- r. F.A.C. Rule 62-522.600(3)(g) requires an inventory and map of all wells within a one (1) mile radius of the landfill, including the owners' names and addresses, well locations, well specifications (well depth, diameter, screened interval, capacity, etc.) and utilization. If there are any changes to the well inventory, the Permittee shall, upon request, revise the well inventory and shall submit the revised inventory to the Department within ninety (90) days.

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s. The Permittee shall monitor the data obtained from the leachate, and ground and surface water monitoring system, and the site-specific conditions. A report shall be submitted every two years to the Department by the Permittee in accordance with FAC Rule 62-701.510(9)(b). In addition, it shall include a graphic plot of analytical laboratory data over time for the leachate and surface water sampling parameters. The groundwater, surface water, and leachate monitoring programs shall be evaluated and the adequacy of the monitoring frequency and analyses shall be determined. The Permittee shall have this report prepared and sealed by a professional geologist or qualified professional engineer and submit this information by May 15, 2001, 2003 and 2005.

t. Based on any information or data obtained after the effective date of this permit, the Department reserves the right to modify the conditions set forth herein pursuant to the latest state Rules and regulations (before or after the effective date of this permit); and may modify the permit conditions to address additional groundwater assessment, additional monitoring wells and/or analytical parameters and compliance monitoring.

32. Groundwater Pumping

- a. The Permittee shall remove groundwater as required from the area within the slurry wall to maintain an inward gradient from the area outside the slurry wall to the area inside the slurry wall. If groundwater elevation data indicates that an inward gradient no longer exists between groundwater inside the area of the slurry wall and groundwater outside the area of the slurry wall, as evidenced by the comparison of data from any existing or future wells, piezometers, or measurement points within the slurry wall to data from any existing or future wells, piezometers or measuring points outside the slurry wall, the Permittee shall notify the Department within 24 hours of measurement. Within seven calendar days of measurement, the Permittee shall begin accelerated removal of groundwater from within the slurry wall to restore the inward gradient. Groundwater elevation data shall be collected weekly until the inward gradient is restored and the inward gradient permanently restored. The accelerated pumping shall continue in order to maintain the inward gradient at all points within the slurry wall, until repairs to the system are complete.
- b. The amount of water removed from the French drain system shall be measured, as well as any additional removal of water removed from within the slurry wall. These measurements shall be compiled monthly, and submitted to the Department quarterly within 30 days of the third month's data collection.
- 33. Surface water monitoring shall be conducted on a quarterly basis. Two of the four quarters shall be in conjunction with the groundwater monitoring plan schedule.

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a. The Surface Water Monitoring System shall be designed and operated in accordance with the Permit Documents, as modified by these specific conditions.

- b. The surface water samples SW-1, SW-2, SW-3, and SW-4 shall be located at the approximate locations indicated in Attachment 1.
- c. All surface water sampling sites shall be analyzed quarter-annually for the parameters listed in Attachment 6. The analytical laboratory reports must be submitted to the Solid Waste Supervisor, Department of Environmental Protection, Northeast District, 7825 Baymeadows Way, Suite 200-B, Jacksonville, Florida, 32256-7590.
- d. Additional sampling sites and parameters may be required based on the results of analyses.
- e. The Permittee shall ensure that the surface water discharged shall not exceed quality standards for drinking water or surface water. If at any time water standards and/or criteria are exceeded, the Permittee shall immediately notify the Department by telephone whenever a serious problem occurs at this facility. During regular business hours notification shall be made to the Northeast District Office at (904) 448-4320. If an emergency occurs outside regular business hours, the Permittee shall telephone the 24-hour emergency phone number (800) 320-0519. This number is for emergencies only. Within 7 days of telephone notification, the Permittee shall submit to the Department a written report explaining the extent of the problem, its cause, and what actions have been or will be taken to correct the problem, and a time frame for implementing those actions.

34. Leachate Management.

- a. Leachate shall be pumped from the leachate sump through below grade force mains to the leachate storage tanks. Leachate shall then be removed from the storage tanks and sent for treatment or recirculated back into the landfill at the active working face.
- b. Leachate shall be recirculated only when authorized and supervised by the landfill operator or the landfill superintendent. Leachate shall not be recirculated in an amount that will cause the leachate head above the upper liner to exceed twelve (12) inches. Leachate shall be recirculated, using the facility's 5,000-gallon tanker, only at the working face having at least a 20-ft depth of in-place waste. On a maximum day, leachate shall not be recirculated in an amount that will exceed 30,000 gallons per day. Additionally, leachate shall not be recirculated during weather conditions or in quantities that may cause runoff outside the waste disposal unit, leachate seeps, ponding, or wind-blown spray.

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Leachate recirculation shall be confined to the inner working face and shall not be recirculated in areas where final or temporary cover has been installed. Prior to implementing leachate recirculation activities, ditches, berms, or other control measures shall be installed or constructed to contain and prevent leachate runoff.

c. Leachate shall be sampled at sampling ports, provided in the leachate force main, at the connection to the sideslope riser pipe. Leachate shall be sampled and analyzed on a semi-annual basis for the following parameters in conjunction with the groundwater monitoring schedule:

Field Parameters
Specific conductivity

Laboratory Parameters
Total ammonia - N

pH Dissolved Oxygen Bicarbonate

Dissolved Oxygen

Chlorides Iron

Colors, Sheen

Mercury Nitrate Sodium

Total Dissolved Solids(TDS)

Those parameters listed in 40 CFR

Part 258 Appendix I

In addition, leachate shall be sampled and analyzed annually for the parameters listed in 40 CFR Part 258, Appendix II.

The sampling and analysis shall be conducted under a Department-approved Comprehensive Quality Assurance Plan that covers these activities. Detection levels shall be at or below groundwater standards and/or criteria. Test results shall be submitted to the Department as part of the semi-annual ground and surface water monitoring report.

d. The leachate constituent and concentration ranges represented by the Permittee's compatibility testing of the liner, EPA Method 9090, includes:

Ammonia	0 to 16.0 mg/l
Arsenic	0 to 0.323 mg/l
Barium	0 to 3.24 mg/l
Lead	0 to 0.275 mg/l
Nickel	0 to 9.71 mg/l
Phenols	0 to 1.86 mg/l
Zinc	0 to 12.2 mg/l

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Xylenes

0 to 527 mg/l

Acetone

0 to 6130 mg/l

Methyl Ethyl Ketone

0 to 5540 mg/l

If, following any leachate sampling event, the concentrations of constituents listed above are exceeded, the Permittee shall perform a liner compatability retest, EPA Method 9090, using a leachate representative of that which was produced at the landfill at the time of the exceedance(s). In addition, parameters that have exceeded the concentration ranges established above shall be added to the semi-annual parameters listed in Attachment 2, and the frequency for leachate sampling and analysis and reporting shall increase to monthly. If the liner compatibility test results indicate that the leachate is compatible with the liner, the Permittee shall submit an application for a modification to the permit increasing the concentration range of the parameter(s) that exceeded those listed above to a range that was represented by the test leachate. If the test results indicate that the leachate is incompatible with the liner, the Permittee shall cease accepting industrial waste.

- d. Prior to sending leachate to a pretreatment or treatment facility, the facility shall obtain the Department's written approval. This permit authorizes the removal of leachate to the pretreatment facility Industrial Water Services Treatment Facility in Jacksonville. Prior to sending the leachate elsewhere, the facility shall propose for review the alternate facility and obtain the Department's written approval. The proposal, at a minimum, shall contain a letter from the facility committing to accepting a maximum daily amount. Please note that the facility shall have the capacity to handle the additional loading. Quantitative records of leachate collected and sent off site for treatment shall be kept at the facility and shall be submitted to the Department with the semi-annual monitoring reports.
- e. Concerning leachate sampling and analysis, if a contaminant listed in 40 CFR exceeds the regulatory level listed therein, the Permittee shall follow the procedures addressed in F.A.C. Rule 62-701.510(6)(b)2. Leachate that tests hazardous shall be handled in accordance with any applicable regulations. Please note that this permit does not authorize on-site treatment or pretreatment of leachate collected at the facility.
- f. A facility operator shall inspect the leachate wetwell and the exposed exterior of the aboveground leachate storage tanks once constructed for leaks, corrosion, and maintenance deficiencies each day the facility is open for operation. Other portions of the leachate collection and storage system, including, but not limited to, the leachate secondary containment structure, shall be conducted weekly, at a minimum rate. An interior inspection of the tanks shall be performed whenever the tank is drained or at a minimum of every three years. If the inspection reveals a tank or equipment deficiency, leak, or any other deficiency that could result in failure of the tank to contain the

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leachate, remedial measures shall be taken immediately to eliminate the leak or correct the deficiency. Inspection reports shall be maintained and made available to the Department upon request for the lifetime of the liquid storage system.

- g. Sludge or solids taken from the leachate storage tanks or the wetwell shall have a hazardous waste determination performed for metals and organics in accordance with 40 CFR 262.11 and FAC Rule 62-730.160. These solids shall be disposed of in a proper manner, at a permitted facility, based on the results of the testing performed.
- h. The facility shall provide a totalizing flow meter at each leachate collection sump location to record, in gallons per day, the amount of leachate being collected and pumped to the leachate storage tanks from each sump.

The Permittee shall measure and record daily the amount of leachate collected from the leachate collection and detection system of each cell of the Class I Landfill. The data shall be compiled monthly and a quarterly summary report shall be submitted to the Department by February 15, May 15, August 15 and November 15 of each year of the permit, commencing with the first year of deposition of waste in the landfill. The Department shall be notified within 24 hours of discovery if the amount of leachate collected from the leak detection system exceeds 878 gallons per day (gpd). After the Department has been notified, the Permittee shall conduct an investigation to determine if remedial actions are warranted and shall provide a report within thirty (30) days of the date of discovery. Should remedial actions be warranted, the Permittee shall propose a remedial plan, which shall include a completion schedule, to the Department for review and approval.

- i. The Permittee shall operate and maintain a recording rain gauge to record precipitation at the landfill on a daily basis. Precipitation records shall be maintained and used by the Permittee to compare with leachate generation rates in accordance with FAC Rule 62-701.500(8)(g). The Permittee shall maintain and compare the recorded precipitation rates to the leachate generation rates on approximately a monthly basis. These records shall be summarized and compiled monthly. This information shall be submitted to the Department as part of the annual ground and surface water monitoring report every two years.
- j. The Permittee shall, in an appropriate manner, clean out the leachate collection system if and when obvious signs of obstruction(s) are exhibited.
- k. Prior to accepting waste in a new cell, the valve that controls the flow of fluids collected in the leachate laterals shall be positioned to allow flow to the leachate collection main. Once in position the valve handles shall be removed to prevent any inadvertent opening. Stormwater that has come into contact with waste shall not be allowed to be discharged to the stormwater management system.

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1. For power outages that extend for a period of 24 hours or more, the facility shall obtain emergency generators within 48 hours of the time the power outage first occurs. In the interim and for shorter power outages, onsite equipment may be utilized to power the leachate sump pumps.

- 35. If waste or final cover will not be applied within 180 days of the last placement of waste in an area, intermediate cover shall be applied within seven days of the date of the last placement of waste in that area. Areas that have received intermediate cover shall be grassed to control erosion. The areas shall be seeded and/or sodded within 45 days of intermediate cover application. A good grass cover shall be established and maintained. Other erosion control measures may be implemented if prior authorization from the Department is obtained.
- 36. The facility shall be closed in phases. Installation of the multi-layer final cover system (MLFCS) including the shallow and deep passive gas vents, shall be completed within 180 days of the waste disposal cessation date. The MLFCS shall be installed in accordance with the permit application, and with the Construction Quality Assurance Plan (CQAP).

37. Stormwater Management System.

- a. The Permittee is responsible for the selection, implementation, and operation of all erosion and sediment controls on-site ant to prevent violations of water quality standards in Chapters 62-520 and 62-4, F.A.C. The permittee is encouraged to use the appropriate Best Management Practices described in the Florida Land Development Manual; A guide to Sound Land and Water Management (DER 1988)
- b. Eighty percent of coverage of the littoral zone by suitable aquatic plants is required within the first twenty-four (24) months of completion of the system. Annual replanting shall be required for littoral areas where aquatic vegetation has not become established or if vegetative cover fails below 80% coverage.
- c. The following operational maintenance activities shall be performed on all permitted systems on a regular basis or as needed:
 - (a) Removal of trash and debris
 - (b) Inspection of inlets and outlets
 - (c) Removal of sediments when the storage volume or conveyance capacity of the system is below design level.

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(d) Stabilization and restoration of eroded areas.

- (e) Mowing and removal of grass clippings.
- (f) Aeration, tilling or replacement of topsoil as needed to restore percolation capability of the system.
- (g) Replanting of vegetative cover in littoral zones falls below 80% coverage.

The stormwater management system shall be inspected after each heavy rain, but at a minimum once per quarter.

- 38. The Permittee is required to provide for periodic inspections of the stormwater management system. The permittee shall submit reports to the Department certifying that the stormwater management system is operating as designed. The reports shall be submitted to the Department as follows:
 - (a) Inspection reports for retention, underdrain, wet detention (with/or without littoral shelf), and swales shall be submitted after completion of construction and every two years thereafter. A registered Florida Professional Engineer must sign and seal the report certifying the system is functioning as designed.
 - (b) The Reports shall be submitted to the Department's Stormwater Engineer at 7825 Baymeadows Way Suite B-200, Jacksonville, FL 32256-7590.
- 39. If stormwater management system is not functioning as designed and permitted, operational maintenance must be performed immediately to restore the system. If operational maintenance measures are insufficient to enable the system to meet the design standards, the permittee must either replace the system or construct an alternative design. In this connections, the permittee must submit a permit modification application within sixty (60) days of the date the system was determined to be design deficient.

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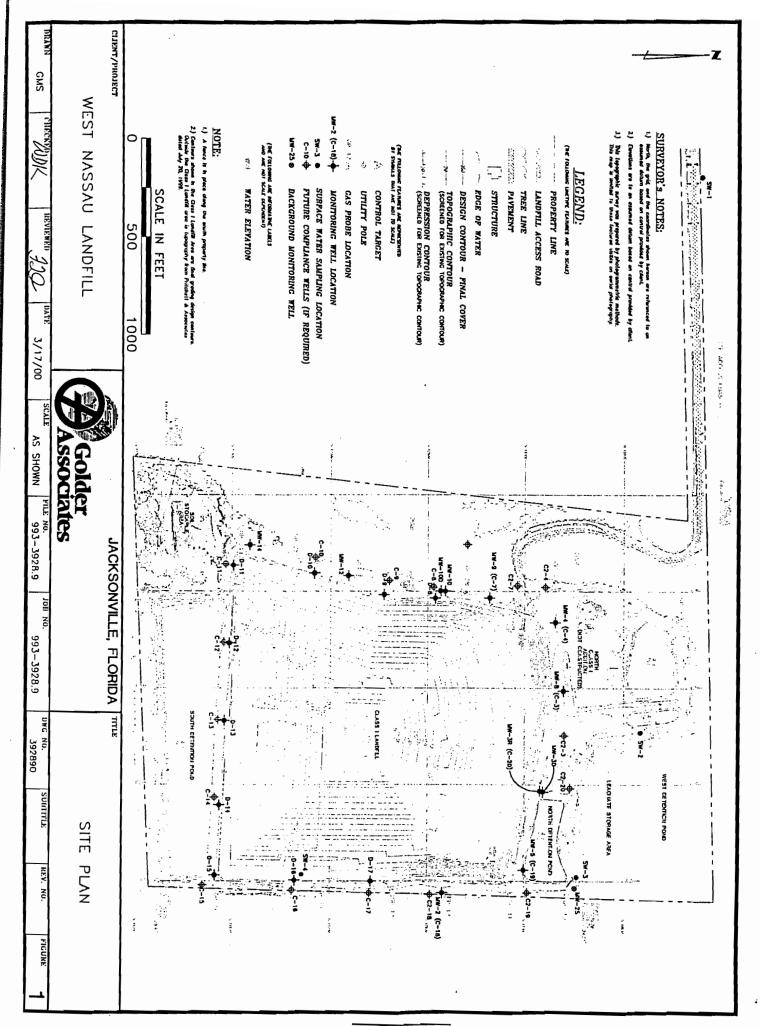
SPECIFIC CONDITIONS:

40. Outfall ditches must be inspected monthly, with the removal of trash, debris, silt and vegetation when necessary to insure proper drainage of stormwater ponds. A copy of this inspection is to be submitted to the Department with the yearly inspection report that is to be signed and sealed by a registered Florida Professional Engineer.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Michael J. Fitzsimmons
Waste Program Administrate



ATTACHMENT 2

SEMI-VANUAL PARAMETERS

Laboratory Parameters

•

Total ammonia - N Chlorides

Iron

Mercury Nitrate

Sodium Total Dissolved Solids

(SQT)

Those parameters listed in 40 CFR Part 258 Appendix I

Field Parameters

Static water level in wells Specific conductivity

Hq

Dissolved oxygen

Turbidity Temperature

Colors and sheens (by observation)

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	Form Tide GROUND WATER MONITORING
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Florida Department of Environmental Protection

Twin Towers Office Bidg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

1) Facility Name

PART I GENERAL INFORMATION

GROUND WATER MONITORING REPORT Rule 62-522.600(11)

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CORRECTIVE ACTIONS FOR CONTAMINATION SITE CASES

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Part 1 Quality Assurance Certification

tests/bench tests and RAP. consistent with the activities proposed in the IRAP, CAP, MOP, pilot organization is qualified to perform. These activities must be QA Officer will issue a letter which summarizes the activities each CompQAP(s) in order for the data to be reliable. At this time, the FDEP laboratories must follow the protocols outlined in their respective sidued by the FDEP QA Officer. All identified organizations and a 15-section document) or the most current CompQAP letter of approval TABLE OF CONTENTS of the Department-approved CompQAP (if the CompQAP is either the most recent TITLE PAGE (signed by the FDEP QA Officer) and The documentation shall, at a minimum, contain actions at the site. activities each will perform as part of the assessment and corrective (Comp QAP) in which each is approved for the sampling and analysis analysis have a Department-approved Comprehensive Quality Assurance Plan the organization(s) and laboratory(s) performing the sampling and the Permittee shall submit to the Department documents certifying that standards and/or criteria as specified in Specific Condition No. 31(o), Within 30 days of confirmation of exceedance of groundwater

A. If at any time sampling and/or analysis activities are anticipated which are not in the Department-approved CompQAP, and the Permittee wishes to maintain the services of the affected organization(s), the organization(s) shall submit amendments to add the capabilities to the CompQAP(s). Such amendments shall be approved before the proposed activity(s) may be conducted. The letter approving such amendments, and signed by the FDEP QA Officer, shall be submitted to the Department.

B. If the organization(s) or laboratory(s) performing the sampling and analysis change at any time during the assessment and corrective actions, documentation of their Department-approved CompQAP (as outlined in 1. above) shall be required.

C. If the approval of the CompQAP for a specified organization expires during the course of the investigation or corrective actions, the Permittee shall discontinue using the organization until 1) the

above is submitted. Lepartment approved CompQAP is selected and documentation outlined in l. organization obtains CompQAP approval or 2) another organization with a

if the CompQAP of any organization expires. analysis were not performed in accordance with the approved CompQAPs or doubt as to the quality of the data or method used, if the sampling and that is not specifically approved in its CompQAP, if there is reasonable generated by the Perimittee if any organization performs an activity The Department reserves the right to reject any results

Part 2 Interim Remedial Actions

may include the following, as appropriate: untreated or undertreated discharges or improper treatment. confaminants into unconfaminated or less contaminated areas through contaminant migration or protect human health. The IRA shall not spread source(s), and/or provide temporary controls to prevent or minimize The objectives of the IRA shall be to remove specific known contaminant IRAP shall be signed and sealed pursuant to Rule 62-103.110(4), F.A.C. determination that an IRA is appropriate. Applicable portions of the IRAP shall be submitted within sixty (60) days following Department Department a detailed written Interim Remedial Action Plan (IRAP). the objectives set forth below, the Permittee shall submit to the proposes that an Interim Remedial Action (IRA) is appropriate to achieve If at any time the Department determines or the Permittee

approvals from federal, state, and local agencies), and reliability; environmental effects, implementability any permits (tucjngtud feasibility, applicable, sport-term gug Joud-term technical incorporating engineering and hydrogeological considerations including, Rationale for the IRA and the cleanup criteria proposed,

into the air as a result of remedial action; concentrations and approximate quantities of any contaminants discharged to ground water, surface water, or to the ground; and the expected effluent sampling schedule if treated ground water is being discharged any effluent, expected contaminant concentrations in the effluent, an Operational details of the IAA including the disposition of B. Design and construction details and specifications for IRA;

not necessarily limited to daily, weekly, and monthly operations under Operation and maintenance plan for the IRA including, but

Details of the treatment or disposition of any contaminated routine conditions; a contingency plan for nonroutine conditions;

softs or sediments;

the effectiveness of the interim remedial action; and surface water, and ground water monitoring, as applicable, to confirm Proposed methodology including post-IRA soil, sediment,

the Permittee with regard to the implementation of the IRAP before the Permittee with a written response to the proposal. Any action taken by The Department shall review the proposed IRAP and provide Schedule for the completion of the IRA;

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IRAP has been approved shall be at Permittee's risk and Paragraph 44

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needed to provide the requested information. Department's request, a reasonable schedule for completing the work submit in writing to the Department within thirty (30) days of the information requires additional time for a response, the Permittee shall within thirty (30) days from receipt of said request. If the requested shall provide all requested revisions in writing to the Department make a written request to Permittee for the information, and Permittee address the objectives set forth in Paragraph 2, the Department will Department to evaluate the IRAP, or if the IRAP does not adequately In the event that additional information is necessary for the

with during the IRAP implementation. and notification requirements spelled out in Part 6 shall be complied All reporting modifications to the IRAP identified by the Department. IKAP reduired all incorporate spall approved Тре Department's notification to the Permittee that the IRAP has been initiated within thirty (30) days from receipt of apgrt pe Department, it shall become effective and made a part of the Order and 6. Once an IRAP has been approved by the listed in Paragraph 43. the objectives of the IRAP, the Department may choose one of the options Department determines that the IRAP still does not adequately address paragraph 2, then the Department shall approve the IRAP. IRAP that the IRAP adequately addresses the objectives set forth in If the Department determines upon review of the resubmitted

Part 3 Contamination Assessment and Risk Assessment

to meet the objectives of the Contamination Assessment. CAP shall be to propose methods for collection of information necessary The purpose of the notice from the Department that a CAP is required. Department a detailed written CAP within sixty (60) days of receipt of Preliminary Contamination Assessment, the Permittee shall submit to the If the Permittee has previously conducted a Rule 62-103.110(4), F.A.C. Applicable portions of the CAP shall be signed and sealed pursuant to Department a detailed written Contamination Assessment Plan (CAP). groundwater standards and/or criteria, Permittee shall submit to the Within sixty (60) days of confirmation of exceedance of

Establish the horizontal and vertical extent of soil, the objectives of the Contamination Assessment shall be to:

sediment, surface water and ground water contamination;

direction of ground water flow; movement in the air, soils, surface water and ground water; and rate and mechanisms of contaminant transport; rate and direction of contaminant Determine or confirm the contaminant source(s); (2)

Provide a complete characterization, both onsite and (٤)

Determine the amount of product lost, and the time (Ð) offsite, of any and all contaminated media;

period over which it was lost (if applicable);

- If leaking storage tanks may be the source of the
- contamination, determine the structural integrity of all
- which exist at the site (if applicable); aboveground and underground storage systems (including integral piping)
- Establish the vertical and horizontal extent of free
- product (if applicable);
- !səuoz characteristics of affected and potentially affected pydrogeologic Describe pertinent pydrogeologic deojodic sug (L)
- .D.7 Aqsagsaa ni beilioeqs as yzoteid etis a ebivorq (6) of the site which influence migration and transport of contaminants; and Describe geologic and hydrogeologic characteristics
- The CAP shall specify the tasks necessary to achieve the ·(I)
- Use of piezometers or wells to determine include, but are not limited to, the following: applicable objectives described in Paragraph 7.A. above. The tasks may
- horizontal and vertical directions of the ground water flow;
- geophysical methods or vapor analyzers to trace extent of ground water Use of Electromagnetic Conductivity (EM) and other
- contamination;
- zones in which discrete flow could take place; Use of fracture trace analysis to discover linear (E)
- extent of the ground water plume; water in affected areas and to determine the vertical and horizontal Use of permanent monitoring wells to sample ground (Đ)
- Sampling of public and private wells; (S)
- Sampling of surface water and sediments; (9)
- Sampling of air for airborne contaminants; (L)
- Analysis of soils, drum and tank residues, or any (8)
- characterization; contaminant and determination waste pazardous IOL media огрек
- equipment such as magnetometers, ground penetrating radar, or metal analyzers or geophysical \mathtt{nspor} Use of organic (6)
- Determination of the horizontal and vertical extent (10) detectors to detect tanks, lines, etc.;
- (11) Use of soil and well borings to determine pertinent of soil and sediment contamination;
- beds, and unsaturated zones; potentially affected hydrogeologic zones such as aquifers, confining site-specific geologic and hydrogeologic characteristics of affected and
- pue :sauoz characteristics of affected and potentially affected hydrogeologic representative slug tests to determine geologic and hydrogeologic Use of geophysical methods, aquifer pump tests and
- The CAP shall provide a detailed technical approach and written Contamination Assessment Report ("CAR") to the Department. As a mandatory task, preparation and submittal of a (EI)
- :noidsmaolni to be carried out. The CAP shall include, as applicable, the following description of proposed methodologies describing how proposed tasks are

of potential pollution sources within 0.25 (one quarter) mile; of materials which may be potential pollution sources; and an inventory permits and enforcement actions; a summary of known spills or releases the life of the facility; a summary of current and past environmental by-products and wastes (including waste constituents) generated during sources; a description of all products used or manufactured and of all processing or manufacture of materials which may be potential pollution and present operations including those which involve the storage, use, past and present property and/or facility owners; a description of past A detailed site history including: a description of

Proposed sampling locations and rationale for their (E) investigation to determine groundwater flow direction and stratigraphy. limited ъ. or conducting эрргоаср g byssed If no reliable information exists, consider stratigraphy investigation. water flow evaluation breliminary ground $\mathtt{su}\lambda$ Details of any previous site investigations including

(Đ) placement;

A description of methods and equipment to be used to

specific leachability cleanup goals); density, soil porosity, soil moisture and total organic carbon (for site identify and quantify soil or sediment contamination, including dry bulk

A description of water and air sampling methods;

their selection; be used, and detection limits of these methods with justification for Parameters to be analyzed for, analytical methods to

Proposed piezometer and well construction details

intervals, well development procedures; including methods and materials, well installation depths and screened

A description of methods proposed to determine (8)

permeability tests, computer modeling); aquifer properties (e.g., aquifer pump tests, representative slug tests,

A description of geophysical methods proposed for the (6) project;

including innovative assessment technologies proposed for the site; ${\tt merpogojodk}$ orper assessment $\operatorname{\mathtt{su}}
olimits\lambda$ Details of (JO)

A description of any survey to identify and sample

door-to-door reconnaissance for a minimum distance of a quarter mile. files, utility and detailed companies qebartment реадтр Surveys should include Water Management District, local and public or private wells which are or may be affected by the contaminant

hydrogeology of the area surrounding the site; regional geology дүр 10 description A (IS)

A description of site features (both natural and (13)

(14) A description of methods and equipment to be used to man-made) pertinent to the assessment;

Details of how drill cuttings, development and purge determine the site specific geology and hydrogeology; and

.lo besogaib bas water from installation of monitoring wells will be collected, managed

analyses, and method detection limits for each medium compared to state Tables which summarize the proposed samples, (9I)

number and type of quality assurance samples. Include the appropriate standards/criteria or generic cleanup goals.

(17) Provide information regarding state listed endangered

and threatened flora and fauna species within and near the site.

Provide a reasonable time schedule for completing (BI)

each task, preparing the CAR and submitting the CAR.

shall be at Permittee's risk and Paragraph 44 applies. written notification from the Department that the CAP has been approved regard to the implementation of the CAP prior to the Permittee receiving certification status of Part 1. Any action taken by the Permittee with the plan and responses to written the quality The Department shall review the CAP and provide the Permittee

In the event that additional information is necessary

response, the Permittee shall submit a written reasonable schedule for If the requested information requires additional time for a writing to the Department within thirty (30) days from receipt of said The Permittee shall provide all requested revisions in information. Department will make a written request to the Permittee for the adequately address the CAP objectives set forth in Paragraph 7.A, the for the Department to evaluate the CAP, or if the CAP does not

objectives and/or requirements in Paragraph 7.A, the Department may Department determines that the CAP still does not adequately address the paragraph 7, then the Department shall approve the CAP. CAP that the CAP adequately addresses the objectives set forth in If the Department determines upon review of the resubmitted completing the work needed to provide the requested information.

the Department. All reporting and notification requirements spelled out incorporate all required modifications to the proposed CAP identified by Permittee that the CAP has been approved. The approved CAP shall within thirty (30) days of the Department's written notification to the become effective and made a part of the Order and shall be initiated Once a CAP has been approved by the Department, it shall choose one of the options listed in Paragraph 43.

in Part 6 shall be complied with during the implementation of the CAP

signed and sealed pursuant to Rule 62-103.110(4), F.A.C. The CAR shall: Applicable portions of the CAR shall be approved by the Department. Report (CAR) to the Department in accordance with the CAP schedule The Permittee shall submit a written Contamination Assessment

Provide the results, discussion and conclusions regarding CAP; Summarize all tasks which were implemented pursuant to the

Include, the following tables and figures as appropriate: the Contamination Assessment objectives outlined in Paragraph 7.A;

Tatum (NGVD) of 1929 if at all possible.); casing elevations should be referenced to the National Geodetic Vertical elevation, depth to water measurements, and water elevations (The top of (1) A table with well construction details, top of casing

tasks.

- (2) A site map showing water elevations, water table contours and the groundwater flow direction for each aquifer monitored for each sampling period;
- (3) A table with water quality information for all monitor wells and surface water sampling locations;

 (4) Site maps showing contaminant concentrations and
- contours of the contaminante for all contaminated media;
- (5) Cross sections depicting the geology of the site at least to the top of the first confining unit. In general there should be at least one north to south cross section and one east to west cross section;
- (6) A table with soil and sediment quality information;
- (7) A map showing the locations of all monitor wells, race water, and sediment samples; and
- soil, surface water, and sediment samples; and (8) If applicable, a map showing the locations of all wells wells locations of an endeath wells.
- potable wells located within a quarter mile of the site. A table with the names and addresses of private and public potable wells should be included.
- D. Include copies of field notes pertaining to field procedures, particularly of data collection procedures; laboratory results to support data summary tables, and soil boring logs, well construction logs, and lithologic logs, and
- E. Summarize conclusions regarding the CAP objectives and include a recommendation for either No Further Action (NFA), a Monitoring Only Plan (MOP), a Risk Assessment/Justification proposal Action Plan (RAP). If the recommendation is for a MOP (see Paragraphs Action Plan (RAP). If the recommendation is for a MOP (see Paragraphs 20 to 25) or a RAJ (see Paragraphs 17 to 19), the MOP or the RAJ proposal shall be attached to the CAR for review.

[Note: The following justification is optional and applies only to those sites with mitigating circumstances such as technology or engineering limitations or documented natural attenuation.]

F. Justification for a "monitoring only" or "no further action" proposal if the results of the contamination assessment alone do not support a No Further Action or Monitoring Only Alternative. If the Permittee plans to develop alternative Site Rehabilitation Levels (SRLs) for the site, the proposal for a Risk Assessment/Justification (RAJ) shall be included in the CAR for review. In most instances the shall be included in the CAR for review. In most instances the exists or a numerical interpretation of the minimum criteria has been exists or a numerical interpretation of the minimum criteria has been developed by the Department for the constituent for a particular class of water or in all waters. Factors to be evaluated shall be, at a minimum.

(1) The present and future uses of the affected aquifer and adjacent surface waters with particular consideration of the probability that the contamination is substantially affecting or will migrate to and substantially affect a public or private source of potable water or a viable wildlife habitat;

aquifer or degradation of other connected aquifers; Potential for further degradation of the affected

on a review of reasonably available technology; and The technical feasibility of achieving the SRLs based

Individual site characteristics, including natural

rehabilitative processes.

completing the work needed to provide the requested information. thirty (30) days of the Department's request, a reasonable schedule for case the Permittee shall submit in writing to the Department, within requested information requires additional time for a response, in which within thirty (30) days from receipt of said request, unless the shall provide all requested revisions in writing to the Department The Permittee written request to the Permittee for the information. objectives set forth in Paragraph 7.A, the Department will make a evaluate the CAR or if the CAR does not adequately address the CAP event that additional information is necessary for the Department to has adequately met the objectives specified in Paragraph 7.A. The Department shall review the CAR and determine whether it

If the Department determines upon review of the CAR or the CAR information becomes known and connects other contamination to the site. Permittee's actions under the Order unless previously unavailable proposal, spall this approval action" Inrther MOP, or NFA as applicable to the Permittee. If the Department approves assessment, the Department will provide written approval of the CAR, reasonable and justified by the results of the contamination satisfactorily completed and that the recommended next action proposed of the CAP objectives and tasks have been all If the Department determines upon review of the CAR or the CAR

the Department may choose one of the options listed in Paragraph 43. in Paragraph 7.A, or that the next proposed action is not acceptable, Addendum that the CAR still does not adequately address the objectives

the Permittee to remediate the site to those SRLs, the Permittee shall Permittee and does not choose to require a risk assessment and requires generation. If the Department does choose to provide SRLs to the water contamination is present, may also be based on potential leachate The cleanup goals for soils will be risk based and if ground present a risk to the public health, the environment or the public SRLs for soils or sediments that are sufficiently contaminated to or may require the Permittee to complete a risk assessment to define Department, at its option, may define the SRLs for soils and sediments Criteria and the toxicity criteria per Rule 62-302.530(62) F.A.C. be the standards specified in Chapter 62-302, F.A.C., the minimum 62-520.400, F.A.C. minimum criteria. The SRLs for surface waters shall standards and the Department's numerical interpretation of the Rule shall be the Chapter 62-520, (which references Chapter 62-550) F.A.C. for the site. The SRLs for ground water as determined by the Department Permittee to implement the risk assessment process to develop such SRLs (SRLs) to which the contamination shall be remediated or may require the the CAR and other relevant information the Site Rehabilitation Levels The Department, at its option, may establish from review of

the following five major headings: subject document shall address the following task elements, divided into Unless otherwise approved by the Department, recommendation. (90) days of the Department's written approval of the CAR and the RAJ approval of the CAR and notice that a RAJ is required, or within ninety shall be submitted within ninety (90) days of the Department's written alternative SRLs or "monitoring only" or "no further action" proposals which includes a risk assessment and a detailed justification of any The TAT constituent for a particular class of water or in all waters. criteria has been developed by Department әұз for water if a standard exists or a numerical interpretation of the Department will not approve the use of a RAJ to develop alternative SRLs Permittee shall prepare and submit a RAJ. . In most instances the After Department approval of the CAR and the RAJ proposal, the

A. Exposure Assessment - The purpose of the Exposure Assessment is to identify routes by which receptors may be exposed to contaminant levels to which receptors may be exposed. The Exposure Assessment should:

(1) Identify the contaminants found at the site and their

concentrations as well as their extent and locations;

with Department acceptable exposure assumptions.

(2) Identify possible transport pathways;

(3) Identify actual and potential exposure routes;

(4) Identify actual and potential receptors for each

exbosnie ionte; and

(5) Calculate expected contaminant levels to which actual

appropriate criteria available for the contaminants and exposure routes approved exposure assumptions. мтси рератстепс ΙI Aquatic Life, and other relevant criteria as applicable in combination Quality Criteria for Protection of Human Health and for Protection of (Rfds), organoleptic threshold levels, Ambient Water Reference Doses shall be based upon criteria such as Carcinogenic Slope Factor (SF), and exposure routes for which specific DEP standards are not established Criteria for constituents exposure routes to which the standards apply. DEP standards shall be the criteria for constituents and defined for all potential exposure routes identified in the Exposure The criteria should be criteria for contaminants found at the site. Assessment is to define the applicable human health and environmental bnzbose Toxicity әұз JO Тhе Toxicity Assessment or potential receptors may be exposed.

(1) Potable water exposure route - develop criteria for ingestion, dermal contact, and inhalation of vapors and mists, utilizing

equations and current scientific literature acceptable to toxicological

concern, or the criteria are in an inappropriate format,

Criteria for the following exposure routes shall be defined or

the criteria using Department

developed as applicable:

spall develop

levels, and other relevant criteria as applicable. applicable health criteria such as SF, Rfds, organoleptic threshold

ingestion by pets and livestock, and other related exposure. ingestion of food crops irrigated with such water, lawn watering, and inhalation of vapors and mists, such as through the develop criteria for incidental ingestion, dermal - əqnoz əznsodxə Non-potable ground water and surface water usage (2)

crops grown in contaminated soils. dermal contact, inhalation, and ingestion by humans or animals of food Soil exposure route - develop criteria for ingestion,

- Non-potable surface water and sediment exposure -(Ð)
- the associated biota). effects that may affect the designated use of the resource as well as marine biota, bio-accumulative effects in the food chain, other adverse or the environment (e.g. toxic effects of the contaminants on aquatic or resource for recreational purposes and ingesting fish, shellfish, etc.) incidental ingestion and dermal contact effects on humans utilizing the develop criteria for prevention of adverse effects on human health (e.g.
- the contaminants. Air exposure route - develop criteria for exposure to (S)
- affected population and the environment from contaminants found at the and the Toxicity Assessment to characterize cumulative risks to the Characterization is to utilize the results of the Exposure Assessment əsodznd ұр JO Дуб -Characterization Кізк

and impact evaluation will be performed which considers, but is not Based on contaminant levels presently found at the site, a risk

гµб Lrom safety gug резјџр ришви CO Kisks (I) limited to:

- (a) carcinogenic risk (FDEP's acceptable risk level is contamination including,
- (b) non-carcinogenic risk (FDEP considers a hazard index IOE-6.), and
- or one as acceptable).
- adverse affects on actually and potentially used water resources; and contamination which may include but not be limited to soils and to Effects on the public welfare of exposure to the
- Environmental risks in areas which are or will be (٤)
- ultimately affected by the contamination including,
- (a) other aquifers,
- (b) surface waters, including wetlands,
- (c) sediments,
- (e) sensitive areas including, but not limited to, (d) sensitive wildlife habitats, and
- Parks, State Recreation Areas, State Preserves. National Parks, National Wildlife Refuges, National Forests, State

required for a Risk Assessment prepared to develop alternative SRLs.] are not readily available to the Department. This justification is Assessment prepared to develop SRLs for the site where the toxicity data The following "justification" is not applicable to a Risk

D. Justification for the alternative Site Rehabilitation Levels (SRLs) The purpose of this section is to provide justification on a case-by-case basis for alternative SRLs at which remedial action shall be deemed completed. Factors to be evaluated shall be, at a minimum:

(1) The present and future uses of the affected aquifer and adjacent surface waters with particular consideration of the probability that the contamination is substantially affecting or will migrate to and substantially affect a public or private source of potable water;

(2) Potential for further degradation of the affected aquifers;

(3) The technical feasibility of achieving the SRLs based

on a review of reasonably available technology;

(4) Individual site characteristics, including natural

rehabilitative processes; and (5) The results of the risk assessment.

18. The Department shall review the RAJ document and determine whether it has adequately addressed the risk assessment task elements and justification. In the event that additional information is necessary to evaluate any portion of the RAJ document, the Department shall make a written request and Permittee shall provide all requested information within twenty (20) days of receipt of said request.

19. The Department shall approve or disapprove the RAJ. If the Department does not approve the alternative SRLs, the Permittee shall use the SRLs as determined by the Department. The Permittee shall implement the Feasibility Study, if required by the Department as set forth in Paragraph 26, or submit the Remedial Action Plan (RAP) as set forth in Paragraph 31.

Part 4 Remedial Planning and Remedial Actions

remediation, it is determined that a MOP is an acceptable alternative for the site, the Permittee shall submit a MOP to the Department either with the CAR or within sixty (60) days of receipt of written Department concurrence. Applicable portions of the MOP shall be signed and sealed pursuant to Rule 62-103.110(4), F.A.C. The MOP shall provide a technical approach and description of proposed monitoring methodologies. The MOP shall include, but may not be limited to, the following:

A. Environmental media for which monitoring is proposed, monitoring locations and rationale for the selection of each location, and proposed monitoring frequency.

and proposed monitoring frequency;

B. Parameters to be analyzed, analytical methods to be used,

sand detection limit is stated methods;

C. Methodology for evaluating contamination trends based on data obtained through the MOP and a proposed format including a time table for submittal of monitoring data and data analysis to the Department; and

The Department shall review the MOP, and provide the Permittee previous monitoring period, or monitoring data appear questionable. monitoring locations at which exceedances did not occur during the increasing, ground water standards or criteria are exceeded contaminant concentrations taken if trends indicate that D. A detailed contingency plan describing proposed actions to

has been approved shall be at the Permittee's risk and Paragraph 44 Permittee with regard to the implementation of the MOP before the MOP with a written response to the proposal. Any action taken by the

shall apply.

the field work needed to provide the requested information. days of the Department's request, a reasonable schedule for completing case the Permittee shall submit in writing to the Department within 30 requested information requires additional time for a response, in which within thirty (30) days from receipt of said request, unless the shall provide all requested revisions in writing to the Department a written request to the Permittee for the information. the MOP requirements set forth in Paragraph 20, the Department will make Department to evaluate the MOP or if the MOP does not adequately address In the event that additional information is necessary for the

Paragraph 43. Paragraph 20, the Department may choose one of the options listed in MOP that the MOP still does not adequately address the requirements in If the Department determines upon review of the resubmitted

incorporate all required modifications to the MOP identified by the Permittee that the MOP has been approved. The approved MOP shall within thirty (30) days of the Department's written notification to the become effective and made a part of the Order, and shall be initiated Once a MOP has been approved by the Department, it shall

Permittee shall notify the Department and initiate the Contingency Plan that require any action proposed in the approved contingency plan, the the approved MOP. If at any time trends are discovered by the Permittee data analysis products to the Department according to the time table in The Permittee shall submit the required monitoring data and

. Aqsragsaraq in a timely manner. Paragraph 43 applies to any exceptions to this

The Department, at its option, shall also determine from

The FS shall be completed and a report submitted within to achieve clean up of the site to SRLs or alternative SRLs (if identifying the most environmentally sound and effective remedial action remedial technologies and remedial alternatives with the objective of FS evaluates ЭЧТ represented or multiple media are contaminated. multiple ŢŢ particularly alternatives, cjasses contaminant required in complex cases to evaluate technologies and remedial be signed and sealed pursuant to Rule 62-103.110(4), F.A.C. The FS may request the option to prepare a FS. Applicable portions of the FS shall should prepare and submit a FS to the Department. The Permittee may review of the CAR and other relevant information whether the Permittee

sixty (60) days of receipt of written notice that a FS is required or within the time frame approved by the Department, unless the Permittee has approval to submit a RAJ pursuant to Paragraphs 16 or 17. The FS shall include the following tasks:

A. Identify and review pertinent treatment, containment, removal and disposal technologies;

B. Screen technologies to determine the most appropriate

technologies;

C. Review and select potential remedial alternatives using the following criteria:

- (1) Jong and short term environmental effects;
- (2) implementability;
- (3) capital costs;
- (4) operation and maintenance costs;
- (5) operation and maintenance requirements;
- (6) reliability;
- (7) feasibility;
- (8) time required to achieve clean-up; and
- (9) potential legal barriers to implementation of any of

the alternatives;

D. Identify the need for and conduct pilot tests or bench

tests to evaluate alternatives, if necessary; \mathbb{F}

E. Select the most appropriate remedial alternative that meets the objective of the FS and the criteria under paragraph C; and

F. (If applicable and not previously addressed) Develop soil cleanup criteria such that any remaining contaminated soils will not cause groundwater contamination in excess of the SRLs or alternative SRLs referenced in paragraphs 16 or 17, 18 and 19 (if approved).

7. The FS Report shall:

A. Summarize all FS task results; and

B. Propose a conceptual remedial action plan based on the selection process carried out in the FS.

28. The Department shall review the FS Report for adequacy and shall determine whether the Department agrees with the proposed remedial action based upon the objective and the criteria specified under paragraph 26.C. In the event that additional information is necessary to evaluate the FS report, the Department shall make a written request and Permittee shall provide all requested information within thirty and Permittee shall provide all requests.

29. If the Department does not approve of the proposed remedial action, the Department will notify the Permittee in writing of the determination. The Permittee shall then have forty-five (45) days from

the Department's notification to resubmit a proposed alternate remedial

Department may choose one of the options listed in paragraph 43. remedial action proposal that it does not agree with the proposal, the If the Department determines upon review of the resubmitted

approved SRLs for all media. The RAP shall include as applicable: The RAP shall summarize the CAR findings and conclusions and state the approved alternative SRLs referenced in paragraphs 16 or 17, 18, and 19. be to achieve the clean up of the contaminated media to the SRLs or the Rule 62-103.110(4), F.A.C. The objective of the remedial action shall Applicable portions of the RAP shall be signed and sealed pursuant to Department, Permittee shall submit to the Department a detailed RAP. Within sixty (60) days of receipt of written notice from the

Rationale for the remedial action proposed which shall

include at a minimum:

Evaluation of results for the proposed remedial (2) Results from any pilot studies or bench tests;

alternative based on the following criteria:

long and short term environmental impacts;

fermits; construction, site access, and necessity for limited to, JO 6926 implementability, which may include, but not be . d

operation and maintenance requirements;

estimates of reliability;

feasibility; and

estimates of costs.

SRLs referenced in paragraphs 16 or 17, 18, and 19. cleanup criteria such that any remaining contaminated soils will not cause groundwater contamination in excess of the SRLs or alternative (If applicable and not previously addressed) Soil

Design and construction details and specifications for the

remedial alternative selected;

of remedial action; which are reasonably expected to be discharged into the air as a result expected concentrations and approximate quantities of any contaminants discharged to soils, to ground water or to surface waters, and the effluent, an effluent sampling schedule if treated ground water is being disposition of any effluent, expected contaminant concentrations in the Operational details of the remedial action including the

quality assurance samples consistent with the requirements of Part 1; for each pertinent medium and include the appropriate number and type of Tables which summarize the proposed samples and analyses

disposition of гхеягшеиг ох JO Details әψι

contaminated soils or sediments;

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Schedule for the completion of the remedial action. accomplishment of the objective of the RAP; and

RAP has been approved shall be at Permittee's risk and Paragraph 44 the Permittee with regard to the implementation of the RAP before the Permittee with a written response to the proposal. Any action taken by The Department shall review the proposed RAP and provide

shall apply.

a reasonable schedule for completing the work needed to provide the the Department, within forty five (45) days of the Department's request, for a response, in which case the Permittee shall submit in writing to said request, unless the requested information requires additional time writing to the Department within forty live (45) days from receipt of The Permittee shall provide all requested revisions in Department will make a written request to the Permittee for the address the objectives and requirements set forth in Paragraph 31, the Department to evaluate the RAP, or if the RAP does not adequately In the event that additional information is necessary for the

requirements of the RAP, the Department may choose one of the options Department determines that the RAP still does not adequately address the then the Department shall approve the RAP. beragraph 31, the RAP adequately addresses the objectives set forth in RAP that If the Department determines upon review of the resubmitted requested information.

1isted in Paragraph 43.

tasks. Part 6 below shall be complied with during the implementation of the RAP Department. All reporting and notification requirements spelled out in incorporate all required modifications to the RAP identified by the The approved RAP shall the Permittee that the RAP has been approved. within thirty (30) days from receipt of the Department's notification to become effective and made a part of the Order and shall be initiated Once a RAP has been approved by the Department, it shall

site remediation. Paragraph 26 to evaluate other alternatives and technologies to improve unable to achieve the SRLs, the Permittee may conduct a FS pursuant to that the selected remedial alternative or treatment technology will be If at any time during RAP implementation, it becomes apparent

Part 5 Termination of Remedial Actions

shall be sampled on a schedule approved by the Department. contaminated media to the approved SRLs), designated monitoring wells Following termination of remedial action (clean up of

site cleanup objectives documentation achieved. peeu рчиб trat Report (SRCR) to the Department for approval. The SRCR shall contain monitoring, the Permittee shall submit a Site Rehabilitation Completion the approved MOP or of the remedial action and post-remedial action Following completion of monitoring requirements pursuant to

39. Within sixty (60) days of receipt of the SRCR, the Department shall approve the SRCR or make a determination that the SRCR does not contain reasonable assurances that site clean-up objectives have been achieved. If the Department determines that the SRCR is not adequate based upon information provided, the Department will notify the Permittee in writing. Site rehabilitation activities shall not be deemed completed until 'such time as the Department provides the Permittee with written notice that the SRCR is approved.

Part 6 Progress Reporting and Notifications

40. On the first working day of each month, or on another schedule approved by the Department after initiating an IRAP, CAP or RAP, Permittee shall submit written progress reports to the Department. These progress reports shall evaluate progress, describe the status of each required IRAP, CAP and RAP shall be evaluated. The Progress effectiveness of the IRAP and RAP shall be evaluated. The Progress Reports shall propose modifications and additional work as needed. The reports shall be submitted until planned tasks have been completed in accordance with the approved IRAP, CAP, or RAP. Each final report shall be signed and sealed by the appropriate professional pursuant to Rule 62-103.110(4), F.A.C. The final report shall include all data, manifests, and a detailed summary of the completed work.

41. The Permittee shall notify the Department at least ten days prior to installing monitoring or recovery wells, and shall allow Department personnel the opportunity to observe the location and installation of the wells. All necessary approvals must be obtained from the water management district before the Permittee installs the wells.

42. The Permittee shall notify the Department at least ten (10) days prior to any sampling, and shall allow Department personnel the opportunity to observe sampling or to take split samples. When the Department chooses to split samples, the raw data shall be exchanged between the Permittee and the Department as soon as the data are available.

Part 7 Conflict Resolution and Other Requirements

43. In the event that the Department determines a document to be inadequate or if there are disagreements, the Department, at its option, may choose to do any of the following:

A. Draft specific modifications to the document and notify

A. Drait specific modifications to the document and notify the Permittee in writing that approval of the document is being granted contingent upon those modifications being incorporated into the document.

B. Resolve the issues through repeated correspondence, telephone discussions, and/or meetings.

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C. Notify the Permittee that Permittee has failed to meet the stated objectives for the document, in which case the Department may do any or all of the following: take legal action to enforce compliance with the Order; file suit to recover damages and civil penalties; or complete the corrective actions outlined herein and recover the costs of completion from the Permittee.

44. The Permittee is required to comply with all applicable local, state and to obtain any necessary approvals/permits from local, state and federal authorities in carrying out these corrective actions.

45. The Permittee shall immediately notify the Department of any circumstances encountered by the Permittee which require modification of any task in the approved IRAP, CAP or RAP, and obtain Department approval prior to implementing any such modified tasks.

46. With regard to any agency action or determination made or taken by the Department under any of the provisions of this document "Corrective Actions for Contamination Site Cases", that portion of the Order containing dispute resolution procedures and remedies shall apply.

ATTACHMENT 5

BACKGROUND PARAMETERS

Laboratory Parameters

N - sinomms latoT

Chlorides Jron

Mercury

Nitrate

Sodium Total Dissolved Solids

(TDS)
Those parameters listed in 40 CFR Part 258 Appendices

II bas I

Field Parameters

Static water level in wells

Specific conductivity

Ho

Dissolved oxygen

Turbidity Temperature

Colors and sheens (by observation)

ATTACHMENT 6

OUARTERLY SURFACE WATER SAMPLING PARAMETERS

Метситу	·
Iron	
Copper	
Biochemical Oxygen Demand	
Total Hardness (as bicarbonate)	
sinommA bəzinoinU	
INORGANIC LABORATORY PARAMETERS	

FIELD PARAMETERS
Specific Conductivity
PH
Dissolved Oxygen
Turbidity
Colors, sheens (by observation)
Temperature

Total Phosphates

Chlorophyl A

Chlorophyl A

Chemical Oxygen Demand (COD)

40 CFR Part 258 Appendix I Parameters

Total Suspended Solids (TSS)

Total Suspended Solids (TSS)

Fecal Coliform

Sinc Nitrate

Total Dissolved Solids (TDS) Total Organic Carbon (TOC)

PROOF OF PUBLICATION

STATE OF FLORIDA SS: COUNTY OF NASSAU

Affight further says the said Nassau County Record is a newspaper published for Callahan, in Nassau County, Florida, and the said newspaper has heretofore been continuously published each week and has been entered as second class matter at the post office in Callahan, Nassau County, Florida, for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm, or corporation any discount; rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Office Manager

Sworn to and subscribed before me this AND., 2000

CHARLOTTE HODGES COFFMAN My comm. exp. Apr. 15, 2003 Comm. No. CC827107 My commission expires:

LEGAL NOTICE

right to petition to become a party to the pro-caeding, in accordance with the requirements set forth above. Department's tinst action may be different from the position taken by it in this notice of from the position taken by it in the rests will be streeded by any such sinst decision of the Department on the application have the right to personne a party to the pro-

The application is available for public inspection during normal business hour, 8:00 a.m. to 5:00 p.m. Monday through Friday, expironmental Protection, Northeast District, vironmental Protection, Northeast District, vironmental Protection, Northeast District, systematical production, Northeast District, stronger and stronger productions of the protection of the protecti

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LEGAL NOTICE

number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the pro-lect is proposed? lect is proposed;

action of proposed action. etinemined ent to entor be seen each perinemined ent to entor be entored entities of the perinemine.

partment's action or proposed action.

(d) A statement of the material facts dis-puted by the petitioners, if any;

(e) A statement of facts that the petitioner contiends warrant reversal or modification of phosed action;

(f) A statement identifying the rules or star-tures that the petitioner contends require re-versal or modifications of the Department's ac-tion or proposed scrion; and

(g) A statement of the relief sought by the petitioner, stating precisely the action to take with respect to the action or proposed action addressed in this notice of intent.

action, the filing of a petition means that the Because the administrative hearing pro-

> TO ISSUE PERMIT STATE OF FLORIDA
>
> DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF INTENT

> > ------

ine peparment of Environmental Protection gives notice of its intent to issue a permit to the Massau County Board of County Commissioners, to construct and operate the west Nassau Class I North Landtill, including the vertical expansion. The facility is located on the east side of U.S. Highway 301 approximately three miles north of Callahan in Nassau County. The Department file numbers for this project are 0002870-002 and 0002870-003 The Department of Environmental Protec-

The Department will issue the permit with the attached conditions unless a fined period from for the attached conditions T20.569 and T20.57 of the Florida Statutes. The procedures for petitioning to a hearing are set forth below.

in this proceeding and participate as a party to it. Any subsequent intervention will be only at the discretion of the preading officer upon the filling of a motion in compliance with Pule 28-5.307 of the Florida Administrative Code. person to file a within the appropriate time person's hot of that person's hid shall constitute a waiver of that person's right to request an administrative determination (hearing) under Section 1 100. To the Florida Statutes, or to the Florida Statutes, or to the Florida shall person and that is a sea shall be shall be seen a sea shall be seen as a particular. filed within fourteen day of publication of the filed within fourteen day of publication of the public notice within fourteen days of receipt of this notice of infent, whichever occurs first. A petitioner must mail a copy of the petitioner of any person to life a within the appropriate time of any person to life a within the appropriate time. titions filed by the permit applicant or any of the parties listed below must be filed within 14 days of receipt of this notice of intent. Peptones filed by any other persons and must be filed within foundation of the Office of General Counset of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Perion 35, Tallahassee, Florida 32399-3000. forth below and must be filed(received) in the The petition must contain the Information set trative hearing in accordance with Sections 120,559 and 120,57 of the Florida Statutes. mitting decision may petition for an adminis-A person whose substantial interests are affected by the Department's proposed per-

A petition must contain the following infor-

(a) The name, address, and telephone