

# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

Mr. Daniel Gray, Director  
Manatee County Utility Operations  
4410 66<sup>th</sup> Street West  
Bradenton, Fl. 34210

June 11, 2004

RE: Lena Road Landfill, Manatee County  
Pending Permit No.: 39884-010-SO, Operation

Dear Mr. Gray:

This is to acknowledge receipt of your permit application and supporting information, dated April 30, 2004 (received May 14, 2004), prepared by Post, Buckley, Schuh & Jernigan (PBSJ), to continue operation of an existing Class I landfill and related facilities, referred to as the Lena Road Class I Landfill, located at 3333 Lena Road, Bradenton, Manatee County, Florida.

This letter constitutes notice that a permit will be required for your project pursuant to Chapter(s) 403, Florida Statutes.

Your application for a permit is incomplete. This is the Department's first request for information. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received. The following information is needed in support of the solid waste application [Chapter 62-701, Florida Administrative Code (F.A.C.)]:

**GENERAL:**

1. Due to magnitude of the proposed project, the requested information and comments below do not repeat the information submitted by the applicant. However, every effort has been made to concisely refer to the section, page, drawing detail number, etc. where the information has been presented in the original submittal.
2. Please submit 4 copies of all requested information. Please specify if revised information is intended to supplement or replace previously submitted information. Please submit all revised plans and reports as a complete package. For revisions to the narrative reports, deletions may be struckthrough (~~struckthrough~~) and additions may be shaded shaded or similar notation method. This format will expedite the review process. Please include revision date on all revised pages.
3. Please provide a summary of all revisions to drawings, and indicate the revision on each of the applicable plan sheets. Please use a consistent numbering system for drawings. If new sheets must be added to the original plan set, please use the same numbering system with a prefix or suffix to indicate the sheet was an addition, e.g. Sheet 1A, 1B, P1-A, etc.
4. Please be advised that although some comments do not explicitly request additional information, the intent of all comments shall be to request revised calculations, narrative, technical specifications, QA documentation, plan sheets, clarification to the item, and/or other information as appropriate. **Please be reminded that all calculations must be signed and sealed by the registered professional engineer (or geologist as appropriate) who prepared them.**

"More Protection, Less Process"

The following information is needed in support of the solid waste applications [Chapter 62-701, Florida Administrative Code (F.A.C.)]:

1. [Rules 62-701.320(10)(c) and 62-701.320(5)(b), F.A.C.] Several items have been noted on the application form as "N/C." For all items marked "N/C," please provide the specific title, date, preparer and location of the information in the document referenced, including subsequent revisions. The reference to "no change from Operation Permit No. 39884-001-SO..." is unclear. Please be advised that if the referenced documents are not currently located in the Department's files, copies of these documents may be requested to verify that the information referenced is still valid.

2. **Application form.** [Rule 62-701.320(7)(b), F.A.C.]

✓ a. Item #A.15. Please include the closing costs for the facility in this item.

✓ b. Item #B.8. Please clarify if domestic sludge or industrial sludge is accepted for disposal. The "Material Rate Table" in this section and Figure L-2 in Section L indicate that "sewer sludge" and "sludge from county wastewater treatment plants" are accepted.

✓ b. Item #B.11. This item indicates that only one spotter is used at the facility. Based on the waste quantity projections on Table F-1, it appears that the facility has received an average of approximately 1200 tons/day in 2004. Please provide calculations that demonstrate that one spotter is adequate for this waste acceptance rate.

✓ c. Item #B.23. Please specify the leachate storage method.

✓ d. Item #E.9.d. Please provide construction details for, and a schedule for construction of, the Household Hazardous Waste Collection and Storage Facility, White Goods and scrap metal storage areas, and public drop off area shown in Figure E-5.

✓ e. Item #E.12. Please provide a description and history of enforcement actions for this site. Although the information states that no enforcement actions have been taken by the Department against the applicant since 1997, Department records include Case #00-1305 against the applicant.

✓ f. Item #E.13. Please provide proof of publication of the attached Notice of Application.

g. Part L. Please explain the note on Page 28 of 40 that states, "Reference to Section where information can be found."

✓ 3. **Prohibitions.** [Rule 62-701.300, F.A.C.] Please provide documentation that demonstrates that each of the prohibitions will not be violated by the operation of this facility. Figure E-2 appears to show the proposed "waste tire, white goods and household waste area" located adjacent to a water body. Please show the 200-foot setback from wetlands for this area on Figure E-5 or other appropriate figure or sheet. Please explain how this location complies with the prohibition of Rule 62-701.300(2)(f), F.A.C. Please verify that the aerial photograph is no greater than 1 year old. Please clarify if solid waste "inadvertently" contaminated with used oil will be disposed of in the landfill.

✓ 4. Please provide a vicinity map (not more than a year old) that shows the one-mile radius around the landfill site, clearly identifies nearby roads, water bodies and other significant features and includes a legend identifying the land use associated with the various codes shown on the figures. Please note that all significant features shall be labeled [F.A.C. Rule 62-701.330(3)(a)].

5. Please provide a topographic survey more recent than June 2003. [Rule 62-701.330(3)(d), F.A.C.]
6. [Rule 62-701.330(3)(e), F.A.C.] Please explain the basis and provide references and calculations supporting the information in Table F-1.
7. [Rule 62-701.340(4), F.A.C.] The information indicates that the landfill is not screened from view on Lena Road. Since Lena Road is a public road, please explain how this complies with the requirements of Rule 62-701.340(4)(d), F.A.C. Please show the locations of the disposal areas on Figure G-1.
8. **Operations Plan (Part L).** [Rules 62-701.400(9), 62-701.500, 62-701.520, and 62-701.530, F.A.C.] Please provide a comprehensive Operations Plan that incorporates the responses to these comments. Replacement pages with revisions noted may be provided (deletions may be struckthrough [~~struckthrough~~] and additions may be shaded ~~shaded~~ or a similar method may be used) with each page numbered with the document title and date of revision. This plan will be reviewed in its entirety after responses are received.
- a. §1.0 Please include the spotter in the "general daily operations" description and Figure L-1. Please provide a training plan or a description of the training courses that will be attended to meet the requirements of Rule 62-701.320(15), F.A.C. Please clarify if a trained spotter will at the working face each time waste is received and that the spotters will inspect each load from ground level (i.e. not while operating equipment).
- b. §2.0 Contingency Operations for Emergencies. Please provide waste handling procedures in case of an emergency. Please show the onsite stockpile of soil on a plan sheet. Please provide procedures for wet weather operations, including commercial haulers. Please show the location where waste is "loaded into dump trucks and transported to the working face" on a plan sheet.
- c. §2.0 Control of Types of Materials Received. Please provide procedures for managing each type of unacceptable and prohibited waste. Please specify which permit conditions are referenced for asbestos management. Please provide specific procedures for the management of asbestos, including recordkeeping. Please specify the types of "uncontaminated white goods" that will be received. Please clarify if white goods will be marked after Freon is removed. Please clarify if yard trash will be removed from bags before mulching.
- d. §2.0 Vehicle Traffic Control and Unloading. Please provide procedures for spotting each load as it is disposed, removing unacceptable wastes and the management of the unacceptable wastes.
- e. §2.0 Method & Sequence of Filling Waste. Part F.5(d) indicates that Stage III will be excavated to elevation +29 feet NGVD prior to placement of waste in that Stage. Please provide a base grading plan sheet. (See note on Sheet C-9 of Attachment L-1) Please provide boring logs for Stage III that confirm that the clay layer will not be penetrated at this bottom elevation. Please provide a table that includes a schedule for each sequence of filling and closure of each disposal area. See also §7.0(Final Cover Timing).
- f. §2.0 Waste Compaction and Application of Cover. This section indicates that the actual compaction rate is 1,491 lb/cy. However, Table F-1 shows that the design life of the landfill was based upon a compaction density of 1,800 lbs/cy. Please clarify this discrepancy.

(comment #8, cont'd)

- g. ✓ §2.0 Maintaining and Cleaning the Leachate Collection System. No information was provided in this section. Please provide this information or reference its location in the application.
- h. ✓ §3.0 Figure L-2. Please include the management of electronics in the operations plan.
- i. ✓ §4.0 Please revise this Section to include all of the waste types listed in Rule 62-701.500(4), F.A.C. *Need new table page*
- j. ✓ §6.0 Please provide procedures for management of each special waste, unacceptable waste and prohibited waste. These procedures should include, at a minimum, procedures for spotting and removing the unacceptable wastes from incoming loads, acceptance of segregated loads, the location and method of storage for each material after separation, how long materials are stored, the maximum quantity of each material stored and the final disposition of each material. Please include all unacceptable and prohibited wastes on Form L-3. Please identify who will be responsible for the clean-up of both the small quantity and larger quantity of hazardous waste and whether the individual(s) have the required training.
- k. ✓ §7.0 Waste Layer Thickness. Rule 62-701.500(7), F.A.C., requires that solid waste at Class I landfills be spread in layers of two feet and compacted to one foot in thickness, in addition the maximum depth of the lift should not exceed ten feet. This Section indicates that the depth of the lift will be no more than twenty feet. Please provide justification for the use of a twenty-foot lift based upon specific operations, daily volume of waste, width of the working face, and good safety practices.
- l. ✓ §7.0 First Waste Layer. Please clarify if waste placement in Stage II is proposed for this pending permit.
- m. ✓ §7.0 Working Face. Please include a description of methods used to prevent stormwater runoff and leachate runoff of the working face (i.e., working face berms). Please include how and when the berms are placed and moved as filling progresses.
- n. ✓ §7.0 Erosion Control. Please provide a schedule for inspecting and implementing repairs in case of erosion of intermediate or final cover.
- o. ✓ §8.0 Stage II. Please provide a figure or plan sheet showing how stormwater is managed and discharged from Stage II.
- p. ✓ §8.0 Stage III. Please clarify the management of leachate in Stage III. Figure L-4 shows two lift stations in Stage III, but this section does not describe the use of both. Since Figure L-4 is Sheet 1 of 2, please provide Sheet 2 of 2.
- q. ✓ §8.0 Operation and Maintenance of Leachate Collection System. Please provide a copy of the videotapes that showed the blockages in the Stage I LCS piping and the piping after repair. See also Comment #15 below.
- r. ✓ §8.0 Leachate as Hazardous Waste. Please provide contingency procedures for the handling of the leachate, if the leachate analysis indicates that it is a hazardous waste.

*Some items not reviewed*

*Section 7 not reviewed*

(comment #8, cont'd)

- s. §9.0 Off-site Discharge Agreements. Please provide a copy of the letter from the Public Works Director authorizing the acceptance of the leachate at the wastewater treatment plant. Please clarify if there are any volume restrictions on the leachate acceptance.
- t. §9.0 Please clarify if Figure L-10 is provided to the Department's Air Section. It appears that the gas management system has had exceedances in some parameters.
- u. §10.0 Stage II System. Please clarify if "overflow weirs 005 and 006" refer to "outfalls" 005 and 006 shown on Figure L-11.
- v. §10.0 Maintenance Plan. Please provide a copy of the facility's Storm Water Pollution Prevention Plan.
- w. §11.0 Please provide details of the fuel containment area and structure.
- x. §14.0 Please include procedures for using petroleum contaminated soil and shredded tires as cover materials in §7.0. Please provide specific procedures for the management of asbestos, including recordkeeping.
- y. Please provide an odor assessment and control plan. This plan should include at a minimum, odor inspection procedures (including frequency) and corrective actions that will be taken in the event that odors are detected.
- Landfill Sequence Plan (Attachment L-1).** [Rule 62-701.500, F.A.C.]
- a. In addition to reduced size drawings, please provide one complete set of full size drawings, signed and sealed by a registered professional engineer.
- b. Sheet C-2. Please clarify the meaning of the cross-hatched area on this sheet. Please provide construction details for and a schedule for construction of the Household Hazardous Waste Collection and Storage Facility, White Goods and scrap metal storage areas, and public drop off area shown in this Sheet.
- c. Sheet C-4. Please explain and provide supporting justification for the absence of drop inlets and down chute pipes on the north side for Sequence 1.
- d. Sheet C-5. Please provide an east-west cross-section for this filling sequence.
- e. Sheets C-6, C-7 and C-8. Since these sequences are all above elevation +45 feet NGVD, please delete the reference to this elevation in Note #1.
- f. Sheet C-8. Since the filling sequences are proposed through February 2009 which is less than the typical 5-year permit cycle, please confirm if the applicant anticipates the permit expiration being February 2009.
- g. Sheets C-9 and C-10. Please label each section and detail on these sheets. Please note that the drawing set will be reviewed in its entirety after receipt of these revised sheets.

*do not meet 62-701.530*

*rework drawings*

10. **Attachment L-2, HHW Collection and Storage Facility Operation Plan.**

[Rules 62-701.400(9), 62-701.500, 62-701.520, and 62-701.530, F.A.C.] Please provide a comprehensive HHW Collection Center Operations Plan that incorporates the responses to these comments. Replacement pages with revisions noted may be provided (deletions may be struckthrough [~~struckthrough~~] and additions may be shaded ~~shaded~~ or a similar method may be used) with each page numbered with the document title and date of revision. This plan will be reviewed in its entirety after responses are received.

a. Please provide construction details for and a schedule for construction of the Household Hazardous Waste Collection and Storage Facility. *Results in \**

b. §2.0 Please clarify if this description is for the existing facility or the proposed facility. *Section not clear.*

c. §3.0 Please provide specific procedures for bulking paint, used oil, etc. See also §6.0, §8.1, §13.0, §13.2. These procedures should include at a minimum the location and method for bulking the materials, precautions taken to prevent spillage, determination of compatibility of wastes, etc.

d. §4.0 Please provide a plan sheet that shows the storage locations of all materials and containment structures. Since paint is a liquid, please clarify if it is stored inside or outside containment.

e. §5.0 Please provide specific procedures for the management of CESQG wastes. See also §12.0.

f. §8.0 Please clarify how many personnel have each level of training listed in this section.

g. §13.2 Please specify which wastes are bulked. Please specify if hazardous wastes are bulked. Please specify the disposition of containers after the material has been removed for bulking. Please clarify if materials with no labels will be bulked.

h. §15.0 Please specify the conditions under which aisle space and communication devices would not be needed.

i. §15.3 Please clarify if the household hazardous wastes are being managed as hazardous waste.

j. §15.4 Please specify the "special handling" for reactive wastes. Please clarify the type of containment for these wastes.

k. §15.5 Please provide procedures for "bulking or neutralizing" ignitable, reactive or incompatible wastes.

11. **Water Quality Monitoring Requirements (Part M).** [Rule 62-701.410 and 62-701.510, F.A.C.] Please respond to Mr. John Morris' memorandum dated June 11, 2004, attached.

12. **Gas Management System Requirements (Part O).** [Rule 62-701.530, F.A.C.] It appears that the drawings provided in this section are for the construction of Stage I Partial Closure #2. Please be advised that closure construction (including construction of a gas extraction system) requires a separate Department permit. Accordingly, these drawings have not been reviewed as part of the pending operation renewal. Please clarify if it is the applicant's intention to submit a permit application for this activity.

13. **Closure Plan (Part P) and Long-Term Care Plan (Part R).** [Rules 62-701.320(7)(e)1., 62-701.600, 62-701.610, 62-701.620, F.A.C.] Although the current application does not include closure construction, a general closure plan is required. Please provide a general closure plan that meets the requirements of Rule 62-701.600, F.A.C. Please provide a long-term care plan that includes procedures and schedule for long-term care monitoring and maintenance activities at the site. These activities must include, at a minimum, maintenance and repair of: final cover, leachate collection and removal system, gas migration system, groundwater monitoring system, gas extraction and management systems. The plan should also include water quality and gas monitoring. This information is also needed to evaluate the financial assurance cost estimates submitted.

14. **Financial Assurance Requirements (Part S).** [Rule 62-701.630, F.A.C.] Please respond to the Department's letter dated June 9, 2004 attached concerning financial assurance cost estimates.

15. **Appendix A, LCS cleaning report.** Please clarify where the sediment and debris removed from the LCS piping was disposed. Please provide a copy of the videotapes that showed the blockages in the Stage I LCS piping and the piping after repair.

**The following comments are for information only at this time or are editorial in nature and do not require an immediate response:**

1. The reference to "litter reinforcement office" in the Operations Plan, §9.0 is unclear.
2. Attachment L-3, LFG SSM Plan, Appendix A SSM form. It appears that the facility address is incorrect on this form.
3. Part P. The rule citation for the closure plan is incorrect.

"NOTICE! Pursuant to the provisions of Section 120.60, F.S. if the Department does not receive a complete response to this request for information within 45 days of the date of this letter, the Department may issue a final order denying your application. You need to respond within 45 days after you receive this letter, responding to all of the information requests and indicating when a response to any unanswered questions will be submitted. If the response will require longer than 45 days to develop, you should develop a specific time table for the submission of the requested information for Department review and consideration. Failure to comply with a time table accepted by the Department will be grounds for the Department to issue a Final Order of Denial for lack of a timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant can reapply as soon as the requested information is available."

You are requested to submit your responses to this letter together, as one complete package. Please contact me at (813)744-6100 ext. 386 to schedule the meeting.

Sincerely,



Susan J. Pelz, P.E.  
Solid Waste Manager  
Southwest District

sjp

Attachments

cc: Joseph Miller, P.E., PBSJ, 482 S. Keller Road, Orlando, Fl. 32810-6101  
John Morris, P.G., FDEP Tampa  
Steve Morgan, FDEP Tampa  
David Smith, P.E., FDEP Tampa- ERP  
David Zell, FDEP Tampa- Air

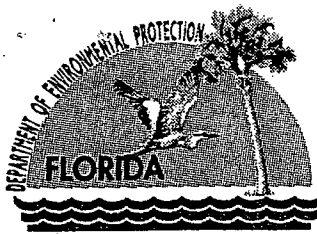
62-110.106 (6) Public Notice of Application and Proposed Agency Action  
Publication of a notice of application shall be required for those projects that, because of their size, potential effect on the environment or natural resources, controversial nature, or location, are reasonably expected by the Department to result in a heightened public concern or likelihood of request for administrative proceedings. If required, the notice shall be published by the applicant one time only within fourteen days after a complete application is filed and shall contain the name of the applicant, a brief description of the project and its location, the location of the application file, and the times when it is available for public inspection. The notice shall be prepared by the Department and shall comply with the following format:

State of Florida  
Department of Environmental Protection  
Notice of Application

The Department announces the receipt of an application for permit from Manatee County Utilities Operations Department, Mr. Daniel Gray, Director for continued operation of a solid waste class I landfill, referred to as the Manatee County Lena Road Class I Landfill, located at 3333 Lena Road, Bradenton, Manatee County, Florida.

This application is being processed and is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m. Monday through Friday, except legal holidays, at the Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.





# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

Mr. Daniel Gray, Director  
Manatee County Utility Operations  
4610 66<sup>th</sup> Street West  
Bradenton, Fl. 34210

June 9, 2004

RE: Lena Road Landfill Financial Assurance Cost Estimates  
Pending Permit No.: 39884-002-SO, Manatee County

Dear Mr. Gray:

This letter is to acknowledge receipt of the revised cost estimates dated April 30, 2004 (received May 14, 2004) as Part S of Lena Road Landfill Application and Engineering Report for Renewal of Landfill Operation Permit. The cost estimates received May 14, 2004 are not approved. The following information is needed to fully evaluate the estimates submitted:

## General Comments

1. Cost estimates provided as part of permit renewal shall be revised cost estimates, including explanation and calculations to support quantities provided and current third-party quotes to support unit costs provided. Revised cost estimates cannot be based on inflation adjustment of previously approved costs or be based on the costs for the County to perform the work. A copy of relevant portions of the County contracts that support references to County contracts shall be provided.
2. Please note that quantities and unit costs for closure and long-term care items may be added or changed based on comments and revisions to the above referenced permit application, therefore the proposed closure and long-term care costs may need to be revised accordingly.
3. Based on your response to the comments provided below, please provide a revised DEP Form 62-701.900(28) that incorporates all proposed changes to the closure and long-term care cost estimates.

## Long-term Care Costs

### **Gas Monitoring**

4. Long-term care monitoring of the facility would also include routine gas monitoring in accordance with NSPS requirements and the facility's Title V permit. Please revise the cost estimate for gas monitoring to include these monitoring costs, with supporting information and third-party quotes.

*"More Protection, Less Process"*

*Printed on recycled paper.*

5. Although referenced, no supporting documentation and/or third-party quote for gas monitoring costs was provided. Please provide.

### **Leachate Collection/Treatment System Maintenance**

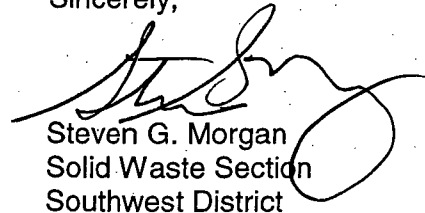
6. Disposal - In accordance with Rule 62-701.630(3)(a), closure and long-term care costs estimates are based on "... the time period in the landfill operations when the extent and manner of its operation making closing most expensive." In the case of leachate generation rates during long-term care, the time of maximum generation rate is immediately upon completion of closure activities. This generation rate corresponds to the leachate generation rate during closure, which is based on the actual per acre leachate generation rate for the previous year calculated for the total acreage to be closed. During the facility's long-term care period, as the average annual leachate generation rate decreases, long-term care costs for leachate disposal can be reduced accordingly. Please revise the leachate quantities provided for long-term care costs accordingly.

### **Stormwater Management System Maintenance**

7. The costs provided in this section were reduced to \$10,000 from the \$25,000 included in the facility's 2002 approved cost estimates without any supporting information, calculations, or justification. Please explain and revise the costs provided as appropriate

The Department requests that **two copies** of all information be provided to the Solid Waste Section, FDEP, and Tampa office within thirty (30) days of this notice. In order to expedite the review of this information, please forward all responses related financial assurance cost estimates directly to the undersigned. If you have any questions or concerns, please contact me at (813) 744-6100 ext. 385.

Sincerely,



Steven G. Morgan  
Solid Waste Section  
Southwest District

sgm  
attachment

cc: Joe Miller, P.E., PBSJ, 482 S. Keller Rd., Orlando, FL 32810  
Fred Wick, FDEP, Tallahassee, w/attachment  
Susan Pelz, P.E., FDEP Tampa

# Memorandum

# Florida Department of Environmental Protection

**TO:** Susan Pelz, P.E. *SP*  
**FROM:** John R. Morris, P.G. *JRM*  
**DATE:** June 11, 2004  
**SUBJECT:** Lena Road Landfill  
Operating Permit Renewal Application, Pending Permit 39884-010-SO  
Environmental Monitoring Review Comments

I have reviewed portions of the permit application materials submitted to the Department in support of the referenced application for renewal of the operating permit for the Lena Road Class I Landfill that was prepared by PBS&J on behalf of Manatee County Utility Operations, received May 14, 2004. My review focused on the hydrogeologic and environmental monitoring aspects of the application.

Please have the applicant submit responses to the following review comments that provide revised submittals, or replacement pages to the submittals, that use a ~~strike through~~ and underline format, or similar format, to facilitate review. Please also have the applicant include the revision date as part of the header/footer for all revised pages (text, figures, tables, appendices, forms and site plans).

The information requests have been referenced to sections of the permit application and are also referenced to the sections of the supporting document where appropriate, as presented below:

## **DEP FORM NO. 62-701.900(1), SOLID WASTE MANAGEMENT FACILITY PERMIT FORM**

1. For all items identified with a "N/C" notation, please identify the document in which the subject information was originally submitted (prepared by, date of preparation/date of revision, document title, date received by the Department) and verify that the document remains valid and is located in the Department's current file, otherwise please resubmit the information.

### **SECTION A – GENERAL INFORMATION**

✓2. **A.7.:** Please submit a revised application form for this item that indicates the latitude and longitude coordinates for the approximate center Stage I within the landfill footprint. A review the Department's GIS data appears to indicate that the latitude and longitude coordinates identified on the application form are located outside the slurry wall, about 2,500 feet northwest of the approximate center of Stage I.

### **SECTION B – DISPOSAL FACILITY GENERAL INFORMATION**

✓3. **B.13.:** It is indicated that the property is recorded as a disposal site in the County Land Records. Please indicate if this has been done to complete the requirements of Rule 62-701.610(5), F.A.C. If so, please provide a certified copy of the County record including the legal description and a scale-drawn map for that part of the property that has been so recorded. If not, please submit a revised application form for this item that indicates a "No" response.

### **SECTION L – LANDFILL OPERATION REQUIREMENTS** (Rule 62-701.500, F.A.C.)

✓4. **L.8.a.:** It is noted that Section 8.0.a. entitled "Leachate Level Monitoring" of the *Landfill Operations Plan* indicates that Stage III includes Lift Station #3, however Figure L-4 appears to indicate that Lift Station #3A is located within the slurry wall near the northwest corner and Lift Station #3B is located outside the slurry wall near the southwest corner. Please review this apparent inconsistency and submit revisions as appropriate.

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

*Printed on recycled paper.*

5. L.8.a.: It is noted that Section 8.0.a. entitled "Leachate Level Monitoring" of the *Landfill Operations Plan* references the "Ground Water Gradient Monitoring Report" as Figure L-7. Please submit the rationale that was used to develop the following gradient monitoring pairs:

- PZ-11 and PZ-19 (describe the distance between these locations and the feasibility of installing a new piezometer directly across the slurry wall from PZ-19 in Stage II)
- PZ-9 and LR11-4 (address the feasibility of substituting PZ-9 and LR11-3)
- PZ-15C and PZ-15A (describe the lateral distance between PZ-15A and GC-1A and address the feasibility of substituting PZ-15C and GC-1A)
- PZ-17 and SG-2 (address the feasibility of substituting PZ-17 and GC-6)
- PZ-18 and SG-3 (describe what information this gradient pair provides)

In the event that changes to the gradient monitoring pairs are proposed, please also submit revisions to Figure L-7, as appropriate.

6. L.9.: It does not appear that Section 9.0.a. entitled "Gas Monitoring" of the *Landfill Operations Plan* includes the gas remediation plan to determine the extent of methane between Stage III and GWM-11A that was described in the PBS&J letter dated November 24, 2003. Please review this apparent omission and submit revisions, as appropriate. Please note that the results of the gas monitoring event conducted March 25, 2004 indicated the occurrence of landfill gas at GMW-11A that exceeded the lower explosive level for methane.

7. L.9.: Please submit revisions to Section 9.0.a. entitled "Gas Monitoring" of the *Landfill Operations Plan* to include a description of the proposed locations identified as GMW-11B and GMW-11C. Please also include proposed locations and construction details for these proposed gas probes.

8. L.9.: Please submit revisions to Section 9.0.a. entitled "Gas Monitoring" of the *Landfill Operations Plan* to include a schedule for when the gas probes and ambient gas monitoring locations in Stage III will be taken out of service.

### **SECTION M – WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS**

(Rule 62-701.510, F.A.C.)

9. M.1.c.(1): Please submit a scale-drawn, site survey drawing that depicts the following features:
- property boundary;
  - center line of slurry wall;
  - monitor well locations (including lateral distance from the slurry wall) and identification numbers;
  - piezometer locations and identification numbers;
  - staff gauge locations and identification numbers;
  - perimeter gas probes and identification numbers; and,
  - leachate lift stations and identification numbers.

Please submit revisions to Section 1.0 entitled "Water Quality and Leachate Monitoring Plan" of the *Water Quality and Leachate Monitoring Requirements* to provide the rationale for the well designations (background, detection and compliance) presented in Table M-1. Please reference the lateral distances between the monitor wells and the slurry wall presented on the requested site survey drawing in the discussion of the appropriateness of the current well designations and submit revisions, as appropriate.

10. M.1.c.(2): Please submit revisions to Section 1.0 entitled "Water Quality and Leachate Monitoring Plan" of the *Water Quality and Leachate Monitoring Requirements* to provide the rationale for designating CW-4 as a compliance well. Please indicate if well CW-4 was installed to meet the requirements of Rule 62-701.510(7), F.A.C., and the appropriateness of continuing to monitor this location.

11. M.1.c.(2): Please submit revisions to Table M-2 to be consistent with review comment No: 5, above.

✓ 12. **M.1.c.(6):** Please submit revisions to Section 1.0 entitled "Water Quality and Leachate Monitoring Plan" of the *Water Quality and Leachate Monitoring Requirements* to provide a comparison of the well screen elevations for the surficial aquifer monitor wells and the range of ground water elevations recorded at each location. Please indicate if the surficial aquifer wells meet the requirement of Rule 62-701.510(3)(d)4, F.A.C., ("...wells monitoring the unconfined water table aquifer shall be screened so that the water table can be sampled at all times."), and indicate if any of the existing wells should be replaced.

✓ 13. **M.1.d.(1):** Section 1.0 entitled "Water Quality and Leachate Monitoring Plan" of the *Water Quality and Leachate Monitoring Requirements* references Figure M-2 and an attached drawing entitled "Surface Water Monitoring Points" dated June 28, 1999, however it appears that only Figure M-2 was submitted. Please review this apparent inconsistency and submit revisions, as appropriate.

✓ 14. **M.1.e.:** Section 1.0 entitled "Water Quality and Leachate Monitoring Plan" of the *Water Quality and Leachate Monitoring Requirements* references Figure M-1 for the leachate lift station locations, however this figure appears to be inconsistent with Figure L-4 (see review comment No. 4, above). Please review this apparent inconsistency and submit revisions, as appropriate.

15. **M.1.f.(2):** Section 1.0 entitled "Water Quality and Leachate Monitoring Plan" of the *Water Quality and Leachate Monitoring Requirements* indicates leachate samples will be collected from each lift station that receives flow from waste-filled areas and composited into one sample for analysis. Please note that the collection of composite leachate samples is considered to be inappropriate as the facility now contains areas that have received final cover, areas that will receive additional fill, and areas that are currently being filled. It is the Department's intention that individual leachate samples be collected from each lift station (anticipated to be Stages I and III for the permit period). Please submit revisions to this section as appropriate.

✓ 16. **M.1.f.(4):** Please submit revisions to Section 1.0 entitled "Water Quality and Leachate Monitoring Plan" of the *Water Quality and Leachate Monitoring Requirements* to indicate that surface water samples shall be analyzed for total phosphates to comply with Rule 62-701.510(8)(b), F.A.C.

17. **M.1.h.(2):** Please submit revisions to the submittal entitled "Biennial Water Quality Monitoring Plan Evaluation, First Half 2002 through Second Half 2003, Manatee County Solid Waste Division, Lena Road Landfill" (BWQMP), prepared by PBS&J, dated December 11, 2003, received December 12, 2003, to address the following comments, as appropriate:

✓ a. **Section 1.1.1** – Please submit revisions to Table 1-1 to list the leachate lift stations (refer to review comment No. 14, above), to be consistent with the current well identification numbers (delete MW-4; replace GC-4 with GC-4A), to identify well designations consistent with review comment Nos. 9 and 10, above.

b. **Section 1.1.2** – Please submit revisions to Table 1-2 to be consistent with review comment No. 5, above.

✓ c. **Section 2.1.1** – Please submit revisions to Tables 2-1 through 2-3 to provide a summary of leachate analyses that are consistent with reports provided to the Department by PBS&J.

✓ d. **Section 2.1.2** – Please submit revisions to Tables 2-4 through 2-7 to provide a summary of ground water analyses that are consistent with reports provided to the Department by PBS&J.

✓ e. **Section 2.1.2** – Please submit revisions to Tables 2-4 through 2-7 to include the results for antimony (reported to exceed the ground water standard at well GC-5 during the September 2002 sampling event).

✓ f. **Section 2.1.2** – Please submit revisions to this section that compare ammonia concentrations reported at background and detection wells.

- g. Section 2.1.2 – It is noted that the discussion of arsenic references the current MCL of 0.05 milligrams per liter (mg/L), however the arsenic MCL will change in January 2005 to 0.01 mg/L. Based on the results provided in Tables 2-4 through 2-7, it appears that samples collected from several wells have exceeded 0.01 mg/L for arsenic. This comment is presented for informational purposes and does not require a response.
- h. Section 2.1.3 -- Please submit revisions to Tables 2-8 and 2-9 to provide a summary of surface water analyses that are consistent with reports provided to the Department by PBS&J. Please submit additional revisions to Tables 2-8 through 2-11 to provide comparison with the surface water criteria presented in Chapter 62-302, F.A.C., for Class III (predominantly freshwater) rather than with ground water standards.
- i. Section 2.1.3 – Please note that the results for selenium do not demonstrate compliance with the surface water criterion as an elevated method detection limit has been reported. Please submit revisions to this section to indicate that the analytical laboratory will be directed to report appropriate detection limits for future sampling events.
- j. Section 2.1.3 – Please submit revisions to this section to discuss the potential sources of elevated turbidity and fecal coliform reported for sampling location SW-2.
- k. Section 2.2 – Please submit revisions to this section to provide a comparison of well screen elevations provided in Table 1-2 with the ground water elevations provided on Figures 4-1 through 4-8 (refer to review comment No. 12, above).
- l. Section 3.1.1 – Please submit revisions to the discussion of “detection patterns” and Table 3-1 to be consistent with review comment Nos. 17.c., 17.d., and 17.h., above, as appropriate.
- m. Section 3.1.2 – Please submit revisions to the discussion of “related parameter correlation” and Appendix A to be consistent with review comment no. 17.d., above, as appropriate.
- n. Section 3.1.3 – Please submit revisions to the discussion of “downgradient correlation” and Appendix B to be consistent with review comment no. 17.d., above, as appropriate.
- o. Section 4.1 – Please submit revisions to Figures 4-1 through 4-8 to provide scale-drawn figures that identify where the hydraulic gradients were measured on each contour map.
- p. Section 4.1 – Please submit revisions to this section to indicate if well CW-1 is still present and could be included in future water level measurements (see Figure 4-1). Please submit additional revisions to this section to discuss the feasibility of installing staff gauges in the surface water bodies located to the south and east of the landfill.
- q. Section 4.1.1 – Please submit revisions to this section to describe the range of hydraulic gradient values recorded at the facility (refer to review comment No. 17.o., above).
- r. Section 4.1.1 – Please submit revisions to this section to describe the locations where hydraulic conductivity tests were conducted (well identification number and lithologic unit monitored) and provide the range of results provided for the surficial aquifer at the facility.
- s. Section 4.1.1 – Please submit revisions to this section that provide ground water velocity calculation using the most conservative values for hydraulic gradient and hydraulic conductivity.
- t. Section 5.0 – The appropriateness of the summary, conclusions and recommendations provided in this section shall be reviewed upon receipt of responses to review comment Nos. 17.a., through 17.s.

I can be contacted at (813)-744-6100, extension 336, to discuss the comments in this memorandum.

jrm