



Florida Department of Environmental Protection

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Mr. Bruce E. Kennedy
Assistant County Administrator
Pasco County Utilities
7530 Little Road
New Port Richey, Fl. 34654

January 9, 2009

RE: West Pasco County Landfill Cell A-4, Construction
Power Plant Certification No. PA87-23

Dear Mr. Kennedy:

This is to acknowledge receipt of the additional information dated December 9, 2008 (received December 10, 2008) submitted in support of your application dated May 12, 2006 (received May 15, 2006) prepared by CDM, to construct Cell A-4 of the Class I Landfill (ash monofill) at the solid waste management facility referred to as the West Pasco Class I Landfill.

As required by Condition of Certification [COC] #XIII.D.1., the construction of new disposal cells shall meet the requirements of Chapter 62-701, F.A.C. This letter constitutes notice that the information submitted **does not meet** the requirements of Chapter 62-701, F.A.C., and construction is **not authorized** at this time.

The information provided is incomplete. This is the Department's fourth request for additional information. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received.

General

1. 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 **6 copies** of all requested information. Please submit all revised plans and reports as a complete package. If possible, please provide revised pages, which may be inserted into the original submittal (holes punched for a three-ring binder). 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 may 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.

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

SECTION 1 - Introduction & Permit Application Rule 62-701.320(7), F.A.C.

1. **Rule 62-701.400(6) F.A.C.**

a. Attachment 19: Please verify that the repairs proposed in the May 15, 2008 CECS report were completed.

2. **Rule 62-701.630, F.A.C.** Please address the following comments regarding the financial assurance cost estimates information provided in Appendix 18.

a. The amounts on the Subtotal of 1-11 Above, Closing Cost Subtotal, and Total Closing Costs lines appear incorrect and do not appear to include the Site Specific Costs. Please verify and revise page 6 of 11, as applicable.

b. A revised page 5 of 11 was not provided. Please verify that the amounts provided on page 5 of 11 of the July 28, 2008 submittal remain unchanged.

SECTION 3 - Leachate Control and Removal System Performance, Rules 62-701.400, 62-701.500(8), F.A.C.

3. **§3.5.:**

a. Please revise the HELP Model results provided in this section, if applicable, based on your response to the comments in this letter.

b. Table 3 and HELP Model Runs: The results of the HELP Model runs reported in Table 3 appear to indicate more leachate leakage through the primary liner (Layer 6) than is collected in the leachate collection layer (Layer 5). This does not appear to be reasonable. Please verify this inconsistency, and revise Table 3 based on revised HELP Model analyses, as appropriate.

4. **Appendix D:**

a. Pipe Conveyance Calculations: Please provide revised pipe conveyance calculations, based on your responses to Comments #3 and #4.b. and based on your response to the comments regarding Appendix F.

b. Lateral Pipe Settlement Estimate Table:

1) The results in this table appear to indicate that the leachate collection pipe slope will be significantly reduced between Points B and A, will reverse slope between Points A and X, and therefore will not function as designed at A-4 buildout and final buildout. The averaging of the slope across the entire pipe length does not appear to be a reasonable demonstration of design adequacy. Please verify the results in this table and revise the design of the leachate collection system, as applicable.

2) Post Settlement Pipe Slope at West Pasco Class I Buildout: The final waste ash elevations and heights do not appear to be consistent with waste elevations and heights that will be over the two northern leachate collection pipes at final buildout of the facility. Please verify and provide revised lateral pipe settlement analyses for these pipes at final buildout waste elevations and heights.

APPENDIX F - Geotechnical Investigation, Rule 62-701.410, F.A.C. Please provide a revised geotechnical investigation, signed and sealed, that addresses the following comments. The revised report will be reviewed in its entirety based on these responses and the revised information provided.

5. §2.4. This section states, "Typically e_o ranges from 0.5 to 1.5" and " $C'=(1+e_o)/C_c$ ". However to "simply modify the equation to $C'=1/C_c$ ", it appears that one would need to assume that $e_o=0$. Please verify and explain this apparent inconsistency and revise the settlement calculations, as applicable.

6. §2.5. The soil properties utilized in the block and circular failure slope stability analyses are inconsistent with the soil properties figure provided as an attachment to the PSI response letter and provided in Appendix C of the report. Please verify these inconsistencies and provide revised slope stability analyses, as appropriate.

APPENDIX I - Water Quality Monitoring Plan, Rules 62-701.410(1) and 62-701.510, F.A.C.

7. Please respond to Mr. John Morris' memorandum dated January 9, 2009, (attached) concerning the Water Quality Monitoring Plan.

APPENDIX H - Construction Quality Assurance Manual, Rules 62-701.400(3), (7) and (8)

8. **Section 5 - Testing, Execution and Field Quality Control**

a. §5.7.2.5. Table A. The required value and test frequency for GCL Peel Strength in Table A in this section still appears to be inconsistent with those provided in Specification 02275 Table A-1A. Please revise Table A and/or the specifications accordingly.

CONSTRUCTION DRAWINGS - Rule 62-701.320(f), 62-701.320(5)(b), F.A.C.

Please provide revised drawings that address the comments provided below, including all necessary details for the construction and operation of the facility. Please be advised that the drawings may be reviewed in their entirety after receipt of the information requested, based on the extent of the changes made.

9. Please revise the construction drawing, as applicable, based on design changes made to the facility in response to the comments provided elsewhere in this letter.

10. **Sheets C-15B and CD-5A.** For the purposes of this application, the conceptual closure design and details depicted on these sheets is acceptable. Please note that the closure design of the facility will be re-evaluated as part of the final closure of the facility. **This comment is for information purposes only and does not necessarily require a response.**

11. **Sheet CD-3.**

a. Detail F: All the "Structural Notes" appear to be deleted from this sheet. Please verify and revise this sheet, as applicable.

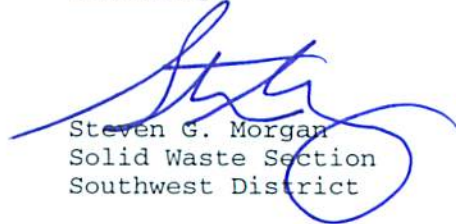
Please provide all responses that relate to engineering for design and operation, including plan sheets, signed and sealed by a professional engineer. Responses that relate to the facility operations should be included as part of the Operation Plan. All replacement pages should be numbered, and with revision date.

This staff assessment is preliminary and is designed to assist in the review of the application prior to final agency action. The comments provided herein are not the final position of the Department and may be subject to revision pursuant to additional information and further review.

Please respond by the date established in the meeting to be scheduled, as indicated below, 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 **the date noted above**, you should develop an alternate specific timetable for the submission of the requested information for Department review and consideration. Pursuant to the provisions of Rule 62-4.055(1), F.A.C., if the Department does not receive a timely, complete response to this request for information the Department may issue a final order denying your application. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant may reapply as soon as the requested information is available.

You are requested to submit 6 copies of your response to this letter as one complete package. Please contact the Department to set up a meeting to discuss this letter and subsequent submittals. Please contact me at (813) 632-7600 ext. 385 to schedule this meeting.

Sincerely,



Steven G. Morgan
Solid Waste Section
Southwest District

sgm

attachment

cc: Aamod Sonawane, P.E., CDM, sonawaneas@cdm.com
John Power, Pasco County, jpower@pascocountyfl.net
Donna Huber, Pasco County, jhuber@pascocountyfl.net
Cindy Mulkey, FDEP Siting, FDEP (e-mail)
Richard Tedder, P.E., FDEP Tallahassee (e-mail)
Fred Wick, FDEP, Tallahassee, (e-mail)
Mara Nasca, FDEP Tampa, Air (e-mail)
Jeff Greenwell, P.E., FDEP Tampa, Water Facilities (e-mail)
William Kutash, FDEP Tampa, Waste (e-mail)
John Morris, P.G., FDEP Tampa SW (e-mail)
Susan Pelz, P.E., FDEP Tampa SW (e-mail)

Memorandum

TO: Steve Morgan
FROM: John R. Morris, P.G. *JRM*
DATE: January 9, 2008
SUBJECT: Pasco County Resource Recovery Facility and Class I Landfills
Proposed Expansion – Cell A-4 Construction Submittal
Hydrogeologic and Monitoring Review Comments (Responses to RAI #3)
cc: Susan Pelz, P.E.

I have reviewed portions of the materials submitted to the Department in support of the referenced expansion of the West Pasco County Landfill, prepared by Camp, Dresser & McKee, Inc. (CDM), received December 10, 2008. The materials provided responses to the review comments presented in the Department's letter dated August 29, 2008. The portions of the submittals that were reviewed included:

- Letter prepared by CDM, re: "West Pasco County Landfill Cell A-4 Construction, Power Plant Site Certification No. PA 87-23 – Responses to Request for Additional Information No. 3," dated December 9, 2008 providing responses to review comments regarding hydrogeologic and monitoring aspects of the proposed Cell A-4 expansion [referred to as the "**CDM response letter**"]
- Attachment 21 – SWFWMD Well Inventory Printouts for Sections 24 and 25, in Township 24S, Range 17E
- Section 1 – DEP Form #62-701.900(1), replacement pages 7, 11, 12, 30, 32, 33, and 35, undated
- Appendix I – document entitled "Water Quality Monitoring Plan for the West Pasco County Class I Landfill, Revision 1" prepared by CDM, dated December 2008 [referred to as the "**WQMP document**"]
- Site Plans prepared by CDM, dated July 2008

My review focused on the hydrogeologic and monitoring aspects of the proposed expansion. Additional information is needed to address the requirements of Rules 62-701.410 and 62-701.510, F.A.C., and to evaluate the adequacy of the proposed monitoring plan modifications.

Please have the applicant provide responses to all comments that do not contain the phrase: "**No additional information is requested.**" Please have the applicant 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 or replacement pages (including text, figures, tables, forms, attachments, site plans, etc.).

The review comment numbers presented below are consistent with my memoranda dated June 13, 2006, August 25, 2006, and August 29, 2008. To facilitate the review process, those comments that were fully addressed by previous submittals have been deleted from this memorandum [comment #1, #3, #4.d., #4.e., #8, and #13]. The information requests have been referenced to sections of the permit application form and sections of the supporting documents, where appropriate, as presented below:

PERMIT APPLICATION – DEP FORM NO. 62-701.900(1)
PART A – GENERAL INFORMATION

2. **A.7.:** The CDM response letter indicated this item of the application form was revised to provide coordinates that represented the center of Cell A4, however page 4 of DEP Form #62-701.900(1) was not provided in Section 1. As previously requested, please submit a revised application form for this item that indicates the latitude and longitude coordinates that represent the approximate center of the Cell A4 footprint.

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PART I – HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS

(Rule 62-701.410(1), F.A.C.)

4. **I.1.a., I.1.b., I.1.d., I.1.e., I.1.f.:** These comments addressed the hydrogeological information provided in the WQMP document:

General Comments Regarding the WQMP Document:

- The revised WQMP document provided pages numbers and the date of preparation and date of revision for each page. **No additional information is requested.**
- The revised WQMP document deleted the repeated paragraphs of Section 2.1.3 (Proposed Additional Monitor Wells). **No additional information is requested.**
- Section 2.1.3, ¶2 of the WQMP document was revised to refer to the construction details for proposed shallow monitor wells on Figures 2A, 2B, and 2C, and to the construction details for proposed deep monitor wells on Figures 2D and 2E. **No additional information is requested.**
- Figure 5 of the WQMP document was revised to refer to proposed monitor wells 2MW-24S/D, 2MW-25S/D and 2MW-26S/D. **No additional information is requested.**

Previous Comments Regarding the Hydrogeological Investigation:

- a. Direction and rate of ground water and surface water flow, including seasonal variations (Rule 62-701.410(1)(a)1, F.A.C.) – Section 6.0 of the WQMP document was revised to describe the direction of ground water flow, range of horizontal hydraulic gradient values, and most conservative ground water velocity value consistent with the information provided on the contour maps prepared for the sampling events conducted at the West Pasco Class I landfill during October 2006, April 2007, September 2007 and March 2008. **No additional information is requested.**
 - b. Background quality of ground water and surface water (Rule 62-701.410(1)(a)2, F.A.C.) – Section 2.1.2 of the WQMP document was revised to present a general discussion of water quality reported for additional wells located in the Cell A4 footprint (wells 2MW-20D, MW-11A, MW-11B and DMW-5). **No additional information is requested.**
 - c. Any on site hydraulic connections between aquifers (Rule 62-701.410(1)(a)3, F.A.C.) – Section 2.1.3, ¶2 of the WQMP document was revised to indicate that a soil boring will be installed at each proposed well location to provide a better description of lithology and ensure that the new wells are appropriately constructed. Section 2.1.3, ¶3 of the WQMP document was revised to indicate how the construction details of the proposed surficial aquifer wells will be adjusted in the event that clayey sediments are encountered at a greater depth than anticipated or if the clayey sediments are not encountered. **No additional information is requested.**
5. **I.1.c.:** This comment was addressed by the response provided to comment #4.b., above, regarding the characterization of background water quality within Cell A4. **No additional information is requested.**
6. **I.1.g., and I.1.i.:** The CDM response letter referred to additional queries of the SWFWMD database regarding well inventory information provided in Attachment 21. Please submit revisions to the tables provided in Attachment 21 to organize the well inventory information by section, township and range to demonstrate that the entire area represented by a one-mile radius around Cell A4 has been addressed.. Please also submit revisions to these items on page 25 of the application form to indicate that the well inventory tables are provided in Attachment 21 and that the well inventory map is provided in Attachment 23.
7. **I.1.h.:** The CDM response letter indicated that Pasco County Utilities – Wastewater Division will be in contact with the Department’s Domestic Wastewater Section to determine the need to install replacement monitor wells as part of the investigation of ground water impacts at the Shady Hills Wastewater Treatment Facility to accommodate the pending abandonment wells MW-11A, MW-11B and DMW-5 associated with the construction of Cell A4. **No additional information is requested.**

PART M – WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS (Rule 62-701.510, F.A.C.)

9. **M.1.a., M.1.b., M.1.c.(1) through M.1.c.(7), M.1.d.(1) and M.1.d.(2), M.1.f.(1) through M.1.f.(4), M.1.g., and M.1.h.(1):** These items were revised on page 32 of the application form [provided in Section 1] to reference the WQMP document. **No additional information is requested.**

10. **M.1.c.(6):** These comments addressed the proposed monitor well construction details.

a. This comment was addressed by the response provided to comment #4.c., above, regarding the rationale used to develop the construction details for the proposed monitor wells. **No additional information is requested.**

b. The CDM response letter referred to revised Section 2.1.3 and to Figures 2D, 2E, 3 and 4 of the WQMP document, and to Site Plan sheet #CD-4 that indicated the proposed monitor wells will be constructed with 10-foot screen lengths. Please submit additional revisions to Site Plan sheet #CD-4 to indicate the construction details for proposed wells 2MW-27S, 2MW-27D, 4MW-27, and 4MW-27D.

11. **M.1.c.(8):** This item was revised on page 32 of the application form [provided in Section 1] with a “N/A” entry. **No additional information is requested.**

12. **M.1.e.:** Sections 2.2 and 3.3 of the WQMP document were revised to clarify the leachate sampling locations, sampling frequency, and sampling parameters for existing disposal cells [A-1, A-2, A-3, SW-1 and SW-2] and for proposed disposal Cell A4. **No additional information is requested.**

This staff assessment is preliminary and is designed to assist in the review of the application prior to final agency action. The comments provided herein are not the final position of the Department and may be subject to revision pursuant to additional information for further review.

I can be contacted at (813) 632-7600, extension 336, to discuss these review comments.

jrm