



# Florida Department of Environmental Protection

Southwest District  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926  
Telephone: 813-632-7600

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

Transmitted via email only to [Casey.Stephens@bocc.citrus.fl.us](mailto:Casey.Stephens@bocc.citrus.fl.us)

Mr. Casey Stephens, Director  
Citrus County Solid Waste Division  
P.O. Box 340  
Lecanto, Fl. 34460-0340

August 10, 2010

RE: Citrus County Central Class I Landfill Operation Permit Renewal  
Pending Permit No.: 21375-018-SO/01, Citrus County  
WACS No.: SWD/09/39859

Dear Mr. Stephens:

This is to acknowledge receipt of the additional information dated and received July 12, 2010, prepared by SCS Engineers, in support of the above permit application for permit renewal to operate an existing Class I landfill, referred to as the Citrus County Central Class I Landfill, located on S.R. 44, 3 miles east of Lecanto, Citrus 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 third 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.

## **GENERAL:**

1. The requested information and comments below do not necessarily 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.**

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

**SECTION K - LANDFILL OPERATIONS REQUIREMENTS (Rule 62-701.500, F.A.C.)**

**Attachment K-1 - Operations Plan:**

Please provide the following additional information and revisions to the facility Operations Plan. Please provide replacement pages with revisions noted (deletions may be struckthrough [struckthrough] and additions may be underlined [underlined] or a similar method may be used) and each page numbered with the document title and date of revision.

**1. Section 8:**

a. Upon completion of the pipe re-rounding rehabilitation of the collapsed leachate riser pipes in Phase 1/1A, please provide a rehabilitation completion report that includes, a narrative description of the work conducted, a video inspection of the repair, detail drawings of the rehabilitated leachate riser pipes and leachate pump system, and information demonstrating that the rehabilitated side slope riser system will adequately function to remove leachate from the Phase 1/1A leachate collection system.

b. Please revise Section 8 of the Operation Plan to describe the operation of the revised Phase 1/1A leachate collection system, based on the rehabilitation of the of the side slope riser system, as appropriate.

**2. Rule 62-701.320(5)(b), F.A.C.** Please address the comments in John Morris' August 10, 2010 memorandum (attached) regarding this application. You may call Mr. Morris at (813) 632-6100, extension 336, to discuss the items in his memorandum.

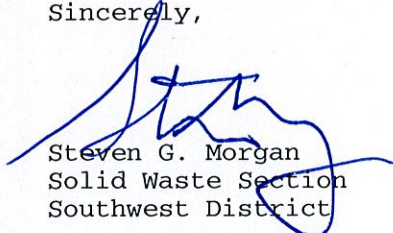
**This staff assessment is preliminary and is designed to assist in the review of the application prior to final agency action. The comments provided herein are not the final position of the Department and may be subject to revision pursuant to additional information and further review.**

**Please 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.**

Please respond by **September 30, 2010**, 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 above schedule, you should develop an alternate timetable for the submission of the requested information for Department review and consideration. 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.

Please provide **4 copies** of your response to this letter as one complete package. If there are points that must be discussed and resolved or you would like to set up a meeting to discuss this letter and subsequent submittals, please contact me at (813) 632-7600 ext. 385.

Sincerely,



Steven G. Morgan  
Solid Waste Section  
Southwest District

SM/sgm

Attachment

cc: Dominique Bramlett, P.E., SCS Engineers, [dbramlett@scsengineers.com](mailto:dbramlett@scsengineers.com)  
Patty Jefferson, Citrus County, [patty.jefferson@bocc.citrus.fl.us](mailto:patty.jefferson@bocc.citrus.fl.us)  
Fred Wick/Frank Hornbrook, FDEP, Tallahassee (e-mail)  
John Morris, P.G., FDEP Tampa (e-mail)  
Susan Pelz, P.E., FDEP Tampa (e-mail)

# Memorandum

## Florida Department of Environmental Protection

**TO:** Steve Morgan  
**FROM:** John R. Morris, P.G. *JRM*  
**DATE:** August 10, 2010  
**SUBJECT:** Citrus Central Class I Landfill, Citrus County  
Operation Permit Renewal Application, Pending Permit #21375-018-S0  
Environmental Monitoring Review Comments (Responses to RAI #2)  
**cc:** Susan Pelz, P.E.

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I have reviewed portions of the materials submitted to the Department in support of the referenced application for renewal of the Class I landfill operations permit that was prepared by SCS Engineers, on behalf of Citrus County Solid Waste Management Division, received July 12, 2010 and July 13, 2010. These materials were prepared in response to the Department's letter dated May 21, 2010 that requested additional information regarding this application for the referenced facility. My review focused on the hydrogeologic and environmental monitoring aspects of the application for the referenced permit and included the following:

- Letter prepared by SCS Engineers dated July 12, 2010, received July 12, 2010, re: "Response to Request for Additional Information No. 2 (RAI No. 2), Citrus County Central Class I Landfill Operation Permit Renewal" [referred to as the **"response letter"**], which transmitted:
  - Attachment C – Document entitled "Citrus County Landfill, Biennial Water Quality Monitoring Report, 2009" [referred to as the **"BWQMR document"**], prepared by SCS Engineers, dated July 12, 2010,
  - Attachment D – Document entitled "Water Quality and Leachate Monitoring Plan, Citrus Central Landfill, Citrus County, Florida" [referred to as the **"WQLMP document"**], prepared by SCS Engineers, dated July 12, 2010,
  - Attachment E – Revised Section L of the Engineering Report [Water Quality and Leachate Monitoring Requirements], prepared by SCS Engineers, dated July 12, 2010,
  - Attachment F – Part L of Department Form #62-701.900(1) [Water Quality and Leachate Monitoring Requirements], pages 30 and 31, undated revisions.
- Letter prepared by SCS Engineers dated July 13, 2010, received July 13, 2010 that transmitted signed/sealed cover pages for the BWQMR document and WQLMP document.

Additional information is required 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. Please have the applicant address all of the review comments that do not include the phrase: **"No additional information is requested."** 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 (including text, figures, tables, attachments, forms, plan sheets, etc.).

The review comment numbers presented below are consistent with my memoranda dated March 2, 2010 and May 21, 2010. To facilitate the review process, those comments that were fully addressed by previous submittals [comments #1.a., #1.c., #1.d., #1.e., #1.f., #1.g., #1.h., #1.i., #1.j., #1.k., #1.l., #1.m., #1.o., #1.p., and #1.t.] have been deleted from this memorandum. 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:

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

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

**1. L.1.h.(3): Two and one-half year report requirements, or every five years if in long-term care, signed, dated and sealed by PG or PE [Rule 62-701.510(9)(b), F.A.C.].**

Please submit additional revisions to the BWQMR document to address the following:

**Section 1 – Introduction**

b. The response letter dated April 21, 2010 itemized the information required by the Department's SOP FS 2212, Sections 3.5.2 and 3.5.3 to determine if elevated dissolved oxygen and turbidity values reported during well purging represent naturally occurring conditions. The response letter dated July 12, 2010 provided additional discussion regarding these elevated dissolved oxygen and turbidity values. Please submit revisions to the appropriate section of the BWQMR document to address the following:

1) The response letter and the "Metals Exceedances – Iron" sub-section in Section 3 of the BWQMR document described activities to be conducted prior to the next sampling event [assumed to be performed during the second half 2010 event, with results due to be submitted by January 15, 2011] to remove the dedicated pump, purge well MW-10 of sediment, re-install the pump at a slightly higher elevation, purge the well at an optimal rate to minimize turbidity, and reduce the pumping rate while collecting samples. While the Department does not object to these activities, please note that this discussion did not address chronically elevated turbidity values reported for well MW-18, or provide an explanation why the elevated turbidity values reported for wells MW-10 and MW-18 would be considered to be naturally occurring. Please also note that in the event these proposed activities are not successful in reducing turbidity levels, supplemental activities may be required. **This comment has been presented for informational purposes and does not require a response.**

2) The response letter referred to the response provided to comment #1.b.(1) and to the "Comments" and "Notes" sections of the Sampling Logs provided for the ground water sampling events conducted at the facility. It is noted that the discussion provided regarding elevated turbidity values reported for well MW-10 did not address the potential for well construction [screen slot and/or sand pack sizes] or well installation [broken screen, insufficient sand pack, insufficient well development] to be the cause for the elevated turbidity values at these wells. As indicated above, please note that in the event these proposed activities are not successful in reducing turbidity levels, supplemental activities may be required. **This comment has been presented for informational purposes and does not require a response.**

3) The response letter referred to the Sampling Logs provided for the ground water sampling events conducted at the facility which indicated the sampling personnel were aware of the need to utilize the SOP procedures to minimize sample dissolved oxygen and collect samples using low flow rates. The response letter also indicated that high recharge in the Brooksville Ridge caused elevated dissolved oxygen levels in the hydraulically upgradient wells [MW-1R, MW-2, MW-3] and in the deeper monitor well [MW-19] that is unaffected by the landfill. Please submit a response that addressed the last two sentences of this review comment in the memorandum dated May 21, 2010:

Please discuss the variability in dissolved oxygen measurements recorded at monitor wells around the facility since the July 2009 sampling event and the causes for the increased dissolved oxygen measurements that no longer meet the purging criterion [see attached table]. Please explain why these conditions would be considered to be naturally occurring.

[Comment #1.b., continued]

4) The response letter referred to the response provided to comment #1.b.(3) and to the "Other Parameter Issues – Dissolved Oxygen" sub-section in Section 3 of the BWQMR document regarding elevated dissolved oxygen levels reported during sampling events conducted at the facility. It does not appear that the information requested by this review comment presented in the memorandum dated May 21, 2010 was provided. Please submit a response that provides the results using a down hole dissolved oxygen probe:

Please indicate when the information described in item #5 was submitted to the Department [A description of conditions at the site that cause the dissolved oxygen to be high and/or dissolved oxygen measurements made within the screened or open borehole portion of the well with a downhole dissolved oxygen probe.]. In the event that dissolved oxygen measurements made within the screened portion the monitor wells using a downhole probe have not been provided, please submit revisions to the appropriate sections of the BWQMR to present this information.

Section 4 – Adequacy of Monitoring Program

n. The response letter referred to the WQLMP document and revised Section L of the Engineering Report. Please submit additional revisions to address the following:

- The WQLMP document meets the requirements of Rule 62-701.510, F.A.C., and replaces the monitoring plan submitted as part of the construction permit for Phase 3 [referenced in Specific Condition #A.2.a.(3) of permit #21375-013-SC/01]. **No additional information is requested.**
- Please submit revisions to Section L of the Engineering Report that addresses the following:  
Section L.1 – Water Quality and Leachate Monitoring Plan  
1) Please revise this paragraph to delete the reference to the November 2008 Jones Edmunds & Associates, Inc., document and replace it by referencing the WQLMP document.

Section L.1.3.2 – Downgradient Compliance Well

2) The third sentence of this section referred to the well locations on "Figure 2 of the Monitoring Plan." Please submit revisions to refer to Attachment 1 of the WQLMP document.

Section L.1.3.3 – Background Wells

3) This section indicated existing background wells MW-1R and MW-2 would be re-designated as piezometers for water level measurements, and that the well network would include background wells MW-3 and MW-7. Please revise the second sentence of ¶2 of this section to indicate "there are no other changes to this subsection."

Section L.1.3.4 – Monitoring Well Location Information

4) The third sentence in ¶1 of this section referred to the well locations on "Figure 2 of the Monitoring Plan." Please submit revisions to refer to Attachment 1 of the WQLMP document.

Section L.1.3.6 – Well Screen Locations

5) Please submit revisions to the second sentence of this section to refer to the table of construction characteristics for proposed wells MW-20 and MW-21 that are provided in Attachment 2 of the WQLMP document.

- The response letter referred to Part L of the application form presented in Attachment F. **No additional information is requested.**

q. The response letter referred ¶5 of Section 2, sub-section entitled "Ground Water Flow Assessment" of the BWQMR document that was revised to reference ground water velocity calculated for the unconfined Floridan aquifer. **No additional information is requested.**

[Comment #1., continued]

r. The response letter referred to the new "Monitoring Frequency" sub-section in Section 4 of the BWQMR document that provided an evaluation of the adequacy of the semi-annual ground water monitoring frequency. **No additional information is requested.**

s. The response letter referred to revised Section 2 and Section 3 of the WQLMP document that indicated existing background wells MW-1R and MW-2 would be re-designated as piezometers and that background water quality would be adequately monitored at wells MW-3 and MW-7. **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 comments.

Jrm