



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**
CENTRAL DISTRICT
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May 29, 2014

Email

scott.cottrell@sumtercountyfl.gov

Sumter County Board of County Commissioners
7375 Powell Road
Wildwood, Florida 34785
% Mr. Scott Cottrell

OCD-SW-14-2664

Sumter County – SW WACS # 53008
Sumter County Closed Class I Landfill
Review of Stabilization Assessment Report

Dear Mr. Cottrell:

The Department has reviewed the document “Sumter County Closed Class I Landfill, Stabilization Assessment Report,” submitted on your behalf by The Colinas Group. The report was dated April 10, 2014. The report was signed and sealed by Professional Geologist, Mr. Richard L. Potts, Jr., P.G., of The Colinas Group. The document submittal included two attachments:

- Attachment I: Stabilization Report Sumter County, Sumter County Landfill Technical Memorandum, prepared by Mr. Bob Mackey, P.E. of S2L, Inc, dated April 8, 2014.
- Attachment II: Sumter County Closed Class I Landfill Water Quality Evaluation Report (Technical Report) Quarter II 2011 – Quarter I 2014, prepared by Mr. Richard L. Potts, Jr., P.G., of The Colinas group, Inc., dated April 2014.

Rule 62-701.620, F.A.C., Long-Term Care, states,

“... Before the expiration of the long-term care monitoring and maintenance period, the Department may extend the time period if the closure design or closure operation plan is found to be ineffective, or if the permittee has not performed all required monitoring and maintenance. For purposes of this subsection, “ineffective” means that:

- (a) The ground water monitoring system indicates that the landfill continues to impact ground water at concentrations that may be expected to result in violations of Department water quality standards or criteria;
- (b) The gas monitoring system indicates that the landfill continues to produce gas in amounts that may be expected to exceed the concentrations of combustible gases allowed in paragraph 62-701.530(1)(a), F.A.C.;
- (c) Significant subsidence of waste has not ceased; or
- (d) The final cover does not have well established vegetation or is showing signs of continuing significant erosion problems.”

Upon review of the Stabilization Report Sumter County, Sumter County Landfill Technical Memorandum, the Department has determined that closure operations have been ineffective. We are concerned with the following issues:

1. The landfill continues to generate gas. The improper maintenance of the passive landfill gas vents could influence the landfill gas to migrate laterally rather vent to the atmosphere.
2. Subsidence has not been repaired on a timely basis. Therefore, it is not possible to know whether additional subsidence has occurred in the recent past or might occur in the future.
3. In certain areas, the final cover is not in good condition. It appears that the cover has not been maintained properly. This might result in future problems.
4. The stormwater ponds have not been properly maintained.
5. Groundwater monitoring wells have not been maintained or secured.


The Water Quality Evaluation Report submitted as Attachment II to the "Sumter County Closed Class I Landfill, Stabilization Assessment Report," fulfills the requirements for a technical report. The Department concurs with its conclusion. If groundwater monitoring continues, the number of sampling events and parameters measured should be reduced. Comments regarding the water quality report are in Attachment 2 of this letter.

Based on Rule 62-701.620, F.A.C., the Department must decide prior to June 15, 2014 (which is the expiration date of the long term care permit 22926-003SF) whether long-term care must be extended. The report cover letter stated Sumter County prefers to not continue under a long-term care permit but is willing to work out details for an environmental monitoring program, if one is necessary. We are willing to work with you, but as of today, we believe renewal of the long-term care permit will be the most effective way to address the maintenance issues.

In Attachment 1 of this letter, we are requesting additional information to clarify what was stated in the Stabilization Assessment Report. Additionally, we will schedule an inspection of the landfill. Are you (or persons you designate) available for an inspection on June 6? We recommend your consultants be available at the time of the inspection. After the inspection, we will discuss future actions.

If you have any questions, please contact Kim Rush at (407) 897-4314 or by e-mail at kim.rush@dep.state.fl.us.

Sincerely,


F. Thomas Lubozynski, P.E.
Waste & Air Resource Programs Administrator

FTL/kr

Attachments

1. Questions and Comments on Attachment I: Stabilization Report Sumter County, Sumter County Landfill Technical Memorandum
2. Comments about Attachment II: Sumter County Closed Class I Landfill Water Quality Evaluation Report (Technical Report) Quarter II 2011 – Quarter I 2014

cc:

Richard L. Potts, Jr., P.G. - The Colinas Group, rickpotts@cfl.rr.com

Bob Mackey, P.E. – S2L, Inc., bmackey@s2li.com

Marjorie Heidorn, P.G. – FDEP Central District, Marjorie.heidorn@dep.state.fl.us

Attachment 1:
Questions and Comments on Stabilization Report Sumter County,
Sumter County Landfill Technical Memorandum

Note that all references to “report” in the following text refer to the document entitled, “Stabilization Report Sumter County, Sumter County Landfill Technical Memorandum, prepared by Mr. Bob Mackey, P.E. of S2L, Inc, dated April 8, 2014.

1. The following questions and comments are in reference to landfill gas generation.
 - a. Page 3 of the report states “Based on S2Li’s review of the landfill data from December 2009 through December 2013, explosive gas was not detected in any of the monitoring locations serving this area.”
 - i. Please provide the landfill gas measurement data including dates samples were taken, how many samples were taken, where samples were taken, and the instrument readings.
 - ii. According to the data in OCULUS, December 2009 through December 2013, there has been only 3 monitoring events and there is no data since 2012. How is this limited amount of data conclusive in determining if gas is migrating?
 - iii. What is meant by “explosive gas?” Is “explosive gas” referring to methane in general at any level or is it referring to methane not detected at concentrations above 5%, which is its lower explosive level?
 - b. Page 4 of the report states “Although it is clear that LFG is still being produced based on data obtained from within the passive vents...” Provide the data for the gas being produced in the passive vents, including dates samples were taken, how many samples were taken, where samples were taken, and the results.
 - c. The report suggests that multiple gas vents are no longer functional. A review of historical Department inspection reports indicates that the Department has required repair of gas vents in the past and that gas vent maintenance has been an on-going problem.
 - i. How many vents are currently intact and functional? Which ones are they?
 - ii. Why were gas vents not being inspected and repaired as part of a periodic maintenance plan?
2. The following questions and comments are in reference to the stormwater ponds. The report indicates that the stormwater ponds are not being maintained as originally designed, that is, as lined retention ponds.
 - a. Does the facility have a stormwater permit?
 - b. Does that permit require the ponds to be lined?
 - c. Is the facility meeting the requirements of their stormwater permit and the applicable stormwater rules?
3. The following questions and comments are in reference to the asphalt cap areas. Your answers should be based on information that is currently available. We are not requesting additional investigation at this time.

- a. Page 2 of the report makes the conclusion about the Southern Asphalt Area that “The overall integrity of this asphalt area was good...”. The report goes on to state the following issues: “the existing asphalt contours include ridges and valleys...crack were observed...water was found ponding...continued seepage of water through the asphalt...” and efforts to promote drainage and fill valleys have had “minimal effect.” Based upon these qualitative statements, the Department cannot agree with the conclusion that the overall integrity of the asphalt cap is good.
 - b. Page 2 states “It is unlikely that cracks within the asphalt extend completely through the cap cross-section. S2Li believes the cracks will only extend through the asphalt layer and not through the asphalt subbase, typically composed of limerock.”
 - i. Did S2Li do any investigations to support their opinion that the cracks do not extend completely through the cap cross-section?
 - ii. How thick is the cap of asphalt?
 - iii. The report states the subbase is “typically composed of limelock.” Since this is not a ‘typical’ use for asphalt, what was actually used for the subbase and how thick was the subbase?
4. The following questions and comments are in reference to the grass cap area.
- a. Page 3 of the report suggests that mowing is not being performed often enough.
 - i. How often was mowing being performed?
 - ii. Is mowing being performed on a regular basis, for example, monthly? Or, is it scheduled “as needed”? If “as needed” what was the criteria for when a mowing event would occur?
 - b. In the report, multiple qualitative statements are given regarding the settlement, ponding, and stressed vegetation such as “extremely small” and “extremely few.”
 - i. Can you quantify such observations?
 - ii. The Department considers any run greater than 10’ with a settlement of 12” to be significant. Were any areas of this size or larger noted?
 - iii. How many areas of ponding were noted? How deep?
 - iv. How many areas had stressed vegetation? How large were they? Why do you think the vegetation was stressed?
5. The following questions and comments are in reference to the conclusions on page 4 of the report.
- a. The conclusion section of the report states “The current integrity of the asphalt areas and grassed landfill cap area is good.” Based upon the maintenance issues and qualitative statements addressed above, the Department cannot agree with the conclusion that the overall integrity of the landfill cap (asphalt and grassed) is good.
 - b. The conclusion section of the report states “Relatively few maintenance issues could be addressed...” Based upon the maintenance issues identified above with respect to the gas vents, mowing, landfill cover, and stormwater ponds, the Department cannot agree with the conclusion that there are relatively few maintenance issues to be addressed.

Attachment 2:
Comments regarding Attachment II: Sumter County Closed Class I Landfill
Water Quality Evaluation Report (Technical Report) Quarter II 2011 – Quarter I 2014

Note that all references to “technical report” in the following text refer to the document entitled, “Attachment II: Sumter County Closed Class I Landfill Water Quality Evaluation Report (Technical Report) Quarter II 2011 – Quarter I 2014,” prepared by Mr. Richard L. Potts, Jr., P.G., of The Colinas group, Inc., dated April 2014.

1. Comments about the Summary and Conclusion section:
 - a. The Department agrees previous Consent Order was deemed satisfied and the case was closed.
 - b. The Department agrees that the Sumter County Closed Landfill (SCCL) is considered to be an “existing installation.” It is exempt from compliance with secondary drinking water standards at the facility property boundary. However, it is prohibited “from causing a violation of the secondary drinking water standards at any private or public water supply well outside the zone of discharge.” (Rule 62-520, F.A.C.)
2. Comments about the Recommendations section: If the groundwater monitoring is continued, the reductions recommended are acceptable for routine sampling events.