

Attention: Solid Waste Section

Date: February 25, 2013

Job No: 201710-1

To: Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 4565  
Tallahassee, Florida 32399-2400

Received

Phone:

FEB 26 2013

BSHW

Regarding: Tomoka Landfill

We are sending you: ☒ Attached ☐ Under separate cover via \_\_\_\_\_ the following items

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications  
☐ Copy of letter ☐ Change Order ☐ Other

SOLID WASTE  
SECTION

FEB 26 2013

Copies	Date	No.	Description
1	February-2013		ADaPT Data for Ammonia and Benzene Evaluation Monitoring

These are transmitted as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit \_\_\_\_\_ copies for approval  
☐ For your use ☐ Approved as noted ☐ Submit \_\_\_\_\_ copies for distribution  
☒ As requested ☐ Returned for corrections ☐ Return \_\_\_\_\_ corrected prints  
☐ For review/comment ☐ Other  
☐ For bids due \_\_\_\_\_ ☐ Prints returned after loan to us

Remarks Mr. Moore,

Enclosed please find one CD copy of the ADaPT Data – from November 2010 to November 2012 for the Tomoka Farms Road Landfill (Facility ID No. 27540) regarding Ammonia-N and Benzene Evaluation Monitoring. These data are provided in accordance with the DEP-CD letter dated October 29, 2012 Item No. 1, which include:

1. November 2010 Ammonia-N: B1B, B41-1, B434-1, B64; and Benzene: B41-1, B43-1, B45-1, and B45-2.
2. May 2011 Ammonia-N: B78-1, B79-1, B80-2, B81-4; and Benzene: B76-1 and B77.
3. November 2011 Ammonia-N: B78-1, B79-1, B80-2, B81-4; and Benzene: B76-1 and B77.
4. May 2012 Ammonia: B78-1, B79-1, B80-2, B81-4; and Benzene: B76-1 and B77.
5. November 2012 Ammonia-N: B78-1, B79-1, B80-2, B81-4; and Benzene: B76-1 and B77.

Please call (904 598 8981) or email ([handi.wang@hdrinc.com](mailto:handi.wang@hdrinc.com)) if you require any additional information.

Thank you very much.

Sincerely,  
Handi Wang, Ph.D.



Cc: – Ms. Jennifer Stirk/Volusia County



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

CENTRAL DISTRICT  
3319 MAGUIRE BOULEVARD, SUITE 232  
ORLANDO, FLORIDA 32803-3767

RICK SCOTT  
GOVERNOR

JENNIFER CARROLL  
LT. GOVERNOR

HERSCHEL T. VINYARD JR.  
SECRETARY

October 29, 2012

**VIA ELECTRONIC MAIL**

**lmarion@co.volusia.fl.us**

Mr. Leonard Marion  
Volusia County Solid Waste Services  
3151 East State Road 44  
Deland, FL 32724-6409

OCD-SW-12-420

Volusia County – SW  
Tomoka Farms Road Landfill  
Review of Technical Report 2009-2011 and  
Contamination Evaluation Report

Dear Mr. Marion:

As a result of the pre-application meeting for the renewal of the facility's Class I operation permit, I reviewed what had been done regarding evaluation monitoring. I realized that although in July we had completed a review of past documents, we had not sent you our comments.

The Department had reviewed the following documents:

Report	Submitted By	Report Date	DEP Received Date
Contamination Evaluation Report	HDR	4/6/2011	4/7/2011
Tomoka Farms Road Landfill Technical Water Quality Monitoring Report 2011	SCS Engineers	4/6/2012	4/10/2012

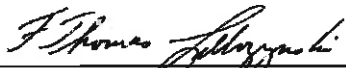
The Department's review comments are in Attachment I. The attachment describes actions that must be accomplished. The following is a summary of the actions:

- 1) Prior to submitting your operation permit renewal application, provide ADaPT submittals of all data not previously uploaded to WACS system. The ADaPT EDD files must be sent to the addresses in Attachment E Section II of the MPIS.
- 2) In your operation permit renewal application, provide an Evaluation Monitoring Summary Report as described in Attachment I, Item #11.
- 3) If you agree with the recommendation to install and sample 8 new evaluation monitoring wells, schedule the work so that they can be sampled during February 2013 quarterly sampling event. If you disagree, your opinion should be fully explained in the Evaluation Monitoring Summary Report.

Mr. Marion  
Page 2 of 7  
October 29, 2012

You may contact Marjorie Heidorn by e-mail at [marjorie.heidorn@dep.state.fl.us](mailto:marjorie.heidorn@dep.state.fl.us) or phone at (407) 897-4302 with questions about this letter.

Sincerely,

  
F. Thomas Lubozynski, P.E.  
Waste Program Administrator

FTL/mh

Attachments:

I. Review Comments on Benzene (CER) submittal dated April 6, 2011

Figure A: WACS# for New Evaluation Monitoring Wells

Figure B: Current and revised lists of Evaluation Monitoring Wells for Quarterly Sampling

cc:

Jennifer Stirk, Volusia County, [jstirk@co.volusia.fl.us](mailto:jstirk@co.volusia.fl.us)

Junos Reed, Volusia County, [jreed@co.volusia.fl.us](mailto:jreed@co.volusia.fl.us)

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Ron Beladi, Neel-Schaffer Inc, [rbeladi@neel-schaffer.com](mailto:rbeladi@neel-schaffer.com)

Richard Tedder, FDEP BSHW, [richard.tedder@dep.state.fl.us](mailto:richard.tedder@dep.state.fl.us)

**Attachment I: Review Comments on Benzene Contamination Evaluation Report (CER),  
dated April 6, 2011**

**Evaluation Monitoring Data in WACS**

1. For the Evaluation Monitoring sampling events, the Department must have a successful ADaPT submittal to Tallahassee for an ADaPT upload into the Department's database called WACS. The Department does not have any record of the following:
  - a. A successful ADaPT submittal for November 2010 semi-annual sampling event. (The Department records include a November 2010 submittal that only has 3 monitoring locations that appear to be related to the sampling for leachate seepage.)
  - b. ADaPT submittal for any quarterly sampling in August 2011.
  - c. ADaPT submittal for any quarterly sampling in February 2012.
  - d. ADaPT submittals for the 4 wells installed in 2011 (B76-1, B77, B79-1, B81-4) for:
    - i. May 2011
    - ii. November 2011
    - iii. May 2012
  - e. Was the quarterly sampling done for August 2012? If so, when is the data expected to be submitted to Tallahassee?
2. If the information in Item #1 has been submitted, please provide the date and name of the person the submittal was addressed to. If it has not been submitted, provide this information as ADaPT EDD files as soon as possible to the addresses in Attachment E Section II of the MPIS.
3. If the monitoring in Item #1 above has not been done, discuss in the Summary Evaluation Monitoring Report why it was not done.
4. For sampling in the future:
  - a. For semi-annual sampling, the ADaPT data sent to Tallahassee shall include all of the data for all of the wells (that is, both MPIS and Evaluation Monitoring wells).
  - b. For evaluation monitoring (EM) sampling events, the ADaPT data must be sent to Tallahassee. It shall include all of the data for all of the wells that were sampled during the event.
  - c. Semi-annual water quality sampling reports shall include all of the data for all of the wells sampled since the last semi-annual report, that is, both semi-annual and quarterly sampling.
  - d. Semi-annual water quality sampling reports shall either discuss the EM sampling results since the last semi-annual report or state that the EM sampling results will be discussed in the annual evaluation monitoring report and shall give an expected due date for the Annual Report (see Item #12 below).
  - e. For all sampling—quarterly and semi-annual—the facility shall meet the reporting requirement in MPIS Condition 28.

Contamination Evaluation Report (CER) Recommendations

5. The Department agrees with your recommendations:
  - a. Install **B82-1** approximately 250 feet downgradient of monitoring well B76-1.
  - b. Install **B83** in cluster B45-1 and screened within the uppermost strata of the Floridan aquifer.
  - c. Install **B84** approximately 500 feet downgradient of monitoring well B78-1.
  - d. Install **B85** approximately 500 feet downgradient of monitoring well B79-1
  - e. Install **B86** a in cluster with B64 and screened within Zone 6.
6. Based upon our review of the CER, the initial sampling results for the wells installed in the first quarter of 2011, the November 2011 semi-annual sampling results, and the Technical Report, the Department recommends 3 additional wells:
  - a. Install **B76-6** in cluster with B76-1 and screened within Zone 6 (Benzene step-out from B77 and Benzene vertical delineation below B76-1.)
  - b. Install **B78-6** in cluster with B78-1 and screened within Zone 6 (Ammonia vertical delineation below B78-1)
  - c. Install **B79-6** in cluster with B79-1 and screened within Zone 6 (Ammonia and Benzene vertical delineation below B79-1)
7. These 8 new wells should be installed so that the initial sampling data can be included in the February 2013 quarterly sampling event.
8. The Department does not agree that a Site Assessment Report (SAR) should be prepared in accordance with the requirements of Chapter 62-780, F.A.C. At this time, the Department prefers to handle the exceedances under Chapter 62-701, F.A.C. If corrective actions are required, then all of the appropriate requirements of Chapter 62-780, F.A.C., will need to be met.
9. See attached **Figure A** for WACS numbers for the new wells.
10. See attached **Figure B** for current and revised lists of Evaluation Monitoring Wells for quarterly sampling.

Evaluation Monitoring Reports

11. Between February 2010 and 10/25/2012, there have been 11 quarterly sampling periods. Provide a Summary Evaluation Monitoring Report for all of the evaluation monitoring data as part of your operation permit renewal application. The report shall include:
  - a. Results from all evaluation monitoring sampling completed to date. If any of the monitoring in Item #1 above has not been done, please discuss why it was not done.
  - b. Identify when the annual Appendix II sampling as required by Rule 62-701.510(7)(a)2., F.A.C., was accomplished.
  - c. Interpretation of the data.
  - d. Conclusions and Recommendations that address the following questions:

- 1) Has the contamination been delineated? If not, do you agree with the new wells proposed by the Department? If yes, give the basis for your judgment. Also, should any of the proposed wells be installed not be installed?
  - 2) Is it necessary to delineate the contamination?
  - 3) Is there a likelihood that Department surface or groundwater water quality standards will be violated outside the zone of discharge? If yes, what actions are necessary to prevent such violations? If you are not sure, what additional assessment should be accomplished to determine whether there is a likelihood that Department surface or groundwater water quality standards will be violated outside the zone of discharge?
  - 4) Is more information needed before a decision is made that evaluation monitoring is complete, for example, more sampling, more wells, etc.?
12. Currently, the evaluation monitoring results have not been reported or discussed in the semi-annual reports or the 2011 Technical Report. This is acceptable. After the facility submits the Summary Evaluation Monitoring Report as discussed in Item #11 above, future formal reporting of the evaluation monitoring will be done on an annual basis. (However, the evaluation monitoring data must still be sent by ADaPT EDD for uploading to WACS within normal timeframes.) Also, you are encouraged to speak with us anytime about the results. The formal report shall include:
- a. Sampling results from 4 quarterly evaluation monitoring events .
  - b. One of the 4 events shall be the annual Appendix II sampling as required by Rule 62-701.510(7)(a)2., F.A.C.
  - c. Interpretation of the data.
  - d. Conclusions and Recommendations that address the following questions:
    - 1) Has the contamination been delineated?
    - 2) Is it necessary to delineate it?
    - 3) Is there a likelihood that Department water quality standards will be violated outside the zone of discharge? If yes, what actions are necessary to prevent any such violations?
    - 4) Is more information needed before a decision is made that evaluation monitoring is complete, for example, more sampling, more wells, etc.?

**Figure A: WACS# for New Evaluation Monitoring Wells**

	EM Well to Be Installed	Benzene	Ammonia	WACS #	Location of MW	ADaPT Report Type for Initial Sample
<b>Monitoring Wells Proposed in CER 4/6/2012</b>						
1	B82-1	✓		28776	Approximately 250 feet downgradient of monitoring well B76-1	ASSMT
2	B83	✓		28777	To be installed in cluster B45-1 and screened within the uppermost strata of the Floridan aquifer	ASSMT
3	B84		✓	28778	Approximately 500 feet downgradient of monitoring well B78-1	ASSMT
4	B85	✓	✓	28779	To be installed Approximately 500 feet downgradient of monitoring well B79-1	ASSMT
5	B86	✓		28780	To be installed in cluster with B64 and screened within Zone 6	ASSMT
<b>Monitoring Wells Proposed per DEP Review October 2012</b>						
6	B76-6	✓		28781	To be installed in cluster with B76-1 and screened within Zone 6	ASSMT
7	B78-6		✓	28782	To be installed in cluster with B78-1 and screened within Zone 6	ASSMT
8	B79-6	✓	✓	28783	To be installed in cluster with B79-1 and screened within Zone 6	ASSMT

**Figure B: Current and Revised Lists of Evaluation Monitoring Wells for Quarterly Evaluation Monitoring Sampling**

The following revised list of wells must be sampled in

- 1<sup>st</sup> Quarter-February
- 2<sup>nd</sup> Quarter-May (as part of the semi-annual sampling event)
- 3<sup>rd</sup> Quarter-August
- 4<sup>th</sup> Quarter November (as part of the semi-annual sampling event)

Tomoka		Current Quarterly Monitoring Wells				Revised Quarterly Monitoring Wells 7/2012									
	Current Total Count	Current Q List	Count	Benzene Wells Q Sampling	Count	Ammonia Wells Q Sampling	Revised Total Count	Q Wells	Count	5 Wells Ammonia & Benzene Sampling	Count	9 Wells Benzene Sampling	Count	6 Wells Ammonia Sampling	
7/3/2012															
Original MPIS Wells used in Quarterly Monitoring Assessment							Original MPIS Wells used in Quarterly Monitoring Assessment								
	1	B1-B			1	B1-B	1	B1-B					1	B1-B	
	2	B41-1	1	B41-1	2	B41-1	2	B41-1	1	B41-1					
	3	B43-1	2	B43-1	3	B43-1	3	B43-1	2	B43-1					
	4	B45-1	3	B45-1			4	B45-1			1	B45-1			
	5	B45-2	4	B45-2			5	B45-2			2	B45-2			
	6	B64			4	B64	6	B64					2	B64	
Assessment Wells Installed 2011 for Quarterly Monitoring							Assessment Wells Installed 2011 for Quarterly Monitoring								
	7	B76-1	5	B76-1			7	B76-1			3	B76-1			
	8	B77	6	B77			8	B77			4	B77			
	9	B78-1			5	B78-1	9	B78-1					3	B78-1	
	10	B79-1*			6	B79-1	10	B79-1	3	B79-1*					
	11	B80-2			7	B80-2	11	B80-2					4	B80-2	
	12	B81-4**			8	B81-4	12	B81-4			5	B81-4**			
Assessment Wells to be Installed per proposed CER (4-2011)							Assessment Wells to be Installed per proposed CER (4-2011)								
							13	B82-1			6	B82-1			
							14	B83			7	B83			
							15	B84					5	B84	
							16	B85	4	B85					
							17	B86			8	B86			
Assessment Wells to be Installed per DEP Review (2012-06)							Assessment Wells to be Installed per DEP Review (2012-06)								
							18	B76-6			9	B76-6			
							19	B78-6					6	B78-6	
							20	B79-6	5	B79-6					