



January 6, 2011

CENTRAL DISTRICT
2011 JAN -7 PM 3:33

Mr. F. Thomas Lubozynski, P.E.
Waste Program Administrator
Department of Environmental Protection, Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

RE: Volusia County Tomoka Farms Road Landfill, WACS #27540
Response to Review of Evaluation Monitoring Plan and Related Documents

Dear Mr. Lubozynski:

The following information is being submitted to the Department in response to the Review of Evaluation Monitoring Plan and Related Documents dated December 8, 2010. The Department requested responses to several questions be submitted by January 7, 2011. Information is provided in the order requested in the referenced correspondence. In each case, the FDEP comment is presented in *italics* with the response immediately following in **bold**.

1. *A combined Benzene and Ammonia Contamination Evaluation Report (CER) shall be submitted within 120 days from receipt of this letter. The following actions are part of that submittal:*
 - a. *Install and sample the proposed Benzene and Ammonia delineation wells.*
 - b. *Conduct a potable well survey.*

A combined Benzene and Ammonia Contamination Evaluation Report (CER) will be submitted to the Department by April 7, 2011.

2. *Within 30 days, provide a site plan with the target locations of each of the proposed Benzene and Ammonia delineation wells.*

A site plan showing proposed well locations is provided as Attachment 1. Note that we are proposing locations for monitoring wells B78-1 and B80-2 which are slightly different than the locations suggested by the Department. Specifically, the proposed location of B78-1 is approximately 200 feet northeast of existing well B1-B, which is 100 feet further than the Department's suggested location. The revised location is due to the presence of wetlands at 100 feet. Moving to 200 feet allows us to install the well outside of the wetland area and slightly beyond the tree line. Similarly, the proposed location of B80-2 is approximately 150 feet south of existing well B64, which is 50 feet further than the Department's suggested location. The revised location will allow us to move beyond the tree line and avoid cutting trees to install the well.

3. *Within 30 days provide a response to Attachment III, Item 4.*

For the Evaluation Monitoring sampling events, the Department must have a successful ADaPt submittal to Tallahassee for an ADaPT Report and upload into WACS. The Department does not have any record for the following:

- a. *A successful ADaPT submittal for November 2009 sampling event. (The Department records note that the ADaPT electronic submittal was withdrawn 2/19/2010). Please provide a successful submittal including Appendix II data.*

HDR is working with the previous subcontract laboratory to obtain the requested files. We will submit them to the Department under separate cover.

- b. *ADaPT submittals for any quarterly sampling in February 2010 and August 2010.*

ADaPT submittals for the February 2010 and August 2010 quarterly sampling events are included on the CD provided in Attachment 2. Appendix II data is not included as discussed in the response to Comment 4 below.

- c. *ADaPT submittals for the Appendix II sampling in May 2010.*

ADaPT submittals for the May 2010 quarterly sampling event are included on the CD provided in Attachment 2. Appendix II data is not included as discussed in the response to Comment 4 below.

4. *Within 30 days provide a response to Attachment III, Item 5.*

The Department's Evaluation Monitoring letter (10/26/09) was written prior to the Chapter 62-701 revision (01/06/2010). The letter required quarterly monitoring of Appendix II parameters in the Benzene wells until reduced parameters are approved by the Department. Based on the Appendix II sampling that has been done to date, please provide a discussion and request for reduced quarterly sampling parameters. The reduced parameter list in the Benzene wells must include sampling for:

Quarterly:

- The parameters listed in paragraph Rule 62-401.510(8)(a), F.A.C.*
- All additional parameters detected in the Appendix II sampling (e.g., bis(2-Ethylhexyl)phthalate) Rule 62-701.510(7)(a)3., F.A.C. Provide the full results for all laboratory tests. (e.g. if 8270 is run, provide the results for all parameters for 8270.)*

Annually:


- The parameters listed in paragraph Rule 62-701.510(8)(d), F.A.C.*

Quarterly sampling for Benzene and Ammonia has been performed since the Fourth Quarter/Second Semiannual 2009 monitoring event. Per the Department's October 26, 2009 letter, analyses of Appendix II parameters were required for the Benzene evaluation monitoring wells but not the Ammonia evaluation monitoring wells.

A total of five quarterly sampling events have been completed since the Department's October 2009 letter. Appendix II parameters were inadvertently omitted from the analyses performed for three of the five quarterly monitoring events. A summary of the events is provided below:

Event	Date	Appendix II
2009 Q4/S2	November 2009	Yes
2010 Q1/S1	February 2010	Yes
2010 Q2	May 2010	No
2010 Q3	August 2010	No
2010 Q4	November 2010	No

A table of all parameters reported above the laboratory detection limit for the Appendix II analyses is provided in Attachment 3. As shown in the table, all parameters detected are included in the Appendix I analyte list. However, it appears warranted to analyze for Appendix II parameters during the first quarterly event of 2011 since no data is available since February 2010. Following review of the 2011 Q1 data, we will submit a request to reduce the parameter list if the data warrants such a recommendation.

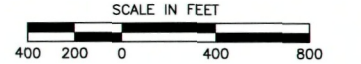
Sincerely,

A circular stamp is visible behind the signature, containing the text "JOHN LOCKLEAR" and "ASSOCIATE VICE PRESIDENT".

John Locklear, P.E.
Associate Vice President
HDR Engineering, Inc.

Cc: Jennifer Stirk, Volusia County

ATTACHMENT 1

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LEGEND

- PROPERTY BOUNDARY
- ▲ LS-1 LEACHATE SAMPLING LOCATION
- B-65 EXISTING GROUNDWATER WELL
- ⊕ PROPOSED GROUNDWATER WELL

NOTES:

1. PROPOSED MONITORING WELL B77 IS NOT SHOWN BUT STAKED 7 FEET WEST TO THE EXISTING WELL B45-1.
2. PROPOSED MONITORING WELL B81-4 IS NOT SHOWN BUT STAKED 5 FEET EAST OF THE EXISTING WELL B64.
3. PROPOSED MONITORING WELL B78-1 IS LOCATED 200 FEET NORTH EAST OF EXISTING WELL B1B.
4. PROPOSED MONITORING WELL B80-2 IS LOCATED 115 FEET SOUTH OF EXISTING WELL B64.



HDR Engineering, Inc.
200 W Forsyth St
Jacksonville, FL 32202

ISSUE	DATE	DESCRIPTION
	1/5/11	PROPOSED GW MONITORING WELLS

PROJECT MANAGER	JOHN LOCKLEAR
DESIGNED BY	K. SINGH
DESIGNED BY	
DESIGNED BY	
DRAWN BY	
CHECKED BY	
PROJECT NUMBER	98293



TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

PROPOSED MONITORING WELLS

FILENAME	00C-01.dwg	SHEET
SCALE	AS SHOWN	00C-01

ATTACHMENT 2

ATTACHMENT 3

PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
TOMOKA FARMS ROAD LANDFILL
NOVEMBER 2009 THROUGH MARCH 2010

PARAMETER		CONDUCTIVITY (FIELD)	DISSOLVED OXYGEN (FIELD)	pH (FIELD)	TEMPERATURE (FIELD)	TURBIDITY (FIELD)	AMMONIA NITROGEN	CHLORIDE	CYANIDE	NITRATE NITROGEN	SULFIDE	TOTAL DISSOLVED SOLIDS	ANTIMONY
STANDARD*		(1)	(1)	6.5-8.5U.**	(1)	(1)	2.8 mg/L***	250 mg/L**	0.2 mg/L*	10 mg/L*	(1)	500 mg/L**	6 µg/L*
UNITS		µmhos/cm	mg/L	S.U.	Degrees C	NTU	mg/L	mg/L	mg/L	mg/L	mg/L		µg/L
B41-1	11/5/2009	1500	0.14	6.32	22.8	2.65	61	150	-	0.35	0.061	1000	47
B41-1	2/23/2010	1865	0.33	5.75	22.1	1.24	150	-	<0.97	-	0.024 I	1100	<0.073
B43-1	11/5/2009	846	0.25	6.01	23.2	1.18	11	70	-	<0.078	0.076	450	36
B43-1	2/23/2010	707	0.52	5.54	21.5	5.87	1.6	-	<0.97	-	0.094	470	<0.073
B45-1	11/5/2009	1501	0.2	6.04	22.4	6.68	0.1	160	-	<0.16	0.061	990	65
B45-1	2/23/2010	663	0.94	6.23	21.3	8.16	-	-	<0.97	-	0.085	930	0.073
B45-2	11/5/2009	1049	0.38	5.10	23.3	3.04	0.066	260	-	<0.078	0.3	930	78
B45-2	2/23/2010	160	1.19	5.20	18.3	40.9	-	-	<0.97	-	0.056	240	0.079 I

LEGEND

(1) No Standard

* = Primary Drinking Water Standard

** = Secondary Drinking Water Standard

*** = Chapter 62-777 Groundwater Cleanup Target Level (GCTL)

Bold indicates the result is outside of the standard

NA = not analyzed due to extreme sample matrix interference

PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
TOMOKA FARMS ROAD LANDFILL
NOVEMBER 2009 THROUGH MARCH 2010

PARAMETER		BARIUM	BERYLLIUM	CHROMIUM	IRON	NICKEL	SILVER	SODIUM	THALLIUM	TIN	VANADIUM	ZINC	ACETONE	BENZENE	CARBON DISULFIDE
STANDARD*		2000 µg/L*	4 µg/L*	100 µg/L*	300 µg/L**	100 µg/L*	100 µg/L**	160 µg/L*	2 µg/L*	4200 µg/L***	49 µg/L***	5000 µg/L**	6300 µg/L***	1 µg/L*	700 µg/L***
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
B41-1	11/5/2009	210	0.28 I	3.6 I	18000	<1.1	<1.1	130	<5.5	-	9.6	10	4.5 I	0.91 I	0.36 I
B41-1	2/23/2010	230	0.20 I	4.4	-	<1.1	<1.1	-	<0.067	95	9.4	<2	3.6 I	1.1	<0.34
B43-1	11/5/2009	170	0.20 I	<0.6	24000	<1.1	0.96 I	74	<5.5	-	5.1	9.5 I	<3.3	1.5	0.40 I
B43-1	2/23/2010	130	<0.13	<0.6	-	2.3 I	<0.44	-	0.15 I	44	4.1	4.6 I	<3.3	0.84 I	<0.34
B45-1	11/5/2009	130	0.28 I	1.3 I	44000	<1.1	0.52 I	200	<5.5	-	4.3	<2	<3.3	8.6	0.38 I
B45-1	2/23/2010	130	0.14 I	0.64 I	-	2.3 I	1.2 I	-	<0.067	96	3	<2	4.3 I	4.3 I	<0.34
B45-2	11/5/2009	140	0.51	2.2 I	54000	4.0 I	<0.44	54	<5.5	-	17	<2	<3.3	0.74 I	0.37 I
B45-2	2/23/2010	35	0.28 I	5.2	-	1.3 I	<0.44	-	<0.067	22	18	<2	<3.3	<0.3	<0.34

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PARAMETERS AT OR ABOVE THE LABORATORY DETECTION LIMIT
TOMOKA FARMS ROAD LANDFILL
NOVEMBER 2009 THROUGH MARCH 2010

PARAMETER		CHLORO- BENZENE	TOLUENE	XYLENES	BENZYL ALCOHOL	PENTA- CHLORO- PHENOL	SIMAZINE
STANDARD*		100 µg/L*	40 µg/L**	20 µg/L**	2100 µg/L***	1 µg/L*	4 µg/L*
UNITS		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
B41-1	11/5/2009	1.9	<0.28	<0.59	<0.66	<1.1	-
B41-1	2/23/2010	2.5	<0.28	<0.59	<0.66	<0.29	0.20 I
B43-1	11/5/2009	7.6	<0.28	<0.59	<0.66	<1.1	-
B43-1	2/23/2010	3.7	<0.28	<0.63	1.4 I	<0.29	<0.072
B45-1	11/5/2009	5.4	0.36 I	1.5 I	<0.66	<1.1	-
B45-1	2/23/2010	5	0.37 I	1.6 I	<0.66	<0.29	0.32
B45-2	11/5/2009	1.1	<0.28	<0.59	<0.66	<1.1	-
B45-2	2/23/2010	<0.23	<0.28	<0.63	<0.66	0.38 I	<0.072

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