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JAN 30 2012



DEP Central Dist.

Transmittal

Attention: Mr. Tom Lubozynski, P.E.	Date: 1/27/2012	Job No: 170995
To: FDEP - Central District 3319 Maguire Blvd, Suite 232 Orlando, Florida 32803-3767		Phone: 407-893-3327
Regarding: Closure Permit Renewal – RAI # 1 Response		

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

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

Copies	Date	No.	Description
4	1/27/2012		Closure Permit Renewal – RAI # 1 Response

These are transmitted as checked below:

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> For approval | <input type="checkbox"/> Approved as submitted | <input type="checkbox"/> Resubmit _____ copies for approval |
| <input type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted | <input type="checkbox"/> Submit _____ copies for distribution |
| <input type="checkbox"/> As requested | <input type="checkbox"/> Returned for corrections | <input type="checkbox"/> Return _____ corrected prints |
| <input type="checkbox"/> For review/comment | <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> For bids due _____ | <input type="checkbox"/> Prints returned after loan to us | |

Remarks	Closure Permit Renewal – RAI # 1 Response
Copy to	File
	Signed Kanishka Perera

If enclosures are not as noted, please notify us at once

Volusia County Solid Waste System

Tomoka Farms Road Landfill Class I Landfill-North Cell Closure Permit Renewal Application RAI#1 Response

January 2012

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DEP Central Dist.

Prepared for:



Prepared By:

HDR Engineering Inc.
200 W. Forsyth Street,
Suite 800
Jacksonville FL, 32202
904-598-8900

The logo for HDR, consisting of the letters "HDR" in a large, bold, red serif font. The background of the entire page is a photograph of a wetland area with a body of water, reeds, and a grassy bank under a clear sky.



ONE COMPANY | *Many Solutions*

January 27, 2012

Tom Lubozynski, P.E.
District Waste Management Administrator
Florida Department of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803

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DEP. Central Dist.

**RE: Volusia County - Tomoka Farms Road Landfill (ID # 27540)
Renewal of the Existing North Cell Closure Permit
FDEP Permit No. SF64-0078737-020
Response to First Request for Additional Information**

Dear Mr. Lubozynski:

Thank you for your review of the Tomoka Farms Road Landfill North Cell Class I Closure Permit Renewal Application for the Tomoka Farms Road Landfill in Volusia County, Florida. The following information is provided in response to the Florida Department of Environmental Protection's (FDEP's or Department's) First Request for Additional Information (RAI) letter dated December 30, 2011. Information is provided in the order requested in the referenced correspondence. In each case, the Department's request is stated in *italics* with the response immediately following in **bold**.

The sections of the December 6, 2011 permit application text documents that have been revised are shown in the attachments as struck through where text has been deleted (~~delete~~) and underlined where text has been added (added).

Comment 1:

The latitude and longitude coordinates provided in Section A.7. of the Application Form are inaccurate. The provided coordinates appear to be in the southwestern portion of the closed South Cell. The facility main entrance or scale house coordinates are latitude: 29 degrees 7 minutes 42.27 seconds; longitude: 81 degrees 4 minutes 54.49 seconds. If you agree, we will make the correction to the application. Otherwise, please provide the correct coordinates of the facility main entrance by resubmitting page 1 of the Application Form. Also, provide details how the coordinates were obtained, e.g., datum, method, collector and its affiliation.

Response: The facility main entrance or scale house coordinates provided by the Department have been verified using ArcGIS and these coordinates appear to be accurate. Therefore, we agree with the comment and Page 4 of FDEP Form 62-701.900(1) has been revised as provided in Attachment R-1.

Comment 2:

Part B.1. of the Application Form indicated "This application is for the closure permit renewal of the North Cell at the Tomoka Farms Road Landfill (TFRL).

- (a) *The current closure permit for the North Cell (SF64-0078767-020) was issued 5/30/2007 when there was a North Cell and East Cell. Since then the North and East cells have been combined into North Cell, Phase I and II. SO64-0078767-023 authorizes the disposal of waste only in North Cell Phase I. Therefore, this permit application is considered to be for the closure of the North Cell Phase I only (as shown in figure 1 of the Report).*

Response: Comment is acknowledged and the revised page 6 of the FDEP Form 62-701.900(1), provided in Attachment R-1, indicates "This application is for the closure permit renewal of the North Cell Phase I at the Tomoka Farms Road Landfill (TFRL)".

- (b) *Please note that the current closure permit for the North Cell (SF64-0078767-020) includes provision of post-closure care to the South Cell. Therefore, this application also requests renewal to continue post-closure care for the South Cell at the TFRL.*

"Section B Third paragraph of the Report stated "The post-closure care provisions for the North and South Cells were combined through the North Cell's closure permit application submitted in November 2006. The post closure care provisions for the two cells are still combined and this closure permit renewal application does not propose any changes to the post closure care provisions."

Response Nos. #1 and 8 in the November 11, 2010 document "Response to First Request for Additional Information (RAI #1)" regarding Closure Permit Modification Application SF64-0078767-027 indicated that you agreed that the South Cell is managed as part of the on-going landfill activities. The 30-year post closure care period will not begin until the official closing date has been established by FDEP. Therefore, the renewal permit will use the language "post closure" activities (or care) rather than "long term" care for the South Cell and the areas of the North Cell that have received final closure.

Response: The South Cell is managed as part of the on-going landfill activities. We agree that the 30-year post closure care period will not begin until the official closing date has been established by FDEP. Therefore, the renewed permit shall use the language "post closure" activities (or care) rather than "long term" care for the South Cell and the areas of the North Cell that will receive final closure.

Comment 3:

On its first page, Permit SF64-0078767-020 states, "The total disposal area is 90 acres of which 43.2 acres have been used." Part B.3. of the Application Form indicated a total disposal area of 87.3 acres of which 65.65 acres has been used. Why are the total disposal areas different, that is, 90 versus 87.3 acres?

Response: The disposal area of 87.34 acres has been determined using AutoCAD Civil 3-D and the bottom liner limits presented in the contour drawing sheet 00C-02 dated 08/2010 and submitted as a part of closure permit modification application (SF64-0078767-027). The source for the bottom liner limits, presented in the drawing sheet 00C-02, was Tomoka Landfill Liner As-Built drawing by Maptech, Inc. dated October 4, 2005, and Class I Cell Fill Sequence Plan Drawing prepared by SCS Engineers and submitted to the Department on August 14, 2009. HDR could not confirm the 90-acre

area reported in the previous permit applications. However, based on the constructed cells and future North Cell Phase II area, the total disposal area was found to be 87.34 acres as shown in Figure 1. The areas given in Part B.3 of the Permit Application is now adjusted to reflect these changes.

Comment 4:

The Closure Permit Modification Application SF64-0078767-027 included the contour drawing sheet 00C-02 dated 08/2010. Has the property topography changed since then? If no, state that conclusion in a signed and sealed opinion.

Response: The property topography has changed since the contour drawing sheet 00C-02 dated 08/2010 was submitted to the Department. However, the proposed final cover system design has not changed since the submittal. This RAI response letter has been signed and sealed as per this comment.

Comment 5:

Appendix B Closure and Long-Term Care Cost Estimates of the Report provided the cost estimates of \$9,364,941.36 (closing) and \$5,259,774.30 (30-year long-term care) for the North Cell Phase I (65.65 acres disposal area).

The Closure Permit Modification Application SF64-0078767-027 Part B.3. indicated "Disposal area: Total 90 acres; Used 69 acres; Available 21 acres" for the North Cell.

The Operation Permit SO64-0078767-023, issued June 2, 2008, states that the North Cell, Phase I is 69.20 acres. This permit combined the original North Cell (43.2 acres) and the Phase I East Expansion (26.0 acres) into one coordinated permit. (North Cell Phase II was originally Areas 3 and 4 of the former East Cell.)

There are discrepancies in numbers of acreage, that is, 65.65, 69 or 69.20. Please explain. If your explanation changes the acreage used in the cost estimate (65.65 acres), please submit a new cost estimate.

Response: The disposal area of 65.65 acres has been originally determined using AutoCAD Civil 3-D and the liner limits presented in the contour drawing sheet 00C-02 dated 08/2010 and submitted as a part of closure permit modification application (SF64-0078767-027). Please note that the current disposal area should be 65.64 acres and the use of 65.65 acre for financial assurance is conservative. The source for the liner limits, presented in the drawing sheet 00C-02, was Tomoka Landfill Liner As-Built drawing by Maptech, Inc. dated October 4, 2005, and Class I Cell Fill Sequence Plan Drawing prepared by SCS Engineers and submitted to the Department on August 14, 2009.

The Figure 1 illustrates the areas of North Cell (39.42 acres) and Phase I East Expansion (26.22 acres) based on as-build drawings. The area of the future Phase II East Cell Expansion is 21.70 acres. Accordingly, the discrepancy in the disposal areas may be associated with the originally constructed North Cell. In addition, HDR verified that the proposed limit of final cover is within the current waste disposal area shown in Figure 1. Therefore, we believe that the 65.65 acre North Cell Phase I disposal area is accurate based on the information provided and therefore, no changes have been made to the submitted financial assurance cost estimates. The total area of the North Cell should be 87.34 acres.

Comment 6:

Appendix B Closure and Long-Term Care Cost Estimates of the Report provided the 30- year long-term care cost estimate of \$3,425,467.65 for the South Cell (114 acres disposal area). The Neel-Schaefer August 27, 2007 FY-2008 Closure & Long-Term Care Financial Responsibility showed the 30- year long-term care cost estimate of \$4,823,327.47. The present long term care cost estimate almost 29% less than four year ago. Unfortunately, the Neel-Schaefer document did not provide a detailed long-term care cost analysis for us to compare with the present long-term care cost estimate. Can you explain why the cost estimate dropped so much?

Response: Please note that the items associated with the long-term care (LTC) were distributed between the North and South Cells such as groundwater monitoring cost was included in LTC cost of South Cell and surface water monitoring cost was included in LTC cost of North Cell. This distribution was based on the following:

- (a) **South Cell Closure Permit Application (dated August 2000):** The application included LTC cost estimates for the South Cell and this estimate provided a detailed cost breakup of some items associated with the LTC of the South Cell. These items were considered as a part of LTC cost of the South Cell to be consistent with the referenced document.
- (b) **Financial Responsibility Closure & LTC Cost Estimates FY 2006 (dated August 2006):** This document included detailed cost breakup of some items associated with the LTC of the North Cell. These items were considered as a part of LTC cost of the North Cell to be consistent with the referenced document.
- (c) **Some LTC items, listed in FDEP Form 62-701.900(28), for the North and South Cells were missing in the above referenced documents. These additional items were distributed between North and South Cells based on HDR's best judgment.**

Because of this distribution, South Cell's LTC cost decreased by 29% as indicted in the comment but at the same time North Cell's LTC increased by approximately 47% in less than four years. Also, there is an overall increase of 30-year LTC liability of approximately 3.5% in the combined LTC cost for North and South Cells since the FY-2008 Closure & LTC Financial Responsibility submittal by Neel-Schaefer on August 27, 2007.

In conclusion, it is difficult to compare previously submitted cost estimates with the present estimates individually for North and South Cells because of the item distribution indicated above, and insufficient information on the detailed breakup of LTC cost estimates in the previously submitted documents. However, comparison of combined LTC cost for North and South Cells indicates that there has not been any decrease in the LTC cost estimates since FY-2008 LTC cost estimates.

Comment 7:

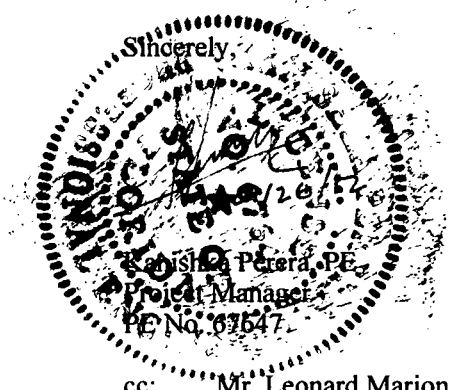
Appendix C of the Report has the "Financial Assurance Deferral application" for North Cell, Phase II. The North Cell Phase II was originally Areas 3 and 4 of the former East Cell.

Financial Assurance Deferral is not required for the North Cell Phase II because the Operation Permit SO64-0078767-023 does not authorize disposal operation in the North Cell Phase II. This renewal permit will not cover the closure of North Cell Phase II. Therefore, closure of the North Cell Phase II is not an issue.

Response: Comment is acknowledged and necessary changes have been made to the Engineering Report. Please disregard Appendix C of the original Engineering Report and refer to the revised pages of the Report provided in Attachment R-2.

If you have any questions or require additional information, please contact me or Carlo Lebron at (904) 598-8900.

Sincerely,



cc: Mr. Leonard Marion, Volusia County
Mr. Chet Purves, Volusia County

Attachments:

- R1 Revised Pages of FDEP Form 62-701.900(1)
- R2 Revised Engineering Report Pages
- R3 Revised Figure 1

ATTACHMENT R1

Revised Pages of the FDEP Form 62-701.900(1)

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
APPLICATION FOR A PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE
A SOLID WASTE MANAGEMENT FACILITY**

Please Type or Print

PART A. GENERAL INFORMATION

1. Type of disposal facility (check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> Class I Landfill | <input type="checkbox"/> Ash Monofill |
| <input type="checkbox"/> Class III Landfill | <input type="checkbox"/> Asbestos Monofill |
| <input type="checkbox"/> Industrial Solid Waste | |
| <input type="checkbox"/> Other Describe: | |

NOTE: Waste Processing Facilities should apply on Form 62-701.900(4), FAC;
Land Clearing Disposal Facilities should notify on Form 62-701.900(3), FAC;
Compost Facilities should apply on Form 62-701.900(10), FAC; and
C&D Disposal Facilities should apply on Form 62-701.900(6), FAC

2. Type of application:

- ☐ Construction
☐ Operation
☐ Construction/Operation
☒ Closure
☐ Long-term Care Only

3. Classification of application:

- | | |
|---|--|
| <input type="checkbox"/> New | <input type="checkbox"/> Substantial Modification |
| <input checked="" type="checkbox"/> Renewal | <input type="checkbox"/> Intermediate Modification |
| | <input type="checkbox"/> Minor Modification |

4. Facility name: Tomoka Farms Road Landfill - North Cell Class I Solid Waste Disposal Area

5. DEP ID number: 27540 County: Volusia

6. Facility location (main entrance):
1990 Tomoka Farms Road, Port Orange, FL 32128

7. Location coordinates:

Section: 9 Township: 16S Range: 32E

Latitude: 29° 7' 42.27" Longitude: 81° 4' 54.49"

Datum: WGS84 Coordinate Method: ArcGIS (World Imagery)

Collected by: Karamjit Singh Company/Affiliation: HDR Engineering, Inc.

PART B. DISPOSAL FACILITY GENERAL INFORMATION

1. Provide brief description of disposal facility design and operations planned under this application:

This application is for the closure permit renewal of the North Cell Phase I at the Tomoka Farms Road Landfill(TFRL). Please note that the current closure permit for the North Cell (SF64-0078737-020) includes provision of post-closure care to the South Cell and therefore, this application also requests renewal to continue post-closure care for the South Cell at the TFRL.

2. Facility site supervisor: Chester Purves

Title: Supervisor Telephone: (386) 947-2952

cpurves@co.volusia.fl.us

E-Mail address (if available)

3. Disposal area: Total 87.34 acres; Used 65.64 acres; Available 21.70 acres.

4. Weighing scales used: ☒ Yes ☐ No

5. Security to prevent unauthorized use: ☒ Yes ☐ No

6. Charge for waste received: _____ \$/yds³ 34 \$/ton

7. Surrounding land use, zoning:

☐ Residential

☐ Industrial

☒ Agricultural

☐ None

☐ Commercial

☐ Other Describe:

8. Types of waste received:

☒ Household

☐ C & D debris

☒ Commercial

☐ Shredded/cut tires

☐ Incinerator/WTE ash

☐ Yard trash

☐ Treated biomedical

☒ Septic tank

☐ Water treatment sludge

☒ Industrial

ATTACHMENT R2

Revised Engineering Report Pages

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APPENDICES

APPENDIX A	FIGURE SHOWING AREA OF CLASS I LANDFILL NORTH CELL
APPENDIX B	CLOSURE AND LONG-TERM CARE COST ESTIMATES
APPENDIX C	FINANCIAL ASSURANCE DEFERRAL APPLICATION FORM

SECTION R

FINANCIAL RESPONSIBILITY REQUIREMENTS

R.1 ESTIMATED COSTS

Estimates of closure and long-term care costs are provided in the Appendix B. Cost estimates are provided on FDEP Form 62-701.900(28) separately for North and South Cells. Supporting third party quotes are also provided in Appendix B. Please note that the Phase 2 Expansion Area has not yet been constructed and therefore, this area is not included in the closure and long-term care cost estimates. ~~proof of financial assurance funding for the Phase 2 Expansion Area will be submitted to FDEP at least 60 days prior to the waste acceptance in accordance with the Rule 62-701.630(2)(c).~~

R.2 ANNUAL COST ADJUSTMENTS

Volusia County will provide the FDEP with annual cost adjustments of the closure and long-term care, in accordance with Rule 62-701.630(4), FAC. The County will either use the FDEP issued inflation factor or recalculate the estimates in the event of changes to the closure or long term care plan.

R.3 FUNDING MECHANISMS

The County has established an escrow account to provide funding for closure and long-term care.

R.4 FINANCIAL ASSURANCE DELAY

~~The proof of financial assurance funding for the Phase 2 Expansion Area will be submitted to FDEP at least 60 days prior to the waste acceptance in accordance with the Rule 62-701.630(2)(c). A financial assurance deferral application form for the Phase 2 Expansion Area is provided as Appendix C.~~ The County has established an escrow account to provide funding for closure and long-term care. This section is not applicable to this application.

ATTACHMENT R3

Revised Figure 1

C:\pwworking\tpa\0346007\Figure 1.dwg, Plot, 1/16/2012 3:54:18 PM, maustin



- NOTES:
1. LIMITS OF CLASS I DISPOSAL AREAS ARE DERIVED FROM LIMITS OF LINER BY MAPTECH INC., ASBUILT LINER SURVEY OCTOBER 4, 2005.
 2. AERIAL IMAGE AND TOPOGRAPHIC SURVEY PROVIDED BY AERIAL CARTOGRAPHICS OF AMERICA FLOWN MAY 7, 2011.

HDR

HDR Engineering, Inc.
200 W Forsyth St
Jacksonville, FL 32202
FLORIDA CA #00064213

1	01/12	2011 PERMIT RENEWAL RAI RESPONSE
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	C. LEBRON, P.E.
PREPARED BY	K. PERERA, P.E.
PREPARED BY	M. AUSTIN
DRAWN BY	M. AUSTIN
CHECKED BY	C. LEBRON, P.E.
PROJECT NUMBER	—



2011 PERMIT RENEWAL
CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

**NORTH CELL AND PHASE I EAST EXPANSION
CLASS I DISPOSAL AREA**



FILENAME	FIGURE 1.dwg
SCALE	AS SHOWN

SHEET
FIGURE 1