

engineers, hydrogeologists, surveyors & management consultants

201 EAST PINE STREET • SUITE 1000 • ORLANDO, FL 32801 TELEPHONE (407) 839-3955 • FAX (407) 839-3790

LETTER OF TRANSMITTAL

70 F.D. <u>380</u> Tai	EP-So 04 Coro mpa, Fi	olidu nut L33	Jaste Sec Palm Dri 1619	TON DATE (ATTENTION RE: E	MIC K LOG MIL	JOB NO. 99-331.01 Ed. P.E. Yeling & Disposal
				JUN	2 1 2001	
		7 a a a - a - a -		Southwest.	District Tampa the following	iteme
WE ARE SE	ENDING YOU jid ☐ Shop draw ☐ Copy of let	ings	☐ Under separate co☐ Prints☐ Change order	Æ Plans	& Reports	☐ Specifications
COPIES	DATE	NO.		DE	ESCRIPTION	
1			"Clean copy	"of Engine	erine Report	(no shading)
1			"Clean copy"	of Operati	ons Plan (no	(no shading)
			Set of sig	ned and see	aled plans	V
THESE ARE	TRANSMITTED a For approve for your us As request For review	al se ed	☐ Approved a ☐ Approved a ☐ Returned fo	as noted		copies for approval _ copies for distribution _ corrected prints
	☐ FOR BIDS			19	PRINTS RETUR	NED AFTER LOAN TO US
REMARKS						
		·				
				· · · · · · · · · · · · · · · · · · ·		
	1	·				
						
				$\overline{}$	LA 1	
COPY TO _				_ SIGNED FIN	A Darf	·
			IF ENCLOSURES A	ARE NOT ASCAROTED, KINDLY	NOTIFY US AT ONCE	

ENGINEERING REPORT

D.E.P.

JUN 2 1 2001 Southwest District Tampa

PREPARED FOR

SID LARKIN & SON, INC. P.O. BOX 1747 DADE CITY, FL 33526

PREPARED BY

HARTMAN & ASSOCIATES, INC. 201 EAST PINE STREET, SUITE 1000 ORLANDO, FL 32801

Roderick K. Cashe, P.E.

Fl. Reg. No. 45,169

Date: 6/20/0/

James E. Golden, P.G.

F1. Reg., No. 945

Date:

HAI #99-331.01 JUNE 2001

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SECTION 3 ENGINEERING REPORT

3.1 GENERAL

Southwest and to propose a class III landfill design to meet the requirements of FAC 62-701 and Pasco County's Land Development Code (LDC). Appendices to this report include: 3-A Operations Plan and 3-B Contingency Plan.

SITE LOCATION AND DESCRIPTION 3.2

The proposed facility will received approximately 1,500 cyds of Class III waste per day from Pasco County and other surrounding Counties (Hernando, Hillsborough and Polk). Based on the 1999 Florida Statistical Abstract, the estimated populations for these counties total 1,854,262 people. Assuming an annual growth rate of 1%, the five-year projection population would be 1,948,848.

The subject site is located in Section 5 and 8, Township 25 South, Range 22 East, in Pasco County, Florida, as shown on the United States Geological Survey (USGS) quadrangle map presented in Figure 3-1. More specifically, it is located at the intersection of Enterprise Road and Auton Road southeast of Dade City, Florida. The site is currently used for orange groves and developed pastureland and occupies approximately 160 acres of land on the northside of Enterprise Road. The square property is approximately 2,640 feet on a side and is located in the southwest quarter of Section 5 and the northwest quarter of Section 8.

The are no airports within 5 miles of the site, see Figure 3-1.

3.2.1 **Prohibition Compliance**

In order to comply with Rule 62-701.300, FAC, the Facility will abide by the following:

The Facility will not dispose of solid waste at the proposed site until proper permitting is obtained.

> FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION JUN 2 1 2001 SOUTHWEST DISTRICT

VSC/sma/sas/ph1/reports/sec3.doc HAI #99-331.01

061501

- As shown in the site location map Figure 3-1, and the Geotechnical Report, Section 4, disposal of solid waste will not occur in areas that are: unable to provide support for the waste; geological formation or subsurface features would allow unimpeded discharge to surface water on groundwater; are within 500 feet of an existing potable water well; are within a dewatered pit; are in a frequently flooded area; are in a body of water; are within 200 feet of a surface water body that discharges offsite; are on a right of way; are within 1000 feet of an existing community potable water well; or are within 3000 ft. of Class 1 surface waters.
- Open burning will not occur on the site unless the burning takes place in a permitted air curtain incinerator.
- Hazardous wastes, PCB's, biohazardous wastes, special wastes, liquids, and oily wastes will
 not be disposed of at the Facility. Random load checks and the use of spotters at the working
 face will ensure that these wastes are not placed for disposal at the Facility.

3.3 SURROUNDING LAND USES AND ZONING

Figure 3-2 presents a recent aerial photograph map depicting the surrounding land uses and designated Pasco County zoning in the site vicinity. Agricultural land uses surround the site and a few scattered residences surround the site. All adjoining properties are zoned A-2. To the north is the closed East Pasco County Class I Sanitary Landfill and a residence. To the east is an old borrow pit and agricultural land. South of the site is agricultural land and orange groves, and to the west are orange groves which are also owned by Sid Larkin & Son, Inc.

Current site zoning designation, A-2 with a conditional use, is consistent with the Class III landfill use. Water supply wells within 1 mile of the site are provided in Appendix 5-E. The water supply well location survey is based on existing information and an infield survey. The 500-foot setback from the proposed landfill footprint to the private potable wells appears to be met, pursuant to FAC 62-701.300(2)(C).

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

3.4 TOPOGRAPHY

According to the USGS 7.5 minute quadrangle map shown in Figure 3-1, the land surface of the subject site has elevations ranging from 85 feet to 175 feet National Geodetic Vertical Datum (NGVD). Natural land surface generally slopes to the northeast on the northern half of the property and southeast on the southern half of the site. A recent site-specific topographic survey is shown on Figure 3-3. The topography of the northern half of the property was obtained from two-foot contour maps provided by the Southwest Florida Water Management District. The topography on the southern half of the property was obtained from an onsite topographic survey.

3.4.1 100-Year Flood Prone Areas

Figure 3-4 depicts a 100-year flood prone area map from the U.S. Federal Emergency Management Administration for the subject vicinity. As shown, the site is not impacted by an estimated 100-year storm flood.

3.5 SOILS

According to the Soil Survey of Pasco County, Florida, published by the U.S. Department of Agriculture Soil Conservation Services (USDA-SCS), the majority of the subject site and surrounding areas are covered by fine sands. A copy of the USDA-SCS Soils Survey Map showing the mapped areas of the major soil types at the subject site and its vicinity is presented in Figure 3-5.

USDA-SCS soil type 12 - Astatula fine sands encompass a small portion in the northeast portion of the site. Astatula sands are nearly level to gently sloping, and excessively drained mainly in the sandhills. Seasonal high water table (SHWT) is typically at a depth of 72 inches in Astatula soil. The permeability is very rapid throughout the soil. Both the available water capacity and natural fertility of the Astatula soil are low.

USDA soil type 32 - Lake fine sands comprise the majority of the soils found on the property. These soils are nearly level to gently sloping and excessively well drained. They occur along ridgetops and on low hillsides in the uplands. Permeability is rapid throughout the soil and the water table is below a depth of 120 inches. The available water capacity is very low in all layers and the natural fertility and organic matter content are both low.

VSC/sma/sas/ph1/reports/sec3.doc HAI #99-331.01 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

061501

USDA soil type 72 - Orlando fine sands are found in a small area in the northeast portion of the property. These soils are nearly level to gently sloping and well drained. The water table is typically at a depth greater than 72 inches with permeability of the soil rapid throughout. The available water capacity is low in the surface layer and very low in the other layers.

3.6 LANDFILL SITE IMPROVEMENTS

The 160-acre proposed landfill site is currently being operated as orange groves and improved pastures. The following site improvements will be installed to meet landfill operational requirements.

3.6.1 Entrance Facilities

An office trailer (gatehouse) will be located onsite for the gate attendant. This trailer will have hand washing and toilet facilities. The trailer will be served via the on-site non-potable water supply well. Bottled water will be used for drinking water. Electric and telephone services will also be available to the trailer office. Proposed site entrance improvements also include an all-weather entrance roadway, scales and perimeter road as shown on the Site Plan provided as Figure 3-6. (C-1).

3.6.2 Roads

The primary haul route to reach the proposed Enterprise Recycling and Disposal Facility (RDF) entrance is from Clinton Avenue east across C.R.35A to east on Enterprise Road to the entrance. A secondary haul route would be from C.R.35A to Enterprise Road east to the Enterprise facility.

We plan to improve Enterprise Road to an all-weather access roadway from C.R.35A to the entrance of what will be the active portion of the proposed landfill. Enterprise RDF will maintain this access road to provide adequate access.

Access roads to the working face will be constructed from on-site soils and/or recovered materials such as concrete and asphalt. This will be done on an as needed basis.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

3.6.3 Effective Barrier

The existing Enterprise property currently has a wire fence along the perimeter of the site. A 6-foot security fence is to be constructed upon County permit approval. The security fence shall be a 6-foot high-galvanized chain link fence, hereafter referred to as the "security fence." The site is currently surrounded by a 5-foot high livestock fence. The chain link fence will be installed within 90 days of permit issuance. Three (3) foot square "NO TRESPASSING" signs with 5-inch letters will be installed at no less than 500-feet spacing and at all corners to notice unauthorized access. The only point of access into the proposed landfill site will be through the ticket gate at the entrance. This gate will be locked during closed hours.

An 8-foot high berm will also be constructed along the site's frontage to Enterprise and Auton roads, see Figure 3-11 (C-6). The required County, and FDEP setbacks will be surveyed in and marked upon permit issuance.

3.6.4 Weighing or Measuring Incoming Waste

A scale system is proposed as shown on the Site Plan. The scale will be calibrated prior to use and every six (6) months, thereafter. Trucks will be weighed as entering the disposal site, and based upon the tare weight of the vehicle, the waste tonnage will be determined. Prior to unloading debris, the tonnage of waste material disposed will be determined and the appropriate fee assessed. The proposed scale will be operable within 90 days of permit issuance. In the interim, wastes accepted will be quantified and recorded based on truck size and waste types and converted to tons.

3.6.5 <u>Vehicle Traffic Control and Unloading</u>

Generally, truck traffic will be controlled by first in - first out, as directed by the working face spotter when and where to dump. There will be adequate space for truck staging at the site's gate (7-8 trucks) to mitigate any backups toward and onto Enterprise Road. Enterprise RDF will discourage any truck staging prior to landfill opening. Signs will be posted at the entrance gate and on interior roads to guide mine truck traffic vs. landfill truck traffic to their appropriate areas of the site.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

3.7 EXCAVATION OPERATIONS

The soils on the proposed site will be excavated and removed for road base and filling operations. A Pasco County permit application has been submitted which allows an excavation setback of 200 feet and a restoration slope of 6H:1V. Figure 3-7 (C-2) presents the phasing of the landfilling/excavation operation at the Enterprise facility. Based on setbacks of 200 feet, a landfill/excavation base ranging from 80 to 86 feet NGVD (at least 5 feet above seasonal high water table), existing topography, and landfill excavation slope of 2H:1V, we estimated the existing soil available for excavation operations to be approximately 4,351,700 cyds. The approximate rate of soil removal from the site will be 400,000 cyds per year.

Excavation slopes will not exceed 6H:1V pursuant to the Pasco County permit; however, once an excavation phase is complete, a portion of the excavated soils from the mining operation will be used as landfill construction material. An estimated 800,000 cyds of soils will be reserved to provide adequate cover material for the landfill operation. A slope stability analysis is discussed in Section 3.8.1 and Section 4 - Geotechnical Report.

The first excavations will take place in Phase 1/Cell 14, Phase 2/Cell 16, and Phase 3/Cell 15, in the in the Northeast corner. This area will serve as a temporary stormwater pond. Excavation will continue towards the south into Phase 4/Cell 1, and will follow the sequence shown in Figure 3-7 (C-2).

Excavation will be such that 2H:1V slopes will only be encountered on the outer edge boundaries of the cells. A 3H:1V working face slope, beginning at the 2H:1V slope face, will be used for landfilling the waste. Ample space shall be maintained between the working face and the 6H:1V excavation slope of the adjacent cell to allow for a berm and stormwater conveyance, as shown in the sequencing figures, 3-17 through 3-22.

The current working cell shall be overcut by 50 feet in order to provide for truck traffic and stormwater transport to the temporary pond. A six (6) foot wide berm will prevent stormwater from entering the working face. An open channel will transport stormwater to the temporary pond. See Figure 3-12, (G-1).

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

3.8 METHOD OF CELL SEQUENCE

The landfill operation will progress in a series of cells as shown on Figure 3-6 (C-1). Cell No. 1 will begin at the east portion of the site with material placed against the east slope with the first lift consisting of 10 feet deep fill. Cell No. 1 will then continue to the south along the east bank and extend approximately 550 feet out from the west slope. Each lift will be compacted as the waste is placed in the cell. The access road will be relocated to provide access to the next cell. The cell landfilling will continue in similar fashion until the cell reaches a height of one-half of the vertical height of the slope. Some areas of the cells may have partial lifts, based on these elevations. The working face shall not exceed a slope of 3H:1V and a width of 100 feet along the side slopes. Cell closure will commence immediately after cell completion. Within 120 days of Cell No. 1 completion, the final 3 feet cover of soil will be placed and compacted to a minimum of 1.5 feet barrier layer with 18 inches of topsoil and vegetated, see Closure Plan. The stormwater retention pond (Pond 1) will be constructed at this time, see SWMP Section 6. The north and west sides of completed Cell No. 1 stormwater will drain to the temporary pond, in the northeast corner of the site.

Cell #2 is the next 560-foot strip to the south of Cell #1. Cell sequencing will continue to the south (through Cell #2) and then move to the west and north portions of the landfill for cells 3 to 13. Completion of cells 14 to 16 will entail filling the northeast temporary retention pond once the floor of the pond has been built up with clean debris or clean fill to the landfill base elevation of 80 feet NGVD in this portion of the landfill. The ponds constructed for completed cells within the buffer areas will approximately replace the stormwater capacity of the northeast temporary pond.

The sequence of filling operations are as follows (see Figures 3-17 through 3-22):

Fill cells 1, 2, & 3 two 10' lifts (100').

Fill cells 1 & 2 one 10' lift (110').

Fill cell 4 two 10' lifts (100').

Fill cells 3 & 4 one 10' lift (110').

Sequence 2 Fill cell 5 two 10' lifts (100').

Fill cells 6 & 7 three 10' lifts (110').

Fill cell 8 two 10' lifts (100').

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

Fill cells 1, 2, 3, & 4 one 10' lift (120'). Begin to close sides of 1, 2, 3 to 120'.

Fill cells 9 & 10 one 15' lift and two 10' lifts (120'). Sequence 3 Fill cell 11 one 15' lift and two 10' lifts (120'). Fill cells 6 & 7 one 10' lift (120'). Begin to close sides of 6, 9, 10 to 120'.

Fill cell 12 one 15' lift and two 10' lifts (120'). Sequence 4 Fill cells 13 & 14 three 10' lifts (110'). Fill cells 15 & 16 two 10' lifts (100').

Fill cells 8, 5, 15, & 16 one 10' lift (110'). Sequence 5 Fill cells 15, 16, 8, 13, 5 & 14 one 10' lift (120'). Fill cells 16 south to 2, then west to 130'. Begin to close outer cells to 130'.

Fill cells 12 south to 9, then east two 10' lifts (150'). Sequence 6 Begin to close outer cells to 150'.

Fill cells 16 south to 2, then west to final elevation – 3 feet. Sequence 7 Complete final closure of landfill.

Lift height includes cover material. Due to the landfill bottom elevation, some lifts may not be a full 10 feet in height.

As each sequence is active, the following procedures will be followed.

- The access road to the working face will be constructed and graded as necessary.
- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- Weekly cover of six (6) inches of soil will be placed on the working face.
- Intermediate cover of 12 inches of soil will be placed in areas that will not receive waste within 180 days. The cover may be removed immediately prior to placement of new waste.
- Stormwater will be diverted to the onsite temporary storage pond until the latter part of sequence four (4) when cells 15 & 16 begin to accept waste.

3.8.1 <u>Vertical Expansion</u>

The landfill is proposed to be completed from 125 to 170 feet NGVD. The final grading plan is shown on Figure 3-10 (C-5). The finished grade will extend the existing hill eastward. The interior temporary side slopes will be no greater than a 6H:1V slope and a series of swales and other stormwater conveyance will be used to prevent side slope erosion, see Section 6.

The top (30H:1V) and side slope (4H:1V) designs provide for proper drainage and minimize rainfall infiltration into the landfill surface.

3.8.2 Erosion Control

The landfill's cell construction plan calls for the excavation of the existing sand mine at 6H:1V sidewall slopes of the pit to a 2H:1V slope for the outer cell boundaries prior to landfilling each cell. This slope can be safely maintained as supported by the Slope Stability Analysis, in the Geotechnical Report, Section 4.0. The 2H:1V excavation would not be initiated until the cell is ready to receive waste materials, and then the outer edge slope will first receive waste. This will minimize the time frame that a 2H:1V slope is exposed to the elements. The following engineering controls will be used to minimize erosion:

• Regrade a maximum of 100 linear feet of the outer edge slopes at a time to 2H:1V. The purpose of this recommendation is that a relatively small area will be subjected to surface erosion at any given time.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

- Construct a berm along the top of the slope during the regrading to redirect any rainfall runoff away from the face of the slope. The area along the berm should be graded so as to allow rapid runoff along the top of the slope. Ponding of water near the top of the slope should not be allowed, since seepage through the slope may initiate slope erosion.
- As soon as possible following the regrading of the slope, begin to fill against the 2H:1V slope with the landfill material. As a minimum, the fill should be placed to a height of one-half the vertical height of the slope and at a 3H:1V slope or flatter.
- When the 100 linear feet of slope is backfilled with landfill material to one-half the vertical height of the slope, the same procedure can be followed for another 100 linear feet until the landfill is complete.

See Geotechnical Report, Section 4.0 for more details.

If blowing sand becomes a problem, silt fences will be installed at the top of the 2H:1V side slope along the temporary berm/ditch.

3.8.3 <u>Life Expectancy</u>

Adequate soil stocks will be maintained to provide the soil cover material for closure activities (approximately 800,000 cyds). The calculated volume of each of the proposed landfill cells and sequencing is presented on the attached Table 1 of this submittal. At the proposed waste disposal rate, based on similar landfill's quarterly reports to the County, the landfill will dispose of approximately 459,000 cyds per year of non-compacted Class III materials; which corresponds to approximately 270,000 cyds of compacted wastes (1.7:1 ratio) as placed in the landfill. This calculates to roughly two (2) lifts across a cell per year or a maximum of approximately two, 6-acre, 10-foot, lifts per year. If this rate continues, we estimate that the life of each cell is approximately 2 years. Sequences 1 and 2 will be permitted first for landfilling.

Therefore, based upon the calculated volume of landfill space available, the landfill has an estimated life expectancy of 30 years at projected disposal volumes and compaction rates.

FLORIDA DEFARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

3.9 WASTE COMPACTION AND APPLICATION OF COVER

Waste received shall be segregated based on compatibility. Bulky, incompressible items shall be separated and reduced as appropriate by the chipper/crusher and disposed of or recycled. The remaining debris is disposed of in designated "cells" using onsite equipment to place the debris and a Rex 370-C Compactor, or equivalent, to weekly compact the waste. Initial cover material is planned to be excavated from onsite areas and placed weekly in approximately 6-inch layers on the compacted lifts to control vectors, reduce rain infiltration and provide a more stable working face area. The amount of weekly cover material required for the design life of the landfill is estimated to be approximately 400,000 cyds. An intermediate cover of one (1) foot of compacted soil will be applied if final cover or an additional lift is not to be applied within 180 days of cell completion (see Figure C-1 for an illustration of the cell closure sequence and Figure C-3 for final cover design of the Class III landfill site). Those landfill cells within the eastern half of the landfill will be temporarily closed until a second tier of cells are filled on top to planned grade, see Sheet C-5.

A final cover of three (3) feet of compacted soil will be placed upon closed cells, see Closure Plan, Section 7. Cell closure shall conform to the grades and lines specified in the grading plan. The grading plan shall conform to the rules and regulation specified in 62-701.600, Florida Administrative Code. Pesticides when deemed necessary to control rodents, insects and other vectors shall be used as specified by the Florida Department of Agriculture and Consumer Services. Uncontrolled and unauthorized scavenging shall not be permitted at the landfill site. Controlled recycling may be permitted by the Site Manager responsible for the operation of the landfill facility. Temporary storage of soil fill or recycling materials may be required in the closed cell areas.

3.10 DESIGN OF GAS, LEACHATE AND STORMWATER CONTROLS

3.10.1 Gas Monitoring and Control

The type of material to be disposed in the Class III Landfill is not expected to generate significant amounts of methane or other toxic gases since the landfill's design prevents groundwater contact. Therefore, no active gas control systems or venting is proposed. However, because biodegradable waste will be accepted, a passive gas control system is proposed, see section 3.10.1.5. The Enterprise RDF site Manager will conduct daily surveys of the landfill for

VSC/sma/sas/ph1/reports/sec3.doc HAI #99-331.01 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

061501

objectionable odors or gas and notify the County of any positive detection and immediately take corrective actions. Quarterly gas point monitoring is also proposed. The facility only accepts Class III debris for disposal and accepts no putrescible household wastes. Surface water and groundwater contact with the Class III wastes will be prevented by the proposed facility design. Other best management practices to prevent odors include: 1) closure of each cell as it is completed; 2) weekly soil cover application; and, 3) immediate corrective actions to abate any detected onsite odors.

3.10.1.1 Proposed Gas Probe Locations

Specifically, we propose to locate gas monitoring points spaced approximately 600 linear feet apart surrounding the landfill. Figure 3-13 presents these proposed locations of the gas probes surrounding the landfill.

After reviewing the sites' geology and topographic maps for any high permeability or low areas that might accumulate methane, we found no significant low areas, nor any geologic heterogeneities that would cause us to locate gas probes at potential accumulation locations surrounding the landfill or at closer spacing than proposed. Therefore, we are proposing a total of 16 gas monitoring probes throughout the subject landfill site. The gas probes are to be placed no farther than 25 feet from the toe of the landfill.

3.10.1.2 Gas Probe Design

Attached Figure 3-14 presents our gas probe design for the subject landfill site. These gas probes are designed to be surface sealed and to provide a greater permeability than the surrounding sediments to act as collector points for any methane gas, if present. Based on the landfill design, we have designed all of the gas probes to each be typically 20-foot in depth with an 18-foot open screen for the monitoring point. This depth will allow the screened interval to intercept the full cross-section of the landfilled waste that could potentially generate methane.

The groundwater table is approximately at a 50-foot depth below land surface (bls) across most of the site, so these gas probes are not designed to intercept the groundwater table. The polyvinyl chloride plastic pipe (PVC), Schedule-40 was selected at the material of choice for these wells since it is basically inert to any attack from landfill gases and most other landfilled materials. The PVC casing and screen will be flush-threaded and have a screen slot size large enough to FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

VSC/sma/sas/ph1/reports/sec3.doc HAI #99-331.01

JUN 2 1 2001

061501

accommodate easy methane extraction from the monitoring point. The sand/bentonite slurry proposed for a surface seal shall be a blend of 4 parts of sand to one part of granular bentonite. The sand and the bentonite shall be mixed dry and hydrated immediately prior to placing it in the annular space of the borehole. The gas probe points are proposed to be installed by hollow-stem auger to construct an eight-inch borehole to be filled with pea gravel. The pea gravel shall meet the requirements of FDOT standard size No. 10 aggregate washed pea gravel. Each gas probe will be protected by a surface mounted well protector and locked for security purposes. Each gas probe will terminate at the surface with a PVC ball valve to accommodate easy monitoring of methane levels, with a portable meter. The ball valve will remain closed between monitoring events and pre-purge measurements will be recorded. In the event of a positive gas measurement, the post-purge measurement will also be recorded.

3.10.1.3 Methane Gas Measurement

In accordance with the subject landfill closure permits, methane gas levels will be monitored at each of the 16 gas monitoring points quarterly and submitted to the FDEP for review. A portable explosimeter, or lower explosive limit (LEL) meter will be used to measure methane levels from each of the gas probes. LEL meters, such as the MSA Model 260 or GEM 500 or equivalent, will be used to conduct this monitoring. These meters are capable of measuring percent volume of methane in air and the percent LEL level of the methane by volume. The meter shall be calibrated in accordance with manufacturer's specifications prior to each methane monitoring event. Appendix D, Operations Plan, presents the proposed gas monitoring probe survey form to be used to conduct the quarterly monitoring at the subject site. This form will document at the time of each gas probe reading, air temperature in degrees Fahrenheit, methane levels in percent volume in air and percent LEL. The reporting action level for methane in air will be considered 5 percent by volume in air as measured by the lower explosive limit. The results of each quarterly gas probe survey will be submitted to the Department on the presented form within two weeks of each monitoring event. These events are planned to be coordinated with the semi-annual groundwater monitoring at the subject site.

3.10.1.4 Gas Contingency Plan

The following Contingency Plan will be implemented if any of the measured gas monitoring points methane levels are detected above the LEL of greater than 5 percent methane in air. If this level of methane or greater is detected in any of the probes, the Enterprise RDF operator will institute

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

061501

measurement of methane in nearby structures, i.e., stormwater collection points, or any maintenance or office buildings nearby the subject gas probe until these levels go below the 5 percent LEL at the subject probe. The monitoring report for any event that detects methane above the LEL will also report methane levels from any nearby structures and may include monthly monitoring measurements at the high methane gas probe points until the levels go below the methane LEL level or until corrective actions are conducted to reduce methane levels. The FDEP will be notified within seven days of any gas monitoring levels that exceed the LEL.

3.10.1.5 Passive Gas Vents

Within 90 days of closure of each landfill cell, a passive landfill gas vent will be installed at the highest point of the cell to prevent explosions, fires and damages to vegetation from methane gas buildup. Figure 3-15 shows the proposed location of the 16 gas vents and Figure 3-16 presents the design of a typical vent. The facility's gas emissions are expected to be far below the threshold of a Title V or an NSPS permit.

3.10.2 Leachate Control

Liquid disposal will not be permitted at the proposed Class III Landfill site. No liner or leachate control system is proposed for the Enterprise RDF Class III landfill based on an existing natural clay layer underlying the landfill. Since the Facility proposes to accept only those wastes described in 62-701.340(3)(d), FAC, it is not expected to produce a leachate that would pose a threat to public health or the environment. The proposed strict method of controlling type of wastes disposed of also supports the leachate and liner exemption, see Operations Plan, 5.0. The resulting seepage primarily will consist of rainwater runoff flowing through the fill material. The intervening soils are expected to attenuate and retard any pollutants generated prior to reaching the groundwater. Therefore, no leachate containment system is proposed.

Based on well inventory information from the Southwest Florida Water Management District, shallow residential wells in the area have a depth ranging from 75 to 190 feet. Potable wells normally withdraw water from limestone in the Floridan aquifer.

A consistent confining layer above the limestone has been identified across the site, as described in detail in the Hydrogeological Report. Additionally, Floridan aquifer monitor wells will be

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

installed on the site to ensure early detection of any exceeded groundwater parameters in this aquifer.

3.10.3 Stormwater Controls

The proposed Stormwater Management Plan for the landfill consists of "swales" and pond facilities constructed within the 200-foot landscape buffer zone to collect and contain stormwater runoff from the completed site. These stormwater facilities are designated to retain the 100-year, 24-hour storm volume as required by Pasco County and the FDEP. In the interim, stormwater will be controlled mainly by percolation into the soil or by overland flow to the temporary stormwater pond to be located in the northeast corner of the site. The site's topography generally slopes downward to the northeast thus facilitating stormwater collection. Refer to Section 6 for details of the Stormwater Management Plan.

3.11 EROSION CONTROL

The site's inherent design as an excavation pit will prevent stormwater from leaving the property. Stabilization by seeding and mulching of the final fill areas will occur as the fill operations progress from cell to cell, see Reclamation and Closure Plan (Section 7) for further details.

3.12 FINAL GRADE PLAN

Final grade plan of the facility is shown on the plans (Figure 3-10 (C-5)) and in the cross-sections (Figures 3-8 (C-3) and 3-9 (C-4)). The mined areas will be certified to the proposed Landfills bottom grade prior to accepting any waste material. The finished elevation after all fill material has been placed and final cover provided is designed to reclaim excavated areas.

3.13 SETBACKS AND VISUAL BUFFERS

The following setbacks (buffers) from the boundary lines of the site shall be used:

- 1. Minimum of 200 feet from boundary lines to landfill footprint.
- 2. Minimum of 500 feet setback from surrounding residential wells to landfill footprint.

 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

VSC/sma/sas/ph1/reports/sec3.doc HAI #99-331.01 JUN 2 1 2001

061501

Buffer areas are to be improved to maintain visual screening of the landfill by the following methods.

- 1. 8-foot high berms along the frontage of Enterprise and Auton roads.
- 2. Landscaping to provide visual buffers within setback areas are shown on attached Figure 3-11 (C-6) and will be completed within 6 months of permit issuance, or sooner, and will be in compliance with the Pasco County LDC.
- 3. Trees shall be planted in the specified buffers as required by the Pasco County and as shown on Landscaping Plan, Figure 3-11 (C-6).
- 4. Existing trees within the setbacks will be maintained.

All trees shall be nursery grown and meet the grades and standards established by the Florida Department of Agriculture for FL #1 materials. Trees shall be sound, healthy, vigorous species free from defects and fully developed without voids and open spaces.

The planting of trees on the site shall conform to the following landscape requirements in accordance with the County LDC, see notes on Figure 3-11 (C-6).

Planting shall be inspected at the completion of the project. Final acceptance shall subject the project to compliance with specified material and installation requirements.

3.14 FOUNDATION ANALYSIS

A Geotechnical evaluation was conducted on the proposed landfill site to estimate if the base and geologic setting are capable of providing structural support. Universal Engineering Sciences, Inc. completed the Geotechnical Report included as Section 4. The report states that the landfill base will adequately support the proposed Class III landfill wastes without excessive settlement. It also states that the potential for sinkhole development on the site is low. Soil boring logs used to support the foundation analysis are also in Section 4, Appendix B.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

3.15 CERTIFICATION

Laboratory testing and observation of cell floor conditions during cell construction completion shall consist of the following:

- Percent fines of the cell floor in accordance with ASTM-D1140 will be determined at a minimum frequency of three tests per cell.
- Hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell floor material will be performed at a minimum frequency of one test per cell, or one test per differing lithology encountered.
- Observance for unstable areas such as limestone, sink holes and soft ground will be performed for each cell.

If the test data from a well floor section does not meet the requirements of the anticipated conditions of the hydrologeological and geotechnical reports, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity meets the requirements, the cell will be considered acceptable. If not, that cell will be reworked or reconstructed so that it will meet these requirements.

Upon completion of construction of the proposed disposal facility, the Engineer of Record shall certify to the FDEP on form 62-701.900(2) that the approved construction is complete and in accordance with the submitted plans. The operator will provide the completed form to the FDEP and arrange for an inspection prior to acceptance of Class III wastes into the proposed disposal area.

3.16 OPERATIONS PLAN

The proposed landfill's Operations Plan is included as Appendix 3-A.

3.17 CONTINGENCY PLAN

The proposed landfill's Contingency Plan is included as Appendix 3-B

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

VSC/sma/sas/ph1/reports/sec3.doc HAI #99-331.01

3-17

OPERATIONS PLAN

D.E.P.

JUN 2 1 2001

Southwest District Tampa

ENTERPRISE RECYCLING AND DISPOSAL FACILITY

PREPARED FOR

SID LARKIN & SON, INC. P.O. BOX 1747 DADE CITY, FL 33526 (813) 713-2704

PREPARED BY

HARTMAN & ASSOCIATES, INC. 201 EAST PINE STREET, SUITE 1000 ORLANDO, FL 32801

J.E. Golden, P.G.

Fl. Reg. No. 0945

HAI #99-331.01 JUNE 2001

FLORIDA DEPARTMENT OF

JUN 2 1 2001

OPERATIONS PLAN ENTERPRISE RECYCLING AND DISPOSAL FACILTY CLASS III LANDFILL APPLICATION

TABLE OF CONTENTS

Section No.		Title	Page
	TAB	LE OF CONTENTS	-i-
1.0	DESI	IGNATION OF RESPONSIBLE PERSON(S)	1
2.0		DFILL SITE IMPROVEMENTS	1
	2.1	Facilities	1
	2.2	Primary Haul Route	1
	2.3	Effective Barrier	2
3.0	OPE	RATING HOURS	2
4.0	CON	TINGENCY OPERATIONS	3
5.0	WAS	STE STREAM QUALITY CONTROL PLAN	3
	5.1	Visual Inspection	3
	5.2	Documentation of Waste Received	4
	5.3	Contingency for Unacceptable Materials	4
	5.4	Acceptable and Unacceptable Waste	5
	5.5	Random Load Inspection	6
	5.6	Asbestos Waste Disposal	6
	5.7	Recycling Operations	8
		5.7.1 Reports	8
6.0	WEI	GHING OR MEASURING INCOMING WASTE	8
	6.1	Proposed Fee Schedule	9
7.0	VEH	IICLE TRAFFIC CONTROL AND UNLOADING	. 9
8.0	MET	THOD OF CELL SEQUENCE AND LIFE EXPECTANCY	9
	8.1	Cell Sequence	. 9
	8.2	Erosion Control	12
	8.3	Life Expectancy	13
9.0		STE COMPACTION AND APPLICATION OF COVER	13
		FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	
VSC/sma HAI #99		/reports/toc3A-doc JUN 2 1 2001 -i- SOUTHWEST DISTRICT TAMPA	061501

OPERATIONS PLAN ENTERPRISE RECYCLING AND DISPOSAL FACILITY CLASS III LANDFILL APPLICATION

TABLE OF CONTENTS (Continued)

Section No.	Title	Page No.
	TODAY OF CAR A FACHATE AND CTODAY ATED	•
10.0	OPERATION OF GAS, LEACHATE AND STORMWATER	14
	CONTROLS	14
	10.1 Gas Monitoring and Control	15
	10.1.1 Methane Gas Measurement	15
	10.1.2 Gas Contingency Plan	16
	10.2 Leachate Control	16
11.0	10.3 Stormwater Control	16
11.0	SIGNS DUST ABATEMENT PLAN	17
12.0	LITTER AND VECTOR CONTROL PLAN	17
13.0 14.0	FIRE PROTECTION AND FIRE FIGHTING FACILITIES	17
14.0	14.1 Hot Loads and Spills	18
15.0	LANDFILL PERSONNEL	18
13.0	15.1 Training Plan	19
160	COMMUNICATION FACILITIES	20
16.0		20
17.0	EQUIPMENT INVENTORY 17.1 Equipment Maintenance	21
10.0	17.1 Equipment Maintenance SAFETY DEVICES	21
18.0	RECORDS, PERMITS AND REPORTS	21
19.0		22
		22
00.0	19.2 Landfill Operating Records EROSION CONTROL	22
20.0		23
21.0	FINAL GRADE PLAN CLOSURE AND LONG TERM CARE	23
22.0		23
23.0	CERTIFICATION	
	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	
	JUN 2 1 2001	

SOUTHWEST DISTRICT TAMPA

OPERATIONS PLAN ENTERPRISE RECYCLING AND DISPOSAL FACILITY CLASS III LANDFILL APPLICATION

TABLE OF CONTENTS (Continued)

Section		Page
No	Title	<u>No.</u>

LIST OF APPENDICES

APPENDIX A: Landfill Sign

APPENDIX B: Random Load Inspection Form

APPENDIX C: Disposal and Recycling Facility Training Log

APPENDIX D: Gas Monitoring Survey Form

APPENDIX E: Sequence Drawings Figures 3-17 to 3-22

APPENDIX F: Approved Landfill Operations Continuing Education Courses

APPENDIX G: Cross-Section of Sequences 1 and 2, Figures 3-24 to 3-27

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

OPERATIONS PLAN

1.0 DESIGNATION OF RESPONSIBLE PERSON(S)

The current designated responsible person for the proposed Enterprise Recycling and Disposal Class III facility is the Site Owner, Mr. Jon Larkin. All correspondence and inquiries concerning the proposed Enterprise RDF Class III Landfill permits and operation should be addressed to him at:

Mr. Jon Larkin, Owner Sid Larkin & Son, Inc. P.O. Box 1747 Dade City, Florida 33526 (352) 713-2704

2.0 LANDFILL SITE IMPROVEMENTS

The 160 acre proposed landfill site is also proposed to be a sand mine facility. The following site improvements will be installed, to operate the proposed Class III Landfill.

2.1 Facilities

An office trailer (gate house) will be located onsite for the gate attendant. This trailer will have handwashing and toilet facilities. The trailer will be served via the on-site non-potable water supply well. Bottled water will be used for drinking water. Electric and telephone services will also be available to the trailer office. Proposed site entrance improvements also include an all-weather entrance roadway, scales and perimeter road as shown on the Site Plan, Figure 3-6 (C-1).

2.2 Primary Haul Route

The primary haul route to reach the proposed Enterprise Recycling and Disposal Facility (RDF) entrance is from Clinton Avenue east across C.R.35A to east on Enterprise Road to the entrance. A secondary haul route would be from C.R.35A to Enterprise Road east to the Enterprise facility.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

We plan to improve Enterprise Road to an all-weather access roadway from C.R.35A to the entrance of what will be the active portion of the proposed landfill. Enterprise RDF will maintain this access road to provide adequate access.

2.3 <u>Effective Barrier</u>

The existing Enterprise property currently has a wire fence along the perimeter of the site. A 6-foot security fence is to be constructed upon County permit approval. The security fence shall be a 6-foot high galvanized chain link fence, hereafter referred to as the "security fence." The chain link fence will be installed within 90 days of permit issuance. Three (3) foot square "NO TRESPASSING" signs with 5-inch letters will be installed at no less than 500-feet spacing and at all corners to notice unauthorized access. The only point of access into the proposed landfill site will be through the ticket gate at the entrance. This gate will be locked during closed hours.

An 8-feet high berm will be constructed along the frontages of Enterprise and Auton roads as a visual and noise buffer.

The required County and FDEP setbacks will be surveyed in and marked upon permit issuance.

3.0 OPERATING HOURS

The landfill shall have the following operating hours:

Day	Hours of Operation	
Monday through Friday	7:00 am to 6:00 PM	
Saturday	7:00 am to 2:00 PM	

Operational hours may be extended periodically to meet special requests of customers, but at no time will operating hours extend past 7:00 A.M. to 7:00 P.M. Monday through Saturday. Waste will not be accepted during non-daylight hours.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

4.0 CONTINGENCY OPERATIONS

A natural disaster closing the facility would not cause 'a major impact on the surrounding communities. Debris originally destined for the proposed landfill would be rerouted to another permitted landfill site. In terms of equipment breakdown, there will be two working pieces of equipment for all stages of landfill operation. If both should breakdown, replacements can be rented or substituted from onsite or offsite within 24 hours.

If the site were to stay operational as a landfill to accept yard waste during and after a major storm, the excavation operations would cease and no soils would be removed from the site until waste receipt returned to normal levels.

The site access roads will be constructed to allow passage of vehicles under all expected weather conditions. See Appendix 3-B for the site's Contingency Plan.

5.0 WASTE STREAM QUALITY CONTROL PLAN

5.1 <u>Visual Inspection</u>

An estimated 1500 cubic yards of Class III waste material will be received at the facility daily. Materials brought onto the proposed Enterprise RDF site will be inspected three times. The first inspection takes place at the site entrance. The site will only accept Class III debris; therefore, any vehicles hauling unacceptable waste can be turned away by the attendant at the ticket gate. The gate attendant will question all waste carriers as to the character of their wastes. A video camera is planned to be installed over the proposed scale location that will allow the gate attendant to visually screen all carrier loads prior to disposal.

The second inspection is a visual inspection that will occur at the disposal/working face. This landfill employee, the spotter, stationed at the working face will be responsible for spotting trucks bringing in disposal loads. The spotter will show the drivers where to unload, and will also inspect the trucks to make sure unacceptable materials are not unloaded. The spotter will have the authority to ensure that unacceptable materials are reloaded on the truck the material was brought in on.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

The third inspection will occur as the waste is spread by the equipment operator. Any unacceptable wastes observed will be placed in the appropriate container located at the working face.

5.2 <u>Documentation of Waste Received</u>

Documentation includes recording the name of the company disposing, driver's signature, all vehicle identification numbers, quantity of waste (cubic yards/tons), and type of waste (to meet FDEP and Pasco County's requirements, all vehicles entering the landfill will be weighed). The type of material and location from which the waste was generated will be recorded. This provides a record for tracing ownership of individual loads. See Operating Record, Section 19.1 for more details.

5.3 Contingency for Unacceptable Materials

If unacceptable materials are delivered to the landfill, they will be refused entry at the gate, if identified as unacceptable at the ticket gate. If the unacceptable materials are observed by a spotter while unloading, they will be reloaded onto the delivery vehicle. Should the vehicle leave before the unaccepted waste has been discovered, Enterprise RDF will place the unacceptable material into an appropriate container located at the working face, as the unacceptable materials are found onsite. Enterprise RDF, or the transporter/generator will then pay a commercial hauler to transport the materials to a disposal facility permitted to accept that type of material. Inadvertently accepted Class I waste shall be stored in a leak proof container with a lid to prevent the generation of leachate and odor. The Class I container contents will be taken weekly for proper disposal at a FDEP permitted Class I Landfill. Other unacceptable nonputrescible, nonhazardous wastes that are inadvertently accepted will be stored in a roll-off container and will be removed for proper disposal within 30 days. Any batteries, paint, chemicals, thermostats or similar items observed will be stored in the secured maintenance building until they are taken for proper disposal. This plan should meet the inspection needs for the site to prevent disposal of unacceptable wastes.

If suspect regulated hazardous wastes are identified by operators or spotters by random load inspection or discovered deposited at the landfill, the FDEP will be notified promptly, as well as the hauler and generator of the wastes, if known. The area where the hazardous wastes are deposited will immediately be secured from public access. If the generator or hauler cannot be

JEG/sas/sma/ph1/reports/operationsplan2 HAI #99-331.01/Ph.1 JUN 2 1 2001

identified, Enterprise RDF will assume the cleanup, transportation and disposal of the waste at a permitted hazardous waste management facility.

5.4 <u>Acceptable and Unacceptable Waste</u>

The Enterprise RDF Class III Landfill will accept only those solid wastes as defined in F.A.C., Chapter 62-701.340(3).

The following is a compilation of acceptable waste materials.

•	Land clearing debris	•	Construction debris
•	Demolition debris	•	Non-Treated Wood Pallets
•	Glass	•	Unpainted and untreated wood
•	Carpet		scraps from manufacturing
•	Cardboard	•	Waste Tires (Shredded)
•	Asbestos	•	Paper
•	Plastic	•	Furniture other than appliances
	-	•	Yard wastes

The following is a compilation of <u>unacceptable</u> waste materials:

- Putresible Household Waste
- Paint
- Any toxic or hazardous
 Materials (i.e., batteries, solvents, oils, etc.)
- Drums

- Refrigerators, freezers, air conditioners (white goods)
- Biomedical waste
- Automobiles or parts
- Septic tanks and pumping
- Whole waste tires
- Electronics

The proposed landfill site will have a visible sign at the site entrance on Enterprise Road. The sign depicting the accepted wastes, hours of operation, tipping fee, landfill classification, and site's 24-hour emergency contact and telephone number and posted prior to operation as a Class III Landfill, see proposed sign in Appendix A.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

5.5 Random Load Inspection

On a random basis, one (1) load per day will be selected for inspection from the incoming loads. These loads will be selected by the site manager. Once a load has been selected, it will be temporarily isolated from all other incoming loads until the inspection has been completed.

The following procedures shall be followed when inspecting the load:

- A. The load will be "broken apart" by both the spotter and equipment operator to allow for a thorough inspection.
- B. The inspectors will be watching for any unauthorized waste contained in the load.
- C. If the load contains any unauthorized materials, they shall immediately be reloaded onto the customer's vehicle for removal from the site. In the event that the transporter will not remove the unacceptable materials, the materials will be loaded into an appropriate container and removed from the site. The customer/ generator will be contacted and notified of the site policies as well as charged for the off-site disposal service.
- D. In all cases, if unacceptable wastes are found during the inspection, the customer will be notified to provide immediate feedback to prevent future occurrences.

All inspection shall be documented on the site's "Random Load Inspection Form," signed by the inspector, and kept in a current Log Book, see Appendix B. Log books will be maintained at the landfill for at least 3 years. Inspections shall be performed by trained site personnel.

5.6 <u>Asbestos Waste Disposal</u>

Asbestos-containing materials (ACM's) will be accepted for disposal in accordance with 40 CFR Part 61.154. Arrangements for disposal of ACM's between Enterprise RDF and the waste generator/hauler will be recorded in the operations record as to the quantity and date of shipment to the landfill.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION JUN 2 1 2001 To ensure that all waste deposited in the Facility meets state and local requirements, all facility personnel shall receive training from their supervisor on the identification of unacceptable materials, which is any waste other than properly labeled and bagged ACM. Unregulated, non friable asbestos containing materials are not required to be bagged, but all other requirements are unchanged.

Each load of ACM arriving at the facility must be accompanied by a completed Waste Shipment Record (WSR) in accordance with 40 CFR 61.150. Each load will be inspected to insure that it is properly bagged, that bags are intact and properly sealed, and that the required warning labels and generator labels are affixed. Bags will not be opened prior to disposal.

ACM arriving at the Facility for disposal will be visually screened by facility personnel a minimum of two times. The first screening will be at the weigh scales, controlling access to the Facility, where the truck drivers will be questioned as to what they are transporting and shipping documents reviewed. The gate attendant will also make a cursory visual examination and direct the drivers to the appropriate disposal area. If this examination identifies acceptable materials, the gate attendant will direct the drivers to the appropriate disposal area. If this examination turns up unauthorized material the truck shall be denied access to the site.

The second screening will be at the working face where a trained inspector/spotter will again question the driver and make a visual examination of the load prior to dumping and as it is dumped. This examination shall insure the ACM is properly bagged, the bags are intact and properly sealed, and that the warning labels and generator labels are affixed.

Enterprise RDF personnel will direct the waste hauler to the designated ACM disposal location in each cell, to be determined by the Operator or Site Manager. The ACM will be covered with 6-inches of soil at the end of any day, ACM is accepted. This designated ACM location will be recorded and updated by the annual topographic survey in accordance with 40 CFR 61.154. ACM disposal records will be maintained for the life of the landfill and disposal locations documented in the Closure Report.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

5.7 <u>Recycling Operations</u>

The proposed Class III landfill plans to recycle a portion of wastes received. In 1998, the State of Florida passed legislation that set a waste reduction/recycling goal of 30 percent by 1995. In 1992, yard trash was restricted from public Class I and II landfills which provides an opportunity for Class III landfills to segregate yard wastes for recycling. Other wastes planned to be recycled at the landfill are: metals, concrete rubble; paper/cardboard; wood wastes; and possibly waste tires. Enterprise's activities to recover and recycle these products will assist the State and County to meet their 30 percent goal and increase the life of the landfill. However, we believe that a Materials Recovery Facility permit will not be required for the proposed recycling area since the primary use of the landfill facility is disposal.

Trucks identified at the entrance as carrying primarily recyclable products, (i.e., concrete, metal, wood, paper) will be directed to the currently designated areas of the landfill with recovered material containers. The recovered material containers will be located at the working face.

At the working face, the spotter will direct the separation of mixed loads if the loads contain a sufficient amount of recoverable materials.

Wood wastes may be chipped for mulch, or be placed in roll-off containers for shipment to a wood recycler. Waste tires will be stored in a roll-off container and may be shipped to a recycler or reused on-site, depending on the quantity received.

5.7.1 Reports

A Recovered Materials report will be submitted quarterly by type of waste and tonnage to the Pasco County Solid Waste Department. These reports will also be compiled into an annual report to the FDEP.

6.0 WEIGHING OR MEASURING INCOMING WASTE

A scale system is proposed as shown on the Site Plan. The scale will be calibrated prior to use and every six (6) months, thereafter. Trucks will be weighed as entering the disposal site, and based upon the tare weight of the vehicle, the waste tonnage will be determined. Prior to

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

061501

unloading debris, the tonnage of waste material disposed will be determined and the appropriate fee assessed.

6.1 <u>Proposed Fee Schedule</u>

The proposed fee schedule to be used by the public at the Enterprise RDF is as follows:

Waste Type	Unit	Fee per Unit
Class III	Cyds	\$9.50

This fee schedule will be periodically revised according to the prevailing market for waste disposal. Enterprise RDF will notify Pasco County immediately in writing of any proposed fee schedule change.

7.0 VEHICLE TRAFFIC CONTROL AND UNLOADING

Generally, truck traffic will be controlled by first in - first out, as directed by the working face spotter when and where to dump. There will be adequate space for truck staging at the site's gate (7-8 trucks) to mitigate any backups toward and onto Enterprise Road. Enterprise RDF will discourage any truck staging prior to landfill opening. Signs will be posted at the entrance gate and on interior roads to guide mine truck traffic vs. landfill truck traffic to their appropriate areas of the site.

8.0 METHOD OF CELL SEQUENCE AND LIFE EXPECTANCY

8.1 <u>Cell Sequence</u>

The landfill operation will progress in a series of cells as shown on Figure 3-6 (C-1) (See Section 3 at Engineering Report). Cell No. 1 will begin at the east portion of the site with material placed against the east slope with the first lift consisting of 10 feet deep fill. Cell No. 1 will then continue to the south along the east bank and extend approximately 550 feet out from the west slope. Each lift will be compacted as the waste is placed in the cell. The access road will be relocated to provide access to the next cell. The cell landfilling will continue in similar fashion until the cell reaches final grade less 3 feet. Some areas of the cells may have partial lifts, based on the final cell elevations. The working face shall not exceed a slope of 3H:1V and a width of 100 feet along

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

061501

the side slopes. Cell closure will commence immediately after cell completion. Within 120 days of Cell No. 1 completion, the final 3 feet cover of soil will be placed and compacted to a minimum of 1.5 feet barrier layer with 18 inches of topsoil and vegetated. The stormwater retention pond (Pond 1) will be constructed at this time. The north and west sides of completed Cell No. 1 stormwater will drain to the temporary pond, in the northeast corner of the site.

Cell #2 is the next 560-foot strip to the south of Cell #1. Cell sequencing will continue to the south (through Cell #2) and then move to the west and north portions of the landfill for cells 3 to 13. Completion of cells 14 to 16 will entail filling the northeast temporary retention pond once the floor of the pond has been built up with clean debris or clean fill to the landfill base elevation of 80 feet NGVD in this portion of the landfill. The ponds constructed for completed cells within the buffer areas will approximately replace the stormwater capacity of the northeast temporary pond.

The sequence of filling operations are as follows, (see Figures 3-17 through 3-22):

Fill cells 1, 2, & 3 two 10' lifts (100').

Fill cells 1 & 2 one 10' lift (110').

Fill cell 4 two 10' lifts (100').

Fill cells 3 & 4 one 10' lift (110').

Sequence 2 Fill cell 5 two 10' lifts (100').

Fill cells 6 & 7 three 10' lifts (110').

Fill cell 8 two 10' lifts (100').

Fill cells 1, 2, 3, & 4 one 10' lift (120').

Begin to close sides of 1, 2, 3 to 120'.

Sequence 3 Fill cells 9 & 10 one 15' lift and two 10' lifts (120').

Fill cell 11 one 15' lift and two 10' lifts (120').

Fill cells 6 & 7 one 10' lift (120').

Begin to close sides of 6, 9, 10 to 120'.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

- Sequence 4 Fill cell 12 one 15' lift and two 10' lifts (120').

 Fill cells 13 & 14 three 10' lifts (110').

 Fill cells 15 & 16 two 10' lifts (100').
- Sequence 5 Fill cells 8, 5, 15, & 16 one 10' lift (110').

 Fill cells 15, 16, 8, 13, 5 & 14 one 10' lift (120').

 Fill cells 16 south to 2, then west to 130'.

 Begin to close outer cells to 130'.
- Sequence 6 Fill cells 12 south to 9, then east two 10' lifts (150').

 Begin to close outer cells to 150'.
- Sequence 7 Fill cells 16 south to 2, then west to final elevation 3 feet.

 Complete final closure of landfill.

Lift height includes cover material. Due to the landfill bottom elevation some lifts may not be a full 10 feet in height.

As each sequence is active, the following procedures will be followed.

- The access road to the working face will be constructed and graded as necessary.
- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length.
- Weekly cover of six (6) inches of soil will be placed on the working face.
- Intermediate cover of 12 inches of soil will be placed in areas that will not receive waste within 180 days. The cover may be removed immediately prior to placement of new waste.
- Stormwater will be diverted to the onsite temporary storage pond until the latter part of sequence four (4) when cells 15 & 16 begin to accept waste.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2.1 2001

SOUTHWEST DISTRICT
TRAFF

8.2 Erosion Control

The landfill's cell construction plan calls for the excavation of the existing sand mine at 6H:1V sidewall slopes of the pit to a 2H:1V for the outer cell boundaries slope prior to landfilling each cell. This slope can be safely maintained as supported by the Slope Stability Analysis, in the Geotechnical Report, Section 4.0. The 2H:1V excavation would not be initiated until the cell was ready to receive waste materials, and then only on the outer edge slope to first receive waste. This will minimize the time frame that a 2H:1V slope is exposed to the elements. The following engineering controls will be used to minimize erosion:

- Regrade a maximum of 100 linear feet of the outer edge slopes at a time to 2H:1V. The purpose of this recommendation is that a relatively small area will be subjected to surface erosion at any given time.
- Construct a berm along the top of the slope during the regrading to redirect any rainfall runoff away from the face of the slope. The area along the berm should be graded so as to allow rapid runoff along the top of the slope. Ponding of water near the top of the slope should not be allowed, since seepage through the slope may initiate slope erosion.
- As soon as possible following the regrading of the slope, begin to fill against the 2H:1V slope with the landfill material. As a minimum, the fill should be placed to a height of one-half the vertical height of the slope and at a 3H:1V slope or flatter.
- When the 100 linear feet of slope is backfilled with landfill material to one-half the vertical height of the slope, the same procedure can be followed for another 100 linear feet until the landfill is complete.

See Geotechnical Report, for more details.

If blowing sand becomes a problem, silt fences will be installed at the top of the 2H:1V side slope along the temporary berm/ditch.

FLORIDA DEFARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

8.3 <u>Life Expectancy</u>

Adequate soil stocks will be maintained to provide the soil cover material for closure activities (approximately 800,000 cyds). The calculated volume of each of the proposed landfill cells and sequencing is presented on the attached Section 7, Table 1 of this submittal. At the proposed waste disposal rate, based on similar landfill's quarterly reports to the County, the landfill will dispose of approximately 459,000 cyds per year of non-compacted Class III materials; which corresponds to approximately 270,000 cyds of compacted wastes (1.7:1 ratio) as placed in the landfill. This calculates to roughly two (2) lifts across a cell per year or a maximum of approximately two, 6- acre, 10-foot, lifts per year. If this rate continues, we estimate that the life of each cell is approximately 2 years. Sequences 1 and 2 will be permitted first for landfilling.

Therefore, based upon the calculated volume of landfill space available, the landfill has an estimated life expectancy of 30 years at projected disposal volumes and compaction rates.

9.0 WASTE COMPACTION AND APPLICATION OF COVER

Waste received shall be segregated based on compatibility. Bulky, incompressible items shall be separated and reduced as appropriate by the chipper/crusher and disposed of or recycled. The remaining debris is disposed of in designated "cells" using onsite equipment to place the debris and a Rex 370-C Compactor, or equivalent, to weekly compact the waste. Initial cover material is planned to be excavated from onsite areas and placed weekly in approximately 6-inch layers on the compacted lifts to control vectors, reduce rain infiltration and provide a more stable working face area. The amount of weekly cover material required for the design life of the landfill is estimated to be approximately 400,000 cyds. An intermediate cover of one (1) foot of compacted soil will be applied if final cover or an additional lift is not to be applied within 180 days of cell completion (see Figure 3-8 (C-3) for final cover design of the Class III landfill site). The proposed final grades are shown in Figure 3-10 (C-5).

Cell closure shall conform to the grades and lines specified in the grading plan. The grading plan shall conform to the rules and regulation specified in 62-701.600, Florida Administrative Code. Pesticides when deemed necessary to control rodents, insects and other

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

vectors shall be used as specified by the Florida Department of Agriculture and Consumer Services. Uncontrolled and unauthorized scavenging shall not be permitted at the landfill site. Controlled recycling may be permitted by the Site Manager responsible for the operation of the landfill facility. Temporary storage of soil fill or recycling materials may be required in the closed cell areas.

10.0 OPERATION OF GAS, LEACHATE AND STORMWATER CONTROLS

10.1 Gas Monitoring and Control

The type of material to be disposed in the Class III Landfill is not expected to generate significant amounts of methane or other toxic gases since the landfill's design prevents groundwater contact. Therefore, a passive gas control system is proposed. The Enterprise RDF site Manager will conduct daily surveys of the landfill for objectionable odors or gas, record the results, and notify the County of any positive detection and immediately take corrective actions. Quarterly gas monitoring will also be performed. The facility only accepts Class III debris for disposal and accepts no putrescible household wastes. Surface water and groundwater contact with the Class III wastes will be prevented by the proposed facility design thus preventing possible odor operation. Other best management practices to prevent odors include: 1) closure of each cell as it is completed; 2) weekly soil cover application; and, 3) immediate corrective actions to abate any detected onsite odors.

However, since yard trash is an acceptable Class III waste, and it is biodegradable, we are proposing a system of gas probes surrounding the landfill to be used to monitor methane gas levels.

A system of passive gas vents are proposed to be used to prevent explosions and fires from possible gas generating from the biodegradable wastes (yard trash) in the landfill. The proposed location of the gas vents is shown on Figure 3-15. The proposed construction details of the vents are shown on Figure 3-16. The vents will be installed during the final closure and installation of the final cover over each landfill cell.

A system of 16 gas probes is proposed to monitor gas at the site, see Figure 3-13. The construction details a typical gas probe as shown on Figure 3-14.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

Gas Monitoring Procedures

10.1.1 Methane Gas Measurement

In accordance with the subject landfill closure permits, methane gas levels will be monitored at each of the 16 gas monitoring points quarterly and submitted to the FDEP for review. See Figure 3-13. A portable explosimeter, or lower explosive limit (LEL) meter will be used to measure methane levels from each of the gas probes. LEL meters, such as the MSA Model 260 or GEM 500 or equivalent, will be used to conduct this monitoring. These meters are capable of measuring percent volume of methane in air and the percent LEL level of the methane by volume. The meter shall be calibrated in accordance with manufacturer's specifications prior to each methane monitoring event. Appendix D presents the proposed gas monitoring probe survey form to be used to conduct the quarterly monitoring at the subject site. This form will document at the time of each gas probe reading, air temperature in degrees Fahrenheit, methane levels in percent volume in air as measured by the lower explosive limit. The ball valve will remain closed between monitoring events and pre-purge measurements will be recorded. In the event of a positive gas measurement, the post-purge measurement will also be recorded. The results of each quarterly gas probe survey will be submitted to the Department on the presented form within two weeks of each monitoring event. These events are planned to be coordinated with the semi-annual groundwater monitoring at the subject site.

10.1.2 Gas Contingency Plan

The following Contingency Plan will be implemented if any of the measured gas monitoring points methane levels are detected above the LEL of greater than 5 percent methane in air. If this level of methane or greater is detected in any of the probes, the Enterprise RDF landfill operator will institute measurement of methane in nearby structures, i.e., stormwater collection points, or any maintenance or office buildings nearby the subject gas probe until these levels go below the 5 percent LEL at the subject probe. The monitoring report for any event that detects methane above the LEL will also report methane levels from any nearby structures and may include monthly monitoring measurements at the high methane gas probe points until the levels go below the methane LEL level or until corrective actions are conducted to reduce methane levels. The FDEP will be notified within seven days of any gas monitoring levels that exceed the LEL.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

10.2 Leachate Control

Liquid disposal will not be permitted at the proposed Class III Landfill site. Based on the proposal method for controlling waste disposed of, types of waste received (Class III), and the naturally protective hydrogeological setting, the facility qualifies for a liner exemption. No liner system is proposed for the Class III landfill primarily based on an existing natural clay layer underlying the landfill. Stormwater runoff will be prevented from contacting the wastes by a system of swales and berms, see Section 6. Since the acceptable wastes are as described in Rule 62-701.340(3)(d), FAC, they are not expected to produce leachate which poses a threat to public health or the equivalent. The proposed strict method of controlling types of wastes disposed also supports the leachate and liner exemption, see Section 5.0 The resulting seepage primarily will consist of rainwater runoff flowing through the top of fill material. The intervening soils within the zone of discharge (ZOD) are expected to attenuate and retard any pollutants generated prior to reaching the groundwater, and/or the bottom of the ZOD. Therefore, no leachate containment system is proposed.

10.3 Stormwater Control

The proposed Stormwater Management Plan for the landfill consists of "swales" and pond facilities constructed within the 200-foot landscape buffer zone to collect and contain stormwater runoff from the completed site. These stormwater facilities are designated to retain the 100-year, 24-hour storm volume as required by the FDEP. In the interim, stormwater will be controlled mainly by percolation into the soil or by overland flow to the temporary stormwater pond to be located in the northeast corner of the site. The site's topography generally slopes downward to the northeast thus facilitating stormwater collection.

The site manager will perform monthly inspections of the stormwater management system. Any areas in need of maintenance will be repaired within seven days.

11.0 SIGNS

Signs will be posted at the entrance to the Enterprise RDF site which will list the following information:

JEG/sas/sma/ph1/reports/operationsplan2 HAI #99-331.01/Ph.1

JUN 2 1 2001 southwest district

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

The operating entity;
Charges for disposal;
Hours of operation;
No scavenging allowed;
No hazardous waste accepted;
List of acceptable and unacceptable waste; and,
24-hour phone number of emergency contact.

The gate attendant will direct each driver to the area appropriate to unload wastes. Signs will also be posted to direct trucks to either the borrow pit or the landfill working face.

12.0 DUST ABATEMENT PLAN

Enterprise RDF will provide a water tanker to water the proposed landfill access roads if and when dust becomes a problem. This will also be done whenever the County receives complaints about dust or when a dust problem is observed during a County or State inspection.

13.0 LITTER AND VECTOR CONTROL PLAN

The nature of the waste to be disposed in the landfill does not typically create litter and vector problems. Daily placement of waste and/or compaction will be the primary means utilized to control litter and vectors. If blowing litter becomes a problem, laborers shall patrol the site as needed and pick up blowing debris and dispose of it in appropriate containers and/or on site. In addition, the laborers shall weekly patrol the haul route west on Enterprise Road to C.R.35A for pick up of litter from vehicles hauling material to and from the site. Temporary fencing to contain litter at the working face of the landfill will be used as needed. These litter controls will also be implemented whenever the County or State receives a complaint from adjacent landowners or a litter problem is observed during an inspection.

14.0 FIRE PROTECTION AND FIRE FIGHTING FACILITIES

Fires that originate in landfills are primarily extinguished by soil application. Supplemental fire protection will be furnished by the Dade City Fire Department (Station No. 1). The Fire Department will be notified immediately of all landfill fires. An emergency contact sign will be

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

posted at the entrance so it is visible to emergency vehicles with a contact phone number available 24-hours.

Onsite fire prevention facilities will include:

- Fire extinguishers mounted in the cab of all heavy equipment and in the gatehouse;
- Radio communication to notify personnel of a fire; and
- Onsite equipment (dozer) and fill dirt to extinguish fires on working face.

Soil for fire fighting purposes will be borrowed from the closest unexcavated area of the site to the fire. Details of all fire fighting episodes will be recorded in the landfill operating record.

14.1 Hot Loads and Spills

Any hot load (of authorized material) found will be dumped on an area at least 500 feet away from the active working face. The load will immediately be covered with earth if a fire is imminent. The waste will not be disposed of until it has cooled completely, and the fire hazard has been mitigated.

Since liquid disposal is prohibited in a Class III landfill, spills from waste vehicles are not anticipated. In the case of a fuel spill or leak, the contaminated soil will be collected to the extent possible, contained in a drum or roll off container, and taken offsite within thirty (30) days for proper disposal or treatment.

15.0 LANDFILL PERSONNEL

The gate attendant and certified landfill operator shall be onsite during all operating hours. In addition, there shall be a minimum of one (1) other person (spotter) onsite, for a total of three (3). The state certified landfill operator will be assigned to manage the daily landfill operations. The personnel will be stationed at the landfill ticket gate and active disposal face. Additional personnel will be assigned to the proposed landfill operation as the demand necessitates.

At least one (1) spotter will be at the working face at all times the facility is accepting waste. The spotter will direct vehicle traffic around the working face and will direct drivers where to empty their vehicles. The loads will be inspected as described in Section 5.1. If the load is acceptable,

-18-

JEG/sas/sma/ph1/reports/operationsplan2 HAI #99-331.01/Ph.1

JUN 2 1 2001

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

the waste will be spread and compacted as necessary. If the load is unacceptable, the spotter will direct the driver to reload the waste into the vehicle, if possible. The spotter will also discourage scavanging by the public.

A typical work schedule is as follows:

	Operating	Gate	Certified		Equipment
Day	Hours	Attendant	Operator	Spotter(s)	Operator
M-F	7 am -6 pm	1 (7 am-6 pm)	1 (6 am -7 pm)	Min. 1 (7 am -6 pm)	Min. 1
	-			For 2 or more	(7 am -6 pm)
				(7 am –4 pm),	
				(12 pm –6pm)	
S	7 am – 2 pm	1 (7 am -2 pm)	1 (6 am -3 pm)	Min. 1 (7 am -2 pm)	Min. 1
	•	•			(7 am -2 pm)

15.1 <u>Training Plan</u>

Enterprise RDF will implement an employee training plan to properly train their landfill operators and spotters to operate the landfill in accordance with this Operations Plan, state and local regulations, and accepted disposal practices and to properly manage any hazardous or prohibited materials which are received at the landfill.

A trained operator will be at the site during all times that the landfill receives waste. All facility operators will be trained at an approved FDEP training course. Each operator will submit proof of training and documentation to the FDEP upon receipt of their certificates.

Landfill operators must have at least one year of work experience in landfill operation and a high school diploma; or have at least two (2) years experience at a Class I, II, or III landfill. Each operator will complete at least 20 hours of initial training in an FDEP-approved training course. Fifteen (15) hours of continuing training will be completed within three (3) years of each operator's initial training from an approved course documented by the form in Appendix C. A list of FDEP approved training courses for operators and spotters is included in Appendix E.

JUN 2 1 2001

southwest district tampa

Enterprise RDF landfill spotters will complete an initial FDEP-approved course and eight (8) hours of continuing training every three (3) years. Records documenting each employee's training course completion and schedule will be maintained and kept at the landfill office at all times.

In addition to FDEP required training, in-house training programs will be conducted by Enterprise RDF trained operators for interim operators, spotters and other employees in proper Class III landfill operations, unacceptable Class III waste material handling, asbestos handling, and facility maintenance. These in-house courses will be provided at least every six (6) months and be documented in a training log as shown in Appendix C.

16.0 COMMUNICATION FACILITIES

The proposed landfill gate house will have both telephone and facsimile facilities. In addition, all proposed landfill operating areas (gate house, working face, etc.) will have radio communication with the base station at the gate house.

17.0 EQUIPMENT INVENTORY

Equipment currently planned for use at the proposed landfill site includes:

- A. D-8 Caterpillar bulldozer, Rex 370-C Compactor, two 2.5 cyd loaders, water truck, 590 John Deer backhoe, or equivalent are sufficient for adequate operation of the facility. A wood chipper/grinding machine (Hogzilla), or equivalent, will be moved to the site periodically to process wood wastes as needed. Additional equipment, such as a grader may be rented as needed.
- B. Arrangements will be made to provide alternate equipment within 24 hours following an equipment breakdown.
- C. There will be safety devices present on equipment to shield and protect the operators from potential hazards during operation.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

17.1 Equipment Maintenance

Enterprise RDF proposes to conduct routine heavy equipment and vehicle maintenance onsite. Maintenance includes fueling of heavy equipment with diesel fuel, lubrication, oil changes and, antifreeze changes. Tire repairs will be handled by an outside service company.

A permanent equipment fueling facility will be installed and registered in accordance with FAC 62-761. Pasco County will be copied on the registration.

Oil and antifreeze changes will be contained by large drip pans to catch the waste oils. These wastes will then be transferred either to a 250-gallon waste oil skid tank or to a 55-gallon drum for waste antifreeze, which will be located in a containment area. Enterprise RDF plans to enter into contracts with licensed recyclers to periodically pick up the waste oil and antifreeze. Records of these pickups will be maintained by Enterprise RDF. All virgin lubricants will be stored within the proposed secured maintenance building. See the site plan for location.

18.0 SAFETY DEVICES

All proposed operating equipment which will be utilized at the proposed landfill site will be fitted with rollover protection and fire extinguishers. All landfill personnel will be required to wear safety helmets, safety shoes, eye protective glasses, gloves, and safety vests. The proposed onsite heavy equipment will meet OSHA safety requirements. First aid equipment will be kept in the office trailer and in the operating equipment.

19.0 RECORDS, PERMITS AND REPORTS

A copy of any Florida Department of Environmental Protection (FDEP) and Pasco County approved engineering drawings, permits and supporting information shall be kept at the facility for reference and inspections. Permits will be posted at site per ordinance. A waste type and quantity intake (in tons) log will be kept daily, compiled monthly and a report will be submitted quarterly to Pasco County and the FDEP.

An annual estimate of the remaining life and capacity in cyds of the landfill will be reported annually to the FDEP.

JEG/sas/sma/ph1/reports/operationsplan2 HAI #99-331.01/Ph.1

JUN 2 1 2001 -21-

SOUTHWEST DISTRICT

ENVIRONMENTAL PROTECTION

19.1 Water Quality Monitoring

Enterprise RDF will conduct the required initial and semi-annual groundwater monitoring at the sites' monitoring wells as described in the sites' Groundwater Monitoring Plan. Semi-annual reports of this monitoring will be submitted to Pasco County and FDEP in accordance with this plan. Quarterly monitoring will also be conducted and reported at specific wells per Pasco County conditions.

19.2 Landfill Operating Records

The operating record for the landfill will document daily as a minimum the following activities:

- Self inspections of landfill conditions, safety equipment and unacceptable waste received, any odor detected;
- Records used to develop permit applications;
- Change in construction, operation or closure permits and all supporting designs;
- Water quality sampling events, analytical reports, well installation or repair;
- Employee training;
- Facility construction, major maintenance, or demolition;
- Other activities that significantly affect facility operations.

The Operating Record will be kept at the landfill and be accessible to the landfill operators to maintain and for FDEP or Pasco County inspection at reasonable times.

Operational records will be maintained for the design life of the landfill. Water quality monitoring information, maintenance records, and permit reports will be maintained for a minimum of 10 years. Background water quality records will be maintained for the design period of the landfill.

20.0 EROSION CONTROL

The site's inherent design as an excavation pit will prevent stormwater from leaving the property. Stabilization by seeding and mulching of the final fill areas will occur as the fill operations progress from cell to cell.

-22-

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TRIPPA

21.0 FINAL GRADE PLAN

Final grade plan of the facility is shown on the plans (Figure 3-10 (C-5)) and in the cross-sections (Figures 3-8 (C-3) and 3-9 (C-4)). The mixed areas will be brought to the proposed Landfills bottom grade prior to accepting any waste material. The finished elevation after all fill material has been placed and final cover provided is designed to reclaim excavated areas back to the grade which existed prior to the site being opened as a mine with allowance for positive drainage.

22.0 CLOSURE AND LONG TERM CARE

The site's Reclamation and Closure Plan details the procedures to properly close and maintain the landfill during the 30-year post-closure period. A Closure Report will be prepared for the landfill that details the site-specific limitations for land use based on geotechnical stability (settlement), potential gas migration, and site access. Long-term maintenance of erosion controls, stormwater controls and monitoring devices is discussed in the Closure Plan, Section 7, of the permit application document.

23.0 CERTIFICATION

Laboratory testing and observation of cell floor conditions during cell construction completion shall consist of the following:

- Percent fines of the cell floor in accordance with ASTM-D1140 will be determined at a minimum frequency of three tests per cell.
- Hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell
 floor material will be performed at a minimum frequency of one test per cell, or one test per
 differing lithology encountered.
- Observance for unstable areas such as limestone, sink holes and soft ground will be performed for each cell.

If the test data from a well floor section does not meet the requirements of the anticipated conditions of the hydrologeological and geotechnical reports, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity

FLORIDA DEFARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT

meets the requirements, the cell will be considered acceptable. If not, that cell will be reworked or reconstructed so that it will meet these requirements.

Upon completion of construction of the proposed disposal facility, the Engineer of Record shall certify to the FDEP on form 62-701.900(2) that the approved construction is complete and in accordance with the submitted plans. The operator will provide the completed form to the FDEP and arrange for an inspection prior to acceptance of Class III wastes into the proposed disposal area.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 2 1 2001

SOUTHWEST DISTRICT TAMPA

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SOUTHWEST DISTRICT

Date 6/18/01	Subject	thrupus -	ett
Date 6 18 01 Time 4: 20		D	
\ :	County _	PAJ e.	0
M JEHNIFER DEAL	Telephon	e No	
Representing	HALTHAN		
Phoned Me [] W	as Called [] Sche	eduled Meeting []	Unscheduled Meeting
Other Individuals Involved in Con	nversation/Meeting		
Summary of Conversation/Meeting	ng	1	
anta ar	inks my RAL	1	I am
KNIME TO	the faxed pa	th An look	5 ol
BOT I WER	o final R	EPIACEMENT	paces.
BOF I WEE	2,3-24,25	26 127 WH	50 60
for the	repens		
e. connect		on colu	o F
	the 1 such		
2 Pansie~	TOATES INM S	(- on EACH P	abe to
1 SHOW RE	aportes to l	LAE S	\
4. SIR PLAN	5 WW BC- C	emplete-Ad	AME DATE
SI GALS A	SEALED.		
ITO SAID L	oul seno otis	Wle	• A
	· · · · · · · · · · · · · · · · · · ·	oll an	I will
		DISCUSS WATE	Torbano
(continue on another	Signature		
sheet, if necessary)	Tiela		
	Title	. , ,	

PA-01 1/96

pap



HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

201 EAST PINE STREET, SUITE 1000, ORLANDO, FLORIDA 32801 TELEPHONE (407) 839-3955

FAX (HYDROGEOLOGY) - (407) 839-2066 FAX (ADMIN./UTILITY ENGINEERING) - (407) 839-3790 FAX (CIVIL ENG./SURVEY/FINANCE) - (407) 481-8447

FACSIMILE TRANSMITTAL

TO: Kin Ford FROM: Jennifer Deal
501: dwaste Section FAX: 813-744-6125 DATE: 6/15/01
RE: Enterprise Road PROJECT: HAI# 99-331.01
We are sending you 12 pages, including this cover sheet. These pages are being transmitted as indicated below:
As requested For your use For your comments For your approval
HARD COPY:
Will be sent via regular mail Will be sent via overnight mail Will be sent by facsimile only Will be sent by hand delivery
MESSAGE:
Kim,
Following are the pages of the Engr. Report and Ops. Plan we discussed on Id13. Please call me if You have any questions.
Jennî fer

3.8 METHOD OF CELL SEQUENCE

The landfill operation will progress in a series of cells as shown on Figure 3-6 (C-1). Cell No. 1 will begin at the east portion of the site with material placed against the east slope with the first lift consisting of 10 feet deep fill. Cell No. 1 will then continue to the south along the east bank and extend approximately 550 feet out from the west slope. Each lift will be compacted as the waste is placed in the cell. The access road will be relocated to provide access to the next cell. The cell landfilling will continue in similar fashion until the cell reaches a height of one-half of the vertical height of the slope. Some areas of the cells may have partial lifts, based on these elevations. The working face shall not exceed a slope of 3H:1V and a width of 100 feet along the side slopes. Cell closure will commence immediately after cell completion. Within 120 days of Cell No. 1 completion, the final 3 feet cover of soil will be placed and compacted to a minimum of 1.5 feet barrier layer with 18 inches of topsoil and vegetated, see Closure Plan. The stormwater retention pond (Pond 1) will be constructed at this time, see SWMP Section 6. The north and west sides of completed Cell No. 1 stormwater will drain to the temporary pond, in the northeast corner of the site.

Cell #2 is the next 560-foot strip to the south of Cell #1. Cell sequencing will continue to the south (through Cell #2) and then move to the west and north portions of the landfill for cells 3 to 13. Completion of cells 14 to 16 will entail filling the northeast temporary retention pond once the floor of the pond has been built up with clean debris or clean fill to the landfill base elevation of 80 feet NGVD in this portion of the landfill. The ponds constructed for completed cells within the buffer areas will approximately replace the stormwater capacity of the northeast temporary pond.

3-7

The sequence of filling operations are as follows (see Figures 3-17 through 3-22):

Fill cells 1, 2, & 3 two 10' lifts (100').

Fill cells 1 & 2 one 10' lift (110').

Fill cell 4 two 10' lifts (100').

Fill cells 3 & 4 one 10' lift (110').

Sequence 2 Fill cell 5 two 10' lifts (100').

Fill cells 6 & 7 three 10' lifts (110').

Fill cell 8 two 10' lifts (100').

Fill cells 1, 2, 3, & 4 one 10' lift (120'). Begin to close sides of 1, 2, 3 to 120'.

Fill cells 9 & 10 one 15' lift and two 10' lifts (120').

Fill cell 11 one 15' lift and two 10' lifts (120').

Fill cells 6 & 7 one 10' lift (120').

Begin to close sides of 6, 9, 10 to 120'.

Sequence 4 Fill cell 12 one 15' lift and two 10' lifts (120').

Fill cells 13 & 14 three 10' lifts (110').

Fill cells 15 & 16 two 10' lifts (100').

Sequence 5 Fill cells 8, 5, 15, & 16 one 10' lift (110').

Fill cells 15, 16, 8, 13, 5 & 14 one 10' lift (120').

Fill cells 16 south to 2, then west to 130'.

Begin to close outer cells to 130'.

Sequence 6 Fill cells 12 south to 9, then east two 10' lifts (150').

Begin to close outer cells to 150'.

Sequence 7 Fill cells 16 south to 2, then west to final elevation – 3 feet.

Complete final closure of landfill.

Lift height includes cover material. Due to the landfill bottom elevation, some lifts may not be a full 10 feet in height.

As each sequence is active, the following procedures will be followed.

- The access road to the working face will be constructed and graded as necessary.
- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length.

We plan to improve Enterprise Road to an all-weather access roadway from C.R.35A to the entrance of what will be the active portion of the proposed landfill. Enterprise RDF will maintain this access road to provide adequate access.

2.3 Effective Barrier

The existing Enterprise property currently has a wire fence along the perimeter of the site. A 6-foot security fence is to be constructed upon County permit approval. The security fence shall be a 6-foot high galvanized chain link fence, hereafter referred to as the "security fence." The chain link fence will be installed within 90 days of permit issuance. Three (3) foot square "NO TRESPASSING" signs with 5-inch letters will be installed at no less than 500-feet spacing and at all corners to notice unauthorized access. The only point of access into the proposed landfill site will be through the ticket gate at the entrance. This gate will be locked during closed hours.

An 8-feet high berm will be constructed along the frontages of Enterprise and Auton roads as a visual and noise buffer.

The required County and FDEP setbacks will be surveyed in and marked upon permit issuance.

3.0 OPERATING HOURS

The landfill shall have the following operating hours:

Day	Hours of Operation	
Monday through Friday	7:00 am to 6:00 PM	
Saturday	7:00 am to 2:00 PM	

Operational hours may be extended periodically to meet special requests of customers, but at no time will operating hours extend past 7:00 A.M. to 7:00 P.M. Monday through Saturday. Waste will not be accepted during non-daylight hours.

4.0 CONTINGENCY OPERATIONS

A natural disaster closing the facility would not cause a major impact on the surrounding communities. Debris originally destined for the proposed landfill would be rerouted to another permitted landfill site. In terms of equipment breakdown, there will be two working pieces of equipment for all stages of landfill operation. If both should breakdown, replacements can be rented or substituted from onsite or offsite within 24 hours.

If the site were to stay operational as a landfill to accept yard waste during and after a major storm, the excavation operations would cease and no soils would be removed from the site until waste receipt returned to normal levels.

The site access roads will be constructed to allow passage of vehicles under all expected weather conditions. See Appendix 3-B for the site's Contingency Plan.

5.0 WASTE STREAM QUALITY CONTROL PLAN

5.1 <u>Visual Inspection</u>

An estimated 1500 cubic yards of Class III waste material will be received at the facility daily. Materials brought onto the proposed Enterprise RDF site will be inspected three times. The first inspection takes place at the site entrance. The site will only accept Class III debris; therefore, any vehicles hauling unacceptable waste can be turned away by the attendant at the ticket gate. The gate attendant will question all waste carriers as to the character of their wastes. A video camera is planned to be installed over the proposed scale location that will allow the gate attendant to visually screen all carrier loads prior to disposal.

The second inspection is a visual inspection that will occur at the disposal/working face. This landfill employee, the spotter, stationed at the working face will be responsible for spotting trucks bringing in disposal loads. The spotter will show the drivers where to unload, and will also inspect the trucks to make sure unacceptable materials are not unloaded. The spotter will have the authority to ensure that unacceptable materials are reloaded on the truck the material was brought in on.

To ensure that all waste deposited in the Facility meets state and local requirements, all facility personnel shall receive training from their supervisor on the identification of unacceptable materials, which is any waste other than properly labeled and bagged ACM. Unregulated, non friable asbestos containing materials are not required to be bagged, but all other requirements are unchanged.

Each load of ACM arriving at the facility must be accompanied by a completed Waste Shipment Record (WSR) in accordance with 40 CFR 61.150. Each load will be inspected to insure that it is properly bagged, that bags are intact and properly sealed, and that the required warning labels and generator labels are affixed. Bags will not be opened prior to disposal.

arriving at the Facility for disposal will be visually screened by facility personnel a minimum of two times. The first screening will be at the weigh scales, controlling access to the Facility, where the truck drivers will be questioned as to what they are transporting and shipping documents reviewed. The gate attendant will also make a cursory visual examination and direct the drivers to the appropriate disposal area. If this examination identifies acceptable materials, the gate attendant will direct the drivers to the appropriate disposal area. If this examination turns up unauthorized material the truck shall be denied access to the site.

The second screening will be at the working face where a trained inspector/spotter will again question the driver and make a visual examination of the load prior to dumping and as it is dumped. This examination shall insure the ACM is properly bagged, the bags are intact and properly sealed, and that the warning labels and generator labels are affixed.

Enterprise RDF personnel will direct the waste hauler to the designated ACM disposal location in each cell, to be determined by the Operator or Site Manager. The ACM will be covered with 6-inches of soil at the end of any day, ACM is accepted. This designated ACM location will be recorded and updated by the annual topographic survey in accordance with 40 CFR 61.154. ACM disposal records will be maintained for the life of the landfill and disposal locations documented in the Closure Report.

the side slopes. Cell closure will commence immediately after cell completion. Within 120 days of Cell No. 1 completion, the final 3 feet cover of soil will be placed and compacted to a minimum of 1.5 feet barrier layer with 18 inches of topsoil and vegetated. The stormwater retention pond (Pond 1) will be constructed at this time. The north and west sides of completed Cell No. 1 stormwater will drain to the temporary pond, in the northeast corner of the site.

Cell #2 is the next 560-foot strip to the south of Cell #1. Cell sequencing will continue to the south (through Cell #2) and then move to the west and north portions of the landfill for cells 3 to 13. Completion of cells 14 to 16 will entail filling the northeast temporary retention pond once the floor of the pond has been built up with clean debris or clean fill to the landfill base elevation of 80 feet NGVD in this portion of the landfill. The ponds constructed for completed cells within the buffer areas will approximately replace the stormwater capacity of the northeast temporary pond.

The sequence of filling operations are as follows, (see Figures 3-17 through 3-22):

Sequence 1 Fill cells 1, 2, & 3 two 10' lifts (100').

Fill cells 1 & 2 one 10' lift (110').

Fill cell 4 two 10' lifts (100').

Fill cells 3 & 4 one 10' lift (110').

Sequence 2 Fill cell 5 two 10' lifts (100').

Fill cells 6 & 7 three 10' lifts (110').

Fill cell 8 two 10' lifts (100').

Fill cells 1, 2, 3, & 4 one 10' lift (120').

Begin to close sides of 1, 2, 3 to 120'.

Fill cells 9 & 10 one 15' lift and two 10' lifts (120').

Fill cell 11 one 15' lift and two 10' lifts (120').

Fill cells 6 & 7 one 10' lift (120').

Begin to close sides of 6, 9, 10 to 120'.

- Sequence 4 Fill cell 12 one 15' lift and two 10' lifts (120).

 Fill cells 13 & 14 three 10' lifts (110').

 Fill cells 15 & 16 two 10' lifts (100').
- Sequence 5 Fill cells 8, 5, 15, & 16 one 10' lift (110').

 Fill cells 15, 16, 8, 13, 5 & 14 one 10' lift (120').

 Fill cells 16 south to 2, then west to 130'.

 Begin to close outer cells to 130'.
- Sequence 6 Fill cells 12 south to 9, then east two 10' lifts (150').

 Begin to close outer cells to 150'.
- Sequence 7 Fill cells 16 south to 2, then west to final elevation 3 feet.

 Complete final closure of landfill.

Lift height includes cover material. Due to the landfill bottom elevation some lifts may not be a full 10 feet in height.

As each sequence is active, the following procedures will be followed.

- The access road to the working face will be constructed and graded as necessary.
- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length.
- Weekly cover of six (6) inches of soil will be placed on the working face.
- Intermediate cover of 12 inches of soil will be placed in areas that will not receive waste within 180 days. The cover may be removed immediately prior to placement of new waste.
- Stormwater will be diverted to the onsite temporary storage pond until the latter part of sequence four (4) when cells 15 & 16 begin to accept waste.

8.3 <u>Life Expectancy</u>

Adequate soil stocks will be maintained to provide the soil cover material for closure activities (approximately 800,000 cyds). The calculated volume of each of the proposed landfill cells and sequencing is presented on the attached Section 7, Table 1 of this submittal. At the proposed waste disposal rate, based on similar landfill's quarterly reports to the County, the landfill will dispose of approximately 459,000 cyds per year of non-compacted Class III materials; which corresponds to approximately 270,000 cyds of compacted wastes (1.7:1 ratio) as placed in the landfill. This calculates to roughly two (2) lifts across a cell per year or a maximum of approximately two, 6- acre, 10-foot, lifts per year. If this rate continues, we estimate that the life of each cell is approximately 2 years. Sequences 1 and 2 will be permitted first for landfilling.

Therefore, based upon the calculated volume of landfill space available, the landfill has an estimated life expectancy of 30 years at projected disposal volumes and compaction rates.

9.0 WASTE COMPACTION AND APPLICATION OF COVER

Waste received shall be segregated based on compatibility. Bulky, incompressible items shall be separated and reduced as appropriate by the chipper/crusher and disposed of or recycled. The remaining debris is disposed of in designated "cells" using onsite equipment to place the debris and a Rex 370-C Compactor, or equivalent, to weekly compact the waste. Initial cover material is planned to be excavated from onsite areas and placed weekly in approximately 6-inch layers on the compacted lifts to control vectors, reduce rain infiltration and provide a more stable working face area. The amount of weekly cover material required for the design life of the landfill is estimated to be approximately 400,000 cyds. An intermediate cover of one (1) foot of compacted soil will be applied if final cover or an additional lift is not to be applied within 180 days of cell completion (see Figure 3-8 (C-3) for final cover design of the Class III landfill site). The proposed final grades are shown in Figure 3-10 (C-5).

Cell closure shall conform to the grades and lines specified in the grading plan. The grading plan shall conform to the rules and regulation specified in 62-701.600, Florida Administrative Code. Pesticides when deemed necessary to control rodents, insects and other

10.2 Leachate Control

Liquid disposal will not be permitted at the proposed Class III Landfill site. Based on the proposal method for controlling waste disposed of, types of waste received (Class III), and the naturally protective hydrogeological setting, the facility qualifies for a liner exemption. No liner system is proposed for the Class III landfill primarily based on an existing natural clay layer underlying the landfill. Stormwater runoff will be prevented from contacting the wastes by a system of swales and berms, see Section 6. Since the acceptable wastes are as described in Rule 62-701.340(3)(d), FAC, they are not expected to produce leachate which poses a threat to public health or the equivalent. The proposed strict method of controlling types of wastes disposed also supports the leachate and liner exemption, see Section 5.0 The resulting seepage primarily will consist of rainwater runoff flowing through the top of fill material. The intervening soils within the zone of discharge (ZOD) are expected to attenuate and retard any pollutants generated prior to reaching the groundwater, and/or the bottom of the ZOD. Therefore, no leachate containment system is proposed.

10.3 Stormwater Control

The proposed Stormwater Management Plan for the landfill consists of "swales" and pond facilities constructed within the 200-foot landscape buffer zone to collect and contain stormwater runoff from the completed site. These stormwater facilities are designated to retain the 100-year, 24-hour storm volume as required by the FDEP. In the interim, stormwater will be controlled mainly by percolation into the soil or by overland flow to the temporary stormwater pond to be located in the northeast corner of the site. The site's topography generally slopes downward to the northeast thus facilitating stormwater collection.

The site manager will perform monthly inspections of the stormwater management system. Any areas in need of maintenance will be repaired within seven days.

11.0 SIGNS

Signs will be posted at the entrance to the Enterprise RDF site which will list the following information:

19.1 Water Quality Monitoring

Enterprise RDF will conduct the required initial and semi-annual groundwater monitoring at the sites' monitoring wells as described in the sites' Groundwater Monitoring Plan. Semi-annual reports of this monitoring will be submitted to Pasco County and FDEP in accordance with this plan. Quarterly monitoring will also be conducted and reported at specific wells per Pasco County conditions.

19.2 Landfill Operating Records

The operating record for the landfill will document daily as a minimum the following activities:

- Self inspections of landfill conditions, safety equipment and unacceptable waste received, any odor detected;
- Records used to develop permit applications;
- Change in construction, operation or closure permits and all supporting designs;
- Water quality sampling events, analytical reports, well installation or repair;
- Employee training;
- Facility construction, major maintenance, or demolition;
- Other activities that significantly affect facility operations.

The Operating Record will be kept at the landfill and be accessible to the landfill operators to maintain and for FDEP or Pasco County inspection at reasonable times.

Operational records will be maintained for the design life of the landfill. Water quality monitoring information, maintenance records, and permit reports will be maintained for a minimum of 10 years. Background water quality records will be maintained for the design period of the landfill.

20.0 EROSION CONTROL

The site's inherent design as an excavation pit will prevent stormwater from leaving the property. Stabilization by seeding and mulching of the final fill areas will occur as the fill operations progress from cell to cell.

21.0 FINAL GRADE PLAN

Final grade plan of the facility is shown on the plans (Figure 3-10 (C-5)) and in the cross-sections (Figures 3-8 (C-3) and 3-9 (C-4)). The mixed areas will be brought to the proposed Landfills bottom grade prior to accepting any waste material. The finished elevation after all fill material has been placed and final cover provided is designed to reclaim excavated areas back to the grade which existed prior to the site being opened as a mine with allowance for positive drainage.

22.0 CLOSURE AND LONG TERM CARE

The site's Reclamation and Closure Plan details the procedures to properly close and maintain the landfill during the 30-year post-closure period. A Closure Report will be prepared for the landfill that details the site-specific limitations for land use based on geotechnical stability (settlement), potential gas migration, and site access. Long-term maintenance of erosion controls, stormwater controls and monitoring devices is discussed in the Closure Plan, Section 7, of the permit application document.

23.0 CERTIFICATION

Laboratory testing and observation of cell floor conditions during cell construction completion shall consist of the following:

- Percent fines of the cell floor in accordance with ASTM-D1140 will be determined at a minimum frequency of three tests per cell.
- Hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell floor material will be performed at a minimum frequency of one test per cell, or one test per differing lithology encountered.
- Observance for unstable areas such as limestone, sink holes and soft ground will be performed for each cell.

If the test data from a well floor section does not meet the requirements of the anticipated conditions of the hydrologeological and geotechnical reports, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity

Par

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 6/18/01	Subject Enraphise Con
Time 4: 20	Permit No.
	County PAJEO
M JEMNIFER DEAL	Telephone No.
Representing	HALFMAN
Phoned Me [] Was	Called [] Scheduled Meeting [] Unscheduled Meeting
Other Individuals Involved in Conve	ersation/Meeting
Summary of Conversation/Meeting	
JD RETURN	is my call. I ship i
REDIGION THE	- FAXED PAUF AND LOOKS OLL
BOT I WEET	FINAL REPLACEMENT PACES
1. PROTTED FIG	3-24,25,26 127 OFFISH
ton the	repent
2. Consent to	ATE WM BE ON COURS OF
enc- Rep	ione loss plan
3 RENSION T	DATES WAS SI- ON EACH PAGE TO
1 SHOW RESI	ported to RAZI
t. SIR- PLAN	s will be complete - Ad same DATE
51 baca 1	
JTD SAID WI	Ul seno titis Wk 11
	SCT OF AU OLL AN I WAI
REDIEN FIN	LE SETS AND DISCUSS WITH JOHNM -
	<i>x</i> , ,
(continue on another	Signature
sheet, if necessary)	Title

PA-01 1/96

pap

STATE OF FLORIDA STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 6[13]01	Subject Entenpolise LIII
Time 9.05	Permit No.
	County
M Jennifer Deal	County
Representing	HARMAN
	as Called [] Scheduled Meeting [] Unscheduled Meeting
Other Individuals Involved in Co	nversation/Meeting
Summary of Conversation/Meeti	ng
I colles	- J.D. and ASK FOR
The a ele	AN CAPIES " OF THE TIME REPORT AND REPERENCE IN HAM SIB GETTIME.
100000	ATTERENCE in HAN STIB LETTER.
JD SAWD	sete will fac trude weter
EATTORIAL	CHANUES 184 WITH MINON - REDISIONS
· As Disessi	ico at our netterno 5/10/01/
Mor cons	ow with copies that ALL NOT
4	HTHO AFTER DEP RESIDEN.
· ·	offer to call me IF site Has
- , ,	ts mans
,	
(continue on another	Signature
sheet, if necessary)	Title

PA-01 1/96

pap