SOUTH FLORIDA WATER MANAGEMENT DISTRICT
WATER USE INDIVIDUAL PERMIT

APPLICATION NO: 140711-10 **PERMIT NUMBER:** 26-01163-W

DATE ISSUED: September 15, 2014 **EXPIRATION DATE:** September 15, 2034

PERMITTEE: LEE COUNTY SOLID WASTE DIVISION
10500 BUCKINGHAM ROAD
FORT MYERS, FL 33905

PROJECT NAME: LEE / HENDRY CTY REGIONAL SOLID WASTE DISPOSAL FAC

PROJECT LOCATION: Hendry County, S4, 9, 16/T45S/R28E

PROJECT DESCRIPTION/AUTHORIZING:

The continued use from the water table aquifer for dewatering at a maximum depth of 0.0 feet NGVD for the construction and expansion of five landfills.

This is to notify you of South Florida Water Management District's (District) agency action concerning Permit Application Number 140711-10, received July 11, 2014. This action is taken pursuant to Chapter 373, Part II, Florida Statutes (F.S.), Rule 40E-1.603 and Chapter 40E-2, Florida Administrative Code (F.A.C). Based on the information provided, District rules have been adhered to and a Water Use Individual Permit is in effect for this project subject to:

1. Not receiving a filed request for an administrative hearing pursuant to Section 120.57 and Section 120.569 (F.S.), or request a judicial review pursuant Section 120.68, F.S.; and
2. The attached 29 permit conditions.
3. The attached 12 exhibits.

By acceptance and utilization of the water authorized under this permit, the Permittee agrees to hold and save the District and its successors harmless from any and all damages, claims or liabilities that may arise by reason of the construction, maintenance or use of activities authorized by this permit. Should you object to the permit, please refer to the attached "Notice of Rights" that addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Should you wish to object to the proposed agency action or file a petition or request, please provide written objections, petitions, requests and/or waivers to the District, attention of Office of the District Clerk, South Florida Water Managment District, Post Office Box 24680, West Palm Beach, FL 33416-4680.

CERTIFICATION OF SERVICE

I HEREBY CERTIFY THAT this written notice has been mailed or electronically transmitted to the Permittee (and the persons listed in the attached distribution list) this 16th day of September, 2014, in accordance with Section 120.60(3), F.S. Notice was also electronically posted on this date through a link on the home page of the District's website (my.sfwmd.gov/ePermitting).

BY: _____
JUANITA ADDIE
(DEPUTY CLERK, SOUTH FLORIDA WATER MANAGEMENT DISTRICT)

LIMITING CONDITIONS

1. This permit shall expire on September 15, 2034.

2. Application for a permit modification may be made at any time.

3. Water use classification:

   Dewatering

4. Source classification is:

   Surface Water from:
   Water Table aquifer

5. Pursuant to Section 2.5.3 of the Basis of Review for Water Use Permit Applications Within the South Florida Water Management District, neither maximum monthly nor annual allocation volumes are specified.

6. Pursuant to Rule 40E-1.6105, F.A.C., Notification of Transfer of Interest in Real Property, within 30 days of any transfer of interest or control of the real property at which any permitted facility, system, consumptive use, or activity is located, the permittee must notify the District, in writing, of the transfer giving the name and address of the new owner or person in control and providing a copy of the instrument effectuating the transfer, as set forth in Rule 40E-1.6107, F.A.C.

   Pursuant to Rule 40E-1.6107 (4), until transfer is approved by the District, the permittee shall be liable for compliance with the permit. The permittee transferring the permit shall remain liable for all actions that are required as well as all violations of the permit which occurred prior to the transfer of the permit.

   Failure to comply with this or any other condition of this permit constitutes a violation and pursuant to Rule 40E-1.609, Suspension, Revocation and Modification of Permits, the District may suspend or revoke the permit.

   This Permit is issued to:

   Lee County Solid Waste Division
   PROJECT - Lee/Hendry County Regional Solid Waste Disposal Facility Master Dewatering Permit
   10500 Buckingham Road
   Ft. Myers, FL 33905

7. Withdrawal facilities:

   Surface Water - Proposed:

   3 - 6" x 60 HP X 5000 GPM Centrifugal Pumps
   3 - 8" x 60 HP X 5000 GPM Centrifugal Pumps

8. Permittee shall mitigate interference with existing legal uses that was caused in whole or in part by the

permittee's withdrawals, consistent with the approved mitigation plan. As necessary to offset the interference, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means.

Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1 in 10 year drought event that results in the:

(A) Inability to withdraw water consistent with provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; or

(B) Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent.

9. Permittee shall mitigate harm to existing off-site land uses caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm caused by withdrawals, as determined through reference to the conditions for permit issuance, includes:

(A) Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other governmental authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g. fill for construction, mining, drainage canal, etc.)

(B) Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or

(C) Land collapse or subsidence caused by reduction in water levels associated with consumptive use.

10. Permittee shall mitigate harm to the natural resources caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to the conditions for permit issuance includes:

(A) Reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface,

(B) Reduction in water levels that harm the hydroperiod of wetlands,

(C) Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,

(D) Harmful movement of contaminants in violation of state water quality standards, or

(E) Harm to the natural system including damage to habitat for rare or endangered species.

11. If any condition of the permit is violated, the permit shall be subject to review and possible modification, enforcement action, or revocation.

12. Authorized representatives of the District, with advance notice to the permittee, shall be permitted to enter, inspect, and observe the permitted system to determine compliance with permit conditions.

13. The Permittee is advised that this permit does not relieve any person from the requirement to obtain all necessary federal, state, local and special district authorizations.

14. The permit does not convey any property right to the Permittee, nor any rights and privileges other than those specified in the Permit and Chapter 40E-2, Florida Administrative Code.

15. Permittee shall submit all data as required by the implementation schedule for each of the limiting conditions to: SFWMD, Regulatory Support Bureau, P.O. Box 24680, West Palm Beach, FL 33416-4680.

16. The Permittee is advised that this Permit does not relieve the Permittee of complying with all county, state, and federal regulations governing these operations, maintenance, and reclamation of the borrow pit.

17. The excavation shall be constructed using sound engineering practice. If the excavation endangers the properties of adjacent owners through erosion, side wall collapse, etc., the Permittee shall cease operation upon notification by the District until a method to prevent such occurrences is found and instituted.

18. Permittee shall immediately cease dewatering when continued dewatering would create a condition hazardous to the health, safety, and general welfare of the people of the District.

19. Permittee shall be responsible for clearing shoaling if the Permittee's dewatering operation creates shoaling in adjacent water bodies.

20. Permittee shall comply with turbidity and general water quality standards for surface discharge into receiving streams, as established by Chapter 62-302, Florida Administrative Code.

21. Permittee shall not lower the water table below the following depths:

    0 feet NGVD or 30 feet below land surface

22. A copy of the permit, its limiting conditions, and dewatering plan is required to be kept on site at all times during dewatering operations by the lead contractor or site manager.

23. In the event of a declared water shortage, water withdrawal reductions will be ordered by the District in

accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C. The Permittee is advised that during a water shortage, pumpage reports shall be submitted as required by Chapter 40E-21, F.A.C.

24. The Permittee shall conduct dewatering activities in adherence to the following operating plan:

Exhibits 5A through 5J and 6A and 6B for the dewatering site plans and calculations.

25. Off-site discharge may be made via the facilities and conditions that follows:
The dewatering effluent will be routed first into hydraulic recharge trenches located between wetlands and active dewatering operations, then to existing water storage/retention areas, the storm water management system, and/or temporary retention areas. All efforts will be made to retain the dewatering effluent on-site. However, off-site discharge may be warranted. If off-site discharge is necessary, silt fencing, turbidity barriers/control measures, turbidity monitoring, and groundwater quality monitoring will be performed prior to off-site discharge through the existing storm water management system via three existing storm water structures DS-1, DS-2, and DS-3. The facility is authorized under the Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity (MSGP # FLR05F517-003) under the National Pollutant Discharge Elimination System (NPDES) regulatory program to discharge off-site during dewatering activities. Dewatering plans and a Master Dewatering Routing Plan are included as Exhibits 5A and 5B. Calculations are included as Exhibit 6. The turbidity and groundwater quality monitoring plans are included as Exhibits 7 and 8, respectively.

26. When off-site discharge occurs in a non storm event, The Permittee shall record pumpage monthly and submit the data quarterly.

27. The Permittee's turbidity monitoring plan shall be implemented as follows:

A turbidity monitoring plan shall be implemented as outlined Exhibit 7, to ensure that the dewatering operation will not result in a violation of state water quality standards. If monitoring indicates that state water quality standards are not being maintained, the dewatering operation will cease until monitoring demonstrates that water quality standards are met. Results shall be retained on-site for District Review.

28. The Permittee's groundwater quality monitoring plan shall be implemented as follows:

In the event that off-site discharge is warranted, Exhibit 8 includes the groundwater quality monitoring and sampling procedures.

29. At least two weeks prior to commencing dewatering, the permittee shall provide site-specific dewatering plans for each proposed dewatering activity to the District for review and approval. Permittee shall not initiate dewatering prior to receiving written notification from District Staff, that the proposed dewatering activity is consistent with the approved master permit.

The issuance of this permit does not serve as approval for any dewatering activities other than the ongoing dewatering activities associated with the expansion of the Ash Monofill Landfill as shown in Exhibits 9A-C. The

Permittee shall not initiate future dewatering activity prior to receiving written notification from District Staff, that the proposed activity is consistent with the approved master permit. Site specific plans shall submitted prior include but not be limited to those criteria outlined in Section 2.5.2 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District and that the proposed dewatering activity is consistent with the approved Master Permit.

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., the following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a SFWMD decision which does or may affect their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

FILING INSTRUCTIONS

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery, or e-mail. **Filings by facsimile will not be accepted after October 1, 2014.** A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the District Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the District Clerk. **Delivery of a petition to the SFWMD's security desk does not constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office.** An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by e-mail must be transmitted to the District Clerk's Office at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed.

INITIATION OF AN ADMINISTRATIVE HEARING

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, SFWMD file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency decision.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If the SFWMD takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

MEDIATION

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the District Clerk within 30 days of rendering of the final SFWMD action.

Last Date for Agency Action:
October 9, 2014

WATER USE STAFF REPORT

FINAL APPROVED BY EXECUTIVE DIRECTOR SEPTEMBER 15, 2014

Application Number:	140711-10
Permit Number:	26-01163-W
Project Name:	LEE / HENDRY CTY REGIONAL SOLID WASTE DISPOSAL FAC
Water Use Permit Status:	EXISTING/PREVIOUSLY PERMITTED/MODIFICATION
Location:	HENDRY COUNTY, S4, 9, 16/T45S/R28E
Applicant's Name and Address:	LEE COUNTY SOLID WASTE DIVISION 10500 BUCKINGHAM ROAD FORT MYERS, FL 33905
Water Use Classification:	Dewatering

Sources:

Surface Water from: Water Table aquifer

Proposed Withdrawal Facilities - Surface Water

Source: Water Table aquifer
3 - 8" X 60 HP X 5000 GPM Centrifugal Pumps
3 - 6" X 60 HP X 5000 GPM Centrifugal Pumps

Rated Capacity Source	Status Code	GPM	MGM	MGY
Water Table aquifer	P	30,000	1,313.3	15,768
Totals:		**30,000**	**1,313.3**	**15,768**

PURPOSE

The purpose of this application is to modify the short-term dewatering Water Use Permit 26-01163-W to a master dewatering permit to allow expansion of Class I and Class III Landfills (five landfill expansions). Withdrawals are from the water table aquifer.

PROJECT DESCRIPTION

Lee/Hendry County Regional Solid Waste Disposal Facility (Project) is an active solid waste facility located in western Hendry County as depicted in Exhibits 1 through 3, that includes a Class I Landfill, a Class III Landfill, and an Ash Monofill Landfill (1,860 acres). The Project was initially issued a short term dewatering permit (Water Use Permit 26-01163-W) on December 23, 2013 for the expansion of a 20.6-acre Ash Monofill Class I

PROJECT DESCRIPTION (CONTINUED)

Landfill and three leachate collection trenches/sumps. Expansion of the Ash Monofill Landfill is ongoing and will not be completed within a one year time frame. Additionally, it was determined that all of the landfills would need to continue with expansions over a 20-year time period. Therefore, a master dewatering permit has been requested pursuant to Section 2.3.2 (B) of the Basis of Review (BOR) for Water Use Permit Applications within the South Florida Water Management District (District). Withdrawals are from the water table aquifer via six centrifugal pumps and a well-point system (Exhibit 4). Future proposed dewatering expansions and individual site specific plans (Limiting Condition 29) shall be submitted prior to dewatering operations.

Permit History:
The Project was first permitted on December 23, 2013. The ash monofill landfill currently permitted under the short term dewatering Water Use Permit 26-01163-W is presently being constructed, but will require more time than the current permit authorizes. Therefore, the continuation of dewatering for the ash monofill landfill will be included in this master individual dewatering permit. The same Permit number 26-01163-W will be used for file continuity.

Permit Operations:
The Project is expected to take approximately 20 years to complete five landfill expansions depending on economic conditions. The Permittee proposes that each landfill expansion is expected to require approximately 1 year but not continuously over the projected 20 year construction plan. The maximum depth of dewatering and excavation will be a depth of 0.0 feet National Geodetic Vertical Datum (NGVD), which is approximately 30 feet below the average land surface. The dewatering effluent will be routed first into hydraulic recharge trenches located between wetlands and active dewatering operations, then to existing water storage/retention areas, the storm water management system, and/or temporary retention areas. All efforts will be made to retain the dewatering effluent on-site during construction of the larger landfills. However, off-site discharge may be warranted. If off-site discharge is necessary, silt fencing, turbidity barriers/control measures, turbidity monitoring, and groundwater quality monitoring will be performed prior to off-site discharge through the existing storm water management system via three existing storm water structures DS-1, DS-2, and DS-3. The facility is authorized under the Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity (MSGP # FLR05F517-003) under the National Pollutant Discharge Elimination System (NPDES) regulatory program to discharge off-site during dewatering activities. Dewatering plans and a master dewatering routing plan are included as Exhibits 5A through 5J. Calculations of average and maximum pumping rates are included as Exhibit 6. The turbidity and groundwater quality monitoring plans are included as Exhibits 7 and 8, respectively.

PROJECTED WATER USE DEMANDS

As per Section 2.5.3 of the BOR, neither maximum monthly nor annual allocation volumes are specified for individual dewatering water use permits. The Applicant states

PROJECTED WATER USE DEMANDS (CONTINUED)

that future dewatering projects for future landfill expansions will be similar to the previously issued short term dewatering for the Ash Monofill construction project, but that site-specific plans and calculations will be submitted two weeks prior to all proposed dewatering projects. In addition, estimates of the maximum monthly and annual dewatering withdrawals for each Project are required to be provided by the Applicant. Based on the submitted dewatering plan a maximum monthly withdrawal of 1,277 million gallons per month (MGM) and 12,410 million gallons per year (MGY) were estimated to be required for the Project's dewatering activities (Exhibit 6).

WATER RESOURCE IMPACT EVALUATION

Water Resource Availability

Water Table aquifer

This is a master permit for dewatering activities by the Lee/Hendry County Regional Solid Waste Disposal Facility in order to expand Class I and Class III Landfills. Land surface elevation across the Project is approximately 30 feet NGVD. The dewatering operation will withdraw water from the water table aquifer. The water table receives direct recharge from rainfall and surface water bodies, and runoff from surrounding land surfaces. In addition, the dewatering effluent will be retained on-site to the maximum extent possible. Based on information obtained from the District's Technical Publication 88-12 (Ground Water Resource Assessment of Hendry County, Florida), the thickness of the water table is approximately 50 feet thick. The maximum excavations and dewatering for future construction expansions of the landfills is proposed to be approximately 30 feet below land surface or 0.0 feet NGVD. The actual maximum excavation and dewatering depths will vary depending on the specific project design. The Permittee will provide site specific plans pursuant to Limiting Condition 29, addressing any resource concerns that are associated with the proposed dewatering, including assurances that the water resource availability of the water table aquifer will not be harmed. Based upon this procedure, the potential for harm to occur to the water resource availability of the water table aquifer as a result of the authorized activity is considered minimal.

Ongoing Dewatering: 20.6-Acre Ash Monofill Construction
Site specific plans for the Ash Monofill construction were previously permitted under a short term dewatering and is on-going. The maximum depth of dewatering for the Ash Monofill expansion construction is 14 feet NGVD. The Ash Monofill expansion area and effluent routing is shown in Exhibits 9A, 9B, and 9C. As approved, in the short term dewatering permit, the effluent will be discharged to the existing on-site ditch/hydraulic recharge trench to maintain the water level at approximately 31 feet NGVD, at least one foot above land surface elevation and to the on-site temporary storage detention area as shown in Exhibit 9B. There will be no off-site discharge. Therefore, the potenatial for harm to occur to the water resource availability of the water table aquifer is considered minimal.

WATER RESOURCE IMPACT EVALUATION (CONTINUED)

Existing Legal Users

Water Table aquifer

The nearest existing legal user of the water table is permitted under Lee County Solid Waste Division (Water Use Permit 26-00710-W) for industrial usage associated with the landfill activities (compost spraying, dust control, aquifer remediation/leachate treatment, equipment and truck washing, and public water supply). The Project has been a permitted landfill since 2003. The majority of dewatering withdrawals will be returned to the water table aquifer via on-site recharge trenches and on-site retention areas. In addition, the water table aquifer receives direct recharge from rainfall and runoff from surrounding land surfaces. Therefore, the potential for the dewatering withdrawals for the Project to interfere with existing legal users is considered minimal. The Permittee shall provide site specific plans pursuant to Limiting Condition 29, addressing any resource concerns that are associated with the proposed dewatering.

Ongoing Dewatering: 20.6-Acre Ash Monofill Construction
Site specific plans for the Ash Monofill construction were previously permitted under a short term dewatering and is on-going. The maximum depth of dewatering for the Ash Monofill expansion construction is 14 feet NGVD. The Ash Monofill expansion area and effluent routing is shown in Exhibits 9A, 9B, and 9C. As approved, in the short term dewatering permit, the effluent will be discharged to the existing on-site ditch/hydraulic recharge trench to maintain the water level at approximately 31 feet NGVD, at least one foot above land surface elevation and to the on-site temporary storage detention area as shown in Exhibit 9B. There will be no off-site discharge. Therefore, the potential to impact existing legal users of the water table aquifer is considered minimal.

Migration Of Saline Water

Water Table aquifer

The nearest surface saline water source is the C-43 Canal downstream of Structure S-79, located approximately seven miles northwest of the Project. The chloride concentration of the water table aquifer is less than 100 milligrams per liter. The most commonly used aquifer in this region is the Sandstone aquifer. Chloride data from nearby United States Geological Survey monitor wells indicate that the chloride concentration in the Sandstone aquifer, at a depth of approximately -100 feet NGVD is approximately 250 milligrams per liter. Due to the confinement that exists between the water table aquifer and the Sandstone aquifer, which acts as a hydrologic barrier between aquifers, and the on-site recharge during dewatering activities, the potential for saline water intrusion or upconing to occur as a result of the proposed dewatering withdrawals is considered minimal.

Ongoing Dewatering: 20.6-Acre Ash Monofill Construction
Site specific plans for the Ash Monofill construction were previously permitted under a

short term dewatering and is on-going. The maximum depth of dewatering for the Ash Monofill expansion construction is 14 feet NGVD. The Ash Monofill expansion area and effluent routing is shown in Exhibits 9A, 9B, and 9C. As approved, in the short term dewatering permit, the effluent will be discharged to the existing on-site ditch/hydraulic recharge trench to maintain the water level at approximately 31 feet NGVD, at least one foot above land surface elevation and to the on-site temporary storage detention area as shown in Exhibit 9B. There will be no off-site discharge. Therefore, the potentiel for the lateral migration or upconing of saline water is considered minimal.

Wetland Environments

Water Table aquifer

The site contains freshwater marshes, wet prairies, and mixed forested wetlands. A 25-foot setback will be maintained between the wetlands and the current construction/dewatering activities. The Applicant is using hydraulic recharge trenches to protect wetlands from drawdown as approved by the previously issued short term dewatering permit. The current dewatering effluent will be continue to be maintained on-site and the recharge trenches will be maintained one foot above land surface at all times during the dewatering activities associated with the construction of the Ash Monofill Landfill. There has been no reported harm to wetlands within the Project. Based on the dewatering plans for the Ash Monofill Landfill project, the potential for harm to occur to wetlands as a result of the dewatering activities is considered minimal. The Permittee shall provide site specific plans (Limiting Condition 29) addressing any resource concerns that are associated with the proposed dewatering, including assurances that the wetlands will not be harmed by the use of hydrologic barriers. Wetland and surface water management is described in Exhibits 10A and 10B.

Ongoing Dewatering: 20.6-Acre Ash Monofill Construction
Site specific plans for the Ash Monofill construction were previously permitted under a short term dewatering and is on-going. The maximum depth of dewatering for the Ash Monofill expansion construction is 14 feet NGVD. The Ash Monofill expansion area and effluent routing is shown in Exhibits 9A, 9B, and 9C. As approved, in the short term dewatering permit, the effluent will be discharged to the existing on-site ditch/hydraulic recharge trench to maintain the water level at approximately 31 feet NGVD, at least one foot above land surface elevation and to the on-site temporary storage detention area as shown in Exhibit 9B. There will be no off-site discharge. Therefore, the potential for harm to occur to wetlands is considered minimal.

Sources Of Pollution

Water Table aquifer

There are no known sources of groundwater pollution within one mile of the Project.

WATER RESOURCE IMPACT EVALUATION (CONTINUED)

The Project is an active landfill and has ongoing water quality monitoring per the Florida Department of Environmental Protection (FDEP) Permit 0130719-010-SO/01 for the Class I Landfill, FDEP Permit 0130719-013-SO/01 for the Ash Monofill and FDEP Permit 0130719-014-SO/T3 for the Class III Landfill. The ongoing water quality monitoring is in accordance with Florida Administrative Code Rule 62-701.510(8)(a). Leachate monitoring was eliminated per the FDEP but other groundwater and surface water monitoring is ongoing and will continue throughout the dewatering expansion projects per state guidelines. The majority of the dewatering effluent will be returned to the water table aquifer via on-site recharge trenches and on-site retention areas. Additionally, the water table aquifer receives direct recharge from rainfall and runoff from surrounding land surfaces. Per the Project's MSGP # FLR05F517-003 which falls under their NPDES regulatory program, the Permittee is allowed to discharge off-site during dewatering activities. In the event that off-site discharge does occur, the Permittee will report the volumes of water being discharged off-site, and provide turbidity and groundwater quality test results prior to off-site discharges as detailed in Exhibits 7, 8, and 10.

Ongoing Dewatering: 20.6-Acre Ash Monofill Construction
Site specific plans for the Ash Monofill construction were previously permitted under a short term dewatering and is on-going. The maximum depth of dewatering for the Ash Monofill expansion construction is 14 feet NGVD. The Ash Monofill expansion area and effluent routing is shown in Exhibits 9A, 9B, and 9C. As approved, in the short term dewatering permit, the effluent will be discharged to the existing on-site ditch/hydraulic recharge trench to maintain the water level at approximately 31 feet NGVD, at least one foot above land surface elevation and to the on-site temporary storage detention area as shown in Exhibit 9B. There will be no off-site discharge. Therefore, the potential for the migration of potential sources on pollution is considered minimal.

Other Impacts

Water Table aquifer

For the current dewatering of the Ash Monofill project and the work proposed under the master dewatering plan, groundwater that is not lost to evaporation is being returned to the water table aquifer in the vicinity of the dewatering withdrawals. The water level in the recharge trenches will be maintained at one foot above land surface during dewatering, providing a hydrologic buffer to wetlands and direct aquifer recharge. Therefore, the withdrawals for the Project are not expected to result in significant reductions in water levels on the property of an existing off-site land use to the extent that the designed function of a water body and related surface water management improvements are damaged (not including aesthetic values), damage to agriculture, including damage resulting from reduction in soil moisture resulting from water use; or land collapse or subsidence caused by reduction in water levels

associated with water use (Section 3.6 of the BOR).

ADDITIONAL INFORMATION

Project Site Issues

Legal Control and Land Use

Lee County Solid Waste Division owns the Project. All withdrawal facilities are located within the Project site (Section 2.1.2 of the BOR).

Water Use Accounting

Per Section 2.3.2 of the BOR, neither maximum monthly nor annual allocation volumes are specified for individual dewatering water use permits. The Applicant states that future dewatering will be similar to the previously issued short term dewatering for the Ash Monofill construction project, but that new site-specific plans and calculations will be submitted two weeks prior to all proposed dewatering projects (Limiting Condition 29). However, in the event off-site discharge is warranted, the Permittee must submit pumpage reports along with turbidity monitoring, and groundwater quality monitoring (Limiting Conditions 26, 27, and 28, respectively).

Permit Reporting Requirements

The maximum depth of dewatering will be 0.0 feet NGVD (Limiting Condition 21).

A copy of the dewatering water use permit, its limiting conditions, and dewatering plan is required to be kept on site at all times during dewatering operations by the lead contractor or site manager (Limiting Condition 22).

If off-site discharge is necessary, the Permittee shall adhere to the requirements specified in Limiting Condition 25 and following the turbidity monitoring requirements listed in Exhibit 7 and Limiting Condition 27.

If off-site discharge is necessary, the Permittee shall adhere to the water quality monitoring requirements specified in Limiting Condition 28 and in Exhibit 8.

Pursuant to Limiting Condition 29, the Permittee shall submit site-specific plans for each dewatering activity. The site specific plans shall include but not be limited to those criteria outlined in Section 2.5.2 of the BOR. This permit application specifically authorizes the dewatering and/or excavation for the continued expansion of the Ash Monofill construction which was previously permitted under a short term dewatering permit. The maximum depth of dewatering for the Ash Monofill expansion construction is 14 feet NGVD. The Ash Monofill expansion area and effluent routing is shown in Exhibits 9A, 9B and 9C. As previously approved, the effluent will be discharged to the

ADDITIONAL INFORMATION (CONTINUED)

existing ditch/hydraulic recharge trench to maintain the water level at approximately 31 feet NGVD (wetland protection) and to the temporary storage detention area (Exhibit 9B).

Permit Duration

This water use permit modification results in no change in impact to the water resource and existing legal users as compared to the existing permit (Section 1.7.2.2.D.5). The Permittee has demonstrated that the Project will require approximately 20 years to complete. Therefore, staff recommends a water use permit duration of 20 years.

ENVIRONMENTAL RESOURCE PERMIT STATUS:

PERMITTED (No. 26-00541-S)

RIGHT OF WAY PERMIT STATUS:

Not Applicable

RECOMMENDATIONS

Project Name: LEE / HENDRY COUNTY REGIONAL SOLID WASTE DISPOSAL FACILITY

Application Number: 140711-10

Permit Number: 26-01163-W

RECOMMENDATION

Authorizing: The continued use from the water table aquifer for dewatering at a maximum depth of 0.0 feet NGVD for the construction and expansion of five landfills.

STAFF EVALUATION

REVIEWER:

Jewelene S. Harris, NRM

Lisa J. Ullman, P.G., WU

SUPERVISOR:

Laura Layman, NRM

Thomas Colios, WU

CONSULTING HYDROGEOLOGIST:

Simon Sunderland, P.G. **Date:** September 8, 2014

WATER USE BUREAU CHIEF:

Maria C. Clemente, P.E. **Date:** 9/9/14

Limiting Conditions

1. This permit shall expire on September 15, 2034.

2. Application for a permit modification may be made at any time.

3. Water use classification:

   Dewatering

4. Source classification is:

   Surface Water from:
   Water Table aquifer

5. Pursuant to Section 2.5.3 of the Basis of Review for Water Use Permit Applications Within the South Florida Water Management District, neither maximum monthly nor annual allocation volumes are specified.

6. Pursuant to Rule 40E-1.6105, F.A.C., Notification of Transfer of Interest in Real Property, within 30 days of any transfer of interest or control of the real property at which any permitted facility, system, consumptive use, or activity is located, the permittee must notify the District, in writing, of the transfer giving the name and address of the new owner or person in control and providing a copy of the instrument effectuating the transfer, as set forth in Rule 40E-1.6107, F.A.C.

   Pursuant to Rule 40E-1.6107 (4), until transfer is approved by the District, the permittee shall be liable for compliance with the permit. The permittee transferring the permit shall remain liable for all actions that are required as well as all violations of the permit which occurred prior to the transfer of the permit.

   Failure to comply with this or any other condition of this permit constitutes a violation and pursuant to Rule 40E-1.609, Suspension, Revocation and Modification of Permits, the District may suspend or revoke the permit.

   This Permit is issued to:

   Lee County Solid Waste Division
   PROJECT - Lee/Hendry County Regional Solid Waste Disposal Facility Master Dewatering Permit
   10500 Buckingham Road
   Ft. Myers, FL 33905

7. Withdrawal facilities:

Surface Water - Proposed:

3 - 6" x 60 HP X 5000 GPM Centrifugal Pumps
3 - 8" x 60 HP X 5000 GPM Centrifugal Pumps

8. Permittee shall mitigate interference with existing legal uses that was caused in whole or in part by the permittee's withdrawals, consistent with the approved mitigation plan. As necessary to offset the interference, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means.

   Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1 in 10 year drought event that results in the:

   (A) Inability to withdraw water consistent with provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; or

   (B) Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent.

9. Permittee shall mitigate harm to existing off-site land uses caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm caused by withdrawals, as determined through reference to the conditions for permit issuance, includes:

   (A) Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other governmental authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g. fill for construction, mining, drainage canal, etc.)

   (B) Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or

   (C) Land collapse or subsidence caused by reduction in water levels associated with consumptive use.

10. Permittee shall mitigate harm to the natural resources caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to the conditions for permit issuance includes:

    (A) Reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface,

    (B) Reduction in water levels that harm the hydroperiod of wetlands,

    (C) Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,

    (D) Harmful movement of contaminants in violation of state water quality standards, or

    (E) Harm to the natural system including damage to habitat for rare or endangered species.

11. If any condition of the permit is violated, the permit shall be subject to review and possible modification, enforcement action, or revocation.

12. Authorized representatives of the District, with advance notice to the permittee, shall be permitted to enter, inspect, and observe the permitted system to determine compliance with permit conditions.

13. The Permittee is advised that this permit does not relieve any person from the requirement to obtain all necessary federal, state, local and special district authorizations.

14. The permit does not convey any property right to the Permittee, nor any rights and privileges other than those specified in the Permit and Chapter 40E-2, Florida Administrative Code.

15. Permittee shall submit all data as required by the implementation schedule for each of the limiting conditions to: SFWMD, Regulatory Support Bureau, P.O. Box 24680, West Palm Beach, FL 33416-4680.

16. The Permittee is advised that this Permit does not relieve the Permittee of complying with all county, state, and federal regulations governing these operations, maintenance, and reclamation of the borrow pit.

17. The excavation shall be constructed using sound engineering practice. If the excavation endangers the properties of adjacent owners through erosion, side wall collapse, etc., the Permittee shall cease operation upon notification by the District until a method to prevent such occurrences is found and instituted.

18. Permittee shall immediately cease dewatering when continued dewatering would create a condition hazardous to the health, safety, and general welfare of the people of the District.

19. Permittee shall be responsible for clearing shoaling if the Permittee's dewatering operation creates shoaling in adjacent water bodies.

20. Permittee shall comply with turbidity and general water quality standards for surface discharge into receiving streams, as established by Chapter 62-302, Florida Administrative Code.

21. Permittee shall not lower the water table below the following depths:

    0 feet NGVD or 30 feet below land surface

22. A copy of the permit, its limiting conditions, and dewatering plan is required to be kept on site at all times during dewatering operations by the lead contractor or site manager.

23. In the event of a declared water shortage, water withdrawal reductions will be ordered by the District in accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C. The Permittee is advised that during a water shortage, pumpage reports shall be submitted as required by Chapter 40E-21, F.A.C.

24. The Permittee shall conduct dewatering activities in adherence to the following operating plan:

    Exhibits 5A through 5J and 6A and 6B for the dewatering site plans and calculations.

25. Off-site discharge may be made via the facilities and conditions that follows:
    The dewatering effluent will be routed first into hydraulic recharge trenches located between wetlands and active dewatering operations, then to existing water storage/retention areas, the storm water management system, and/or temporary retention areas. All efforts will be made to retain the dewatering effluent on-site. However, off-site discharge may be warranted. If off-site discharge is necessary, silt fencing, turbidity barriers/control measures, turbidity monitoring, and groundwater quality monitoring will be performed prior to off-site discharge through the existing storm water management system via three existing storm water structures DS-1, DS-2, and DS-3. The facility is

authorized under the Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity (MSGP # FLR05F517-003) under the National Pollutant Discharge Elimination System (NPDES) regulatory program to discharge off-site during dewatering activities. Dewatering plans and a Master Dewatering Routing Plan are included as Exhibits 5A and 5B. Calculations are included as Exhibit 6. The turbidity and groundwater quality monitoring plans are included as Exhibits 7 and 8, respectively.

26. When off-site discharge occurs in a non storm event, The Permittee shall record pumpage monthly and submit the data quarterly.

27. The Permittee's turbidity monitoring plan shall be implemented as follows:

    A turbidity monitoring plan shall be implemented as outlined Exhibit 7, to ensure that the dewatering operation will not result in a violation of state water quality standards. If monitoring indicates that state water quality standards are not being maintained, the dewatering operation will cease until monitoring demonstrates that water quality standards are met. Results shall be retained on-site for District Review.

28. The Permittee's groundwater quality monitoring plan shall be implemented as follows:

    In the event that off-site discharge is warranted, Exhibit 8 includes the groundwater quality monitoring and sampling procedures.

29. At least two weeks prior to commencing dewatering, the permittee shall provide site-specific dewatering plans for each proposed dewatering activity to the District for review and approval. Permittee shall not initiate dewatering prior to receiving written notification from District Staff, that the proposed dewatering activity is consistent with the approved master permit.

    The issuance of this permit does not serve as approval for any dewatering activities other than the ongoing dewatering activities associated with the expansion of the Ash Monofill Landfill as shown in Exhibits 9A-C. The Permittee shall not initiate future dewatering activity prior to receiving written notification from District Staff, that the proposed activity is consistent with the approved master permit. Site specific plans shall submitted prior include but not be limited to those criteria outlined in Section 2.5.2 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District and that the proposed dewatering activity is consistent with the approved Master Permit.

HENDRY COUNTY, FLORIDA

N

Application No: 140711-10

Map Date: 2014-08-19

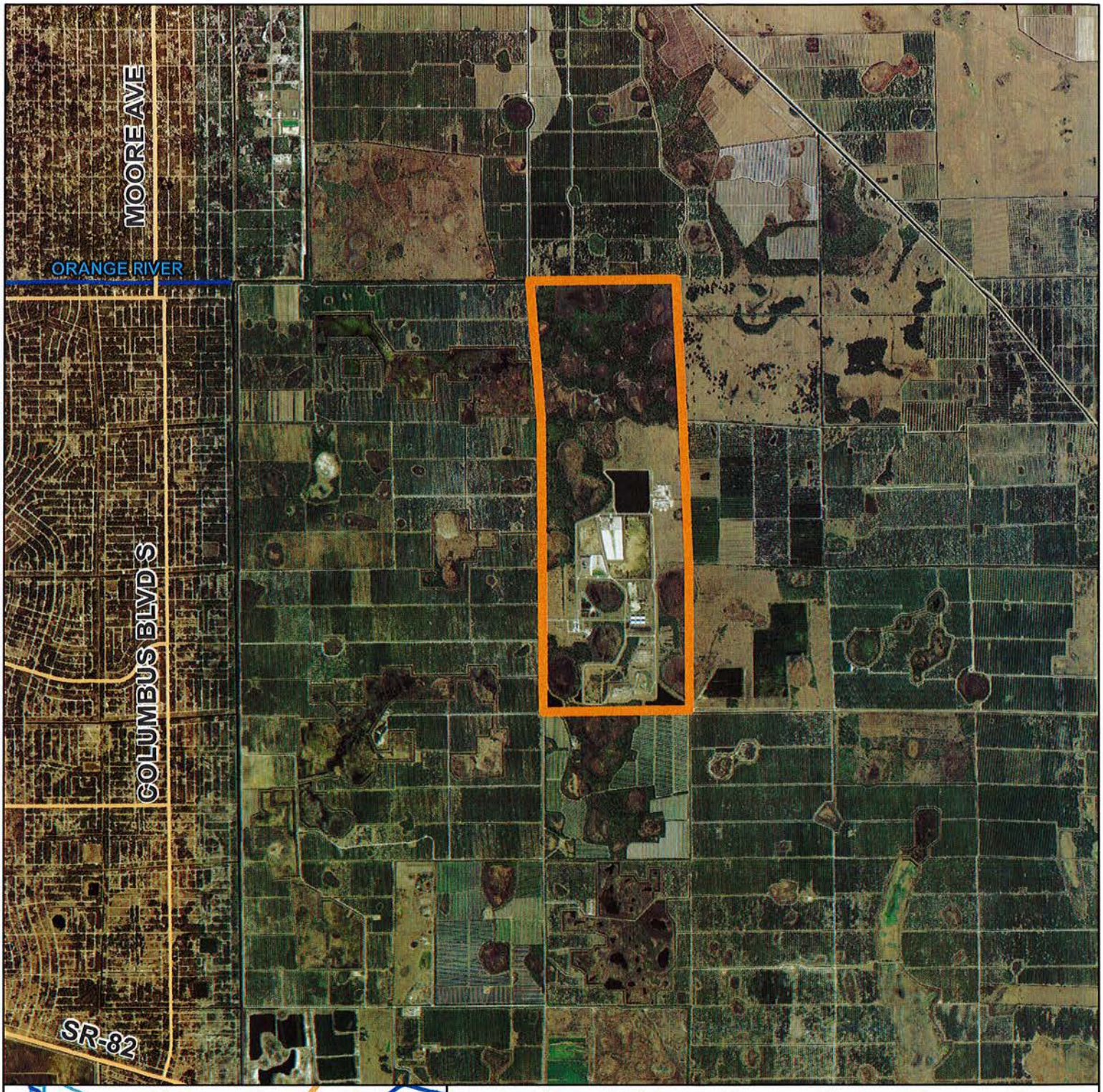
Permit No: 26-01163-W

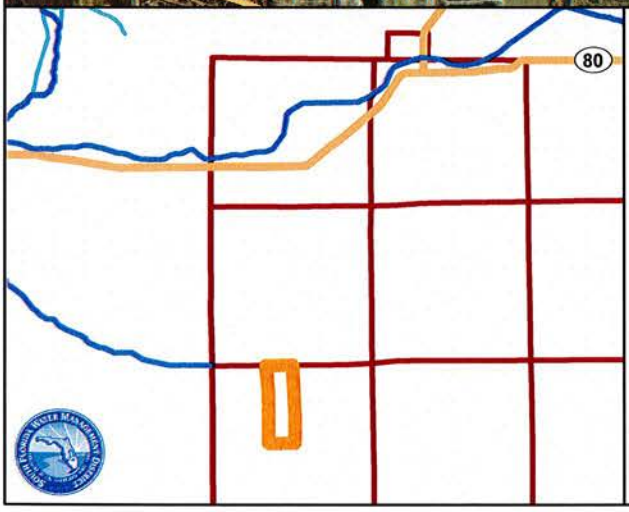
Sec 4, 9, 16 / Twp 45 / Rge 28

Project Name: LEE / HENDRY COUNTY
REGIONAL SOLID WASTE DISPOSAL FACILITY

0 5 10 Miles

Exhibit No: 1





HENDRY COUNTY, FLORIDA

N

Legend

Application

Map Date: 2014-08-20

Application No: 140711-10

Permit No: 26-01163-W

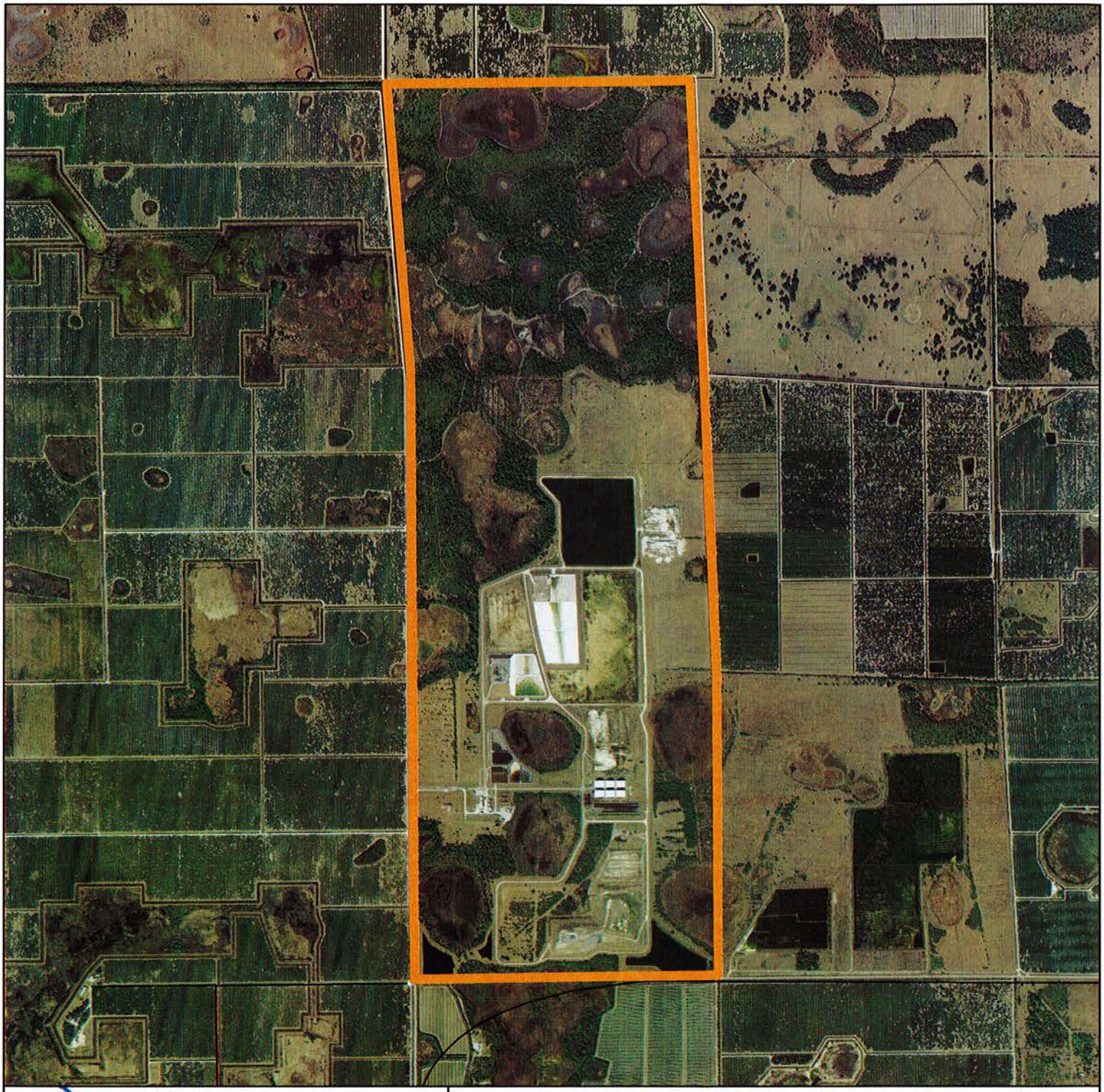
Sec 4, 9, 16 / Twp 45 / Rge 28

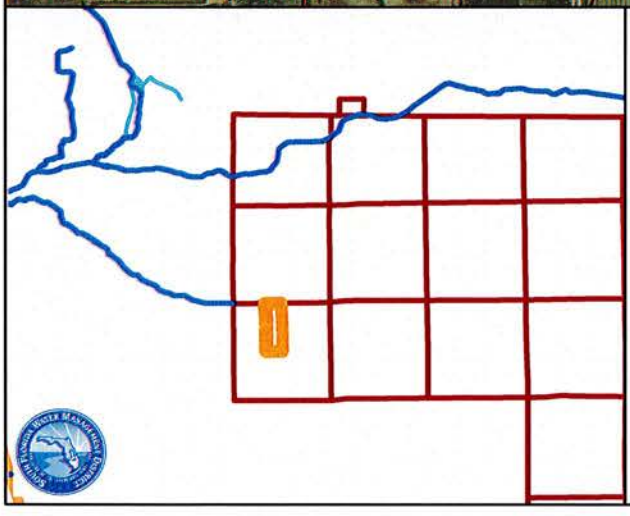
Project Name: LEE / HENDRY COUNTY
REGIONAL SOLID WASTE DISPOSAL FACILITY

0 1 2

Miles

Exhibit No: 2





HENDRY COUNTY, FLORIDA

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Legend

Application

Map Date: 2014-08-20

Application No: 140711-10

Permit No: 26-01163-W

Sec 4, 9, 16 / Twp 45 / Rge 28

Project Name: LEE / HENDRY COUNTY
REGIONAL SOLID WASTE DISPOSAL FACILITY

0 0.475 0.95

Miles

Exhibit No: 3

TABLE - B

Description Of Surface Water Pumps

Application Number: **140711-10**

Pump ID	267251	267252	267253	267254	267255	267256
Name	Pump 1	Pump 2	Pump 3	Pump 4	Pump 5	Pump 6
Map Designator	Pump 1	Pump 2	Pump 3	Pump 4	Pump 5	Pump 6
Facility Group						
Existing/Proposed	P	P	P	P	P	P
Pump Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Diameter(Inches)	6	6	6	8	8	8
Pump Capacity(GPM)	5,000	5,000	5,000	5,000	5,000	5,000
Pump Horse Power	60	60	60	60	60	60
Two Way Pump ?	N	N	N	N	N	N
Elevation (ft. NGVD)	14	14	14	14	14	14
Planar Location						
Source						
Feet East						
Feet North						
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Mining / Dewatering	Mining / Dewatering	Mining / Dewatering	Mining / Dewatering	Mining / Dewatering	Mining / Dewatering
Surface Water Body	Water Table aquifer	Water Table aquifer	Water Table aquifer	Water Table aquifer	Water Table aquifer	Water Table aquifer

Exhibit No: 4

Attachment 10 (F.1)

Master Dewatering Routing Plan

Lee/Hendry Regional Solid Waste Disposal Facility

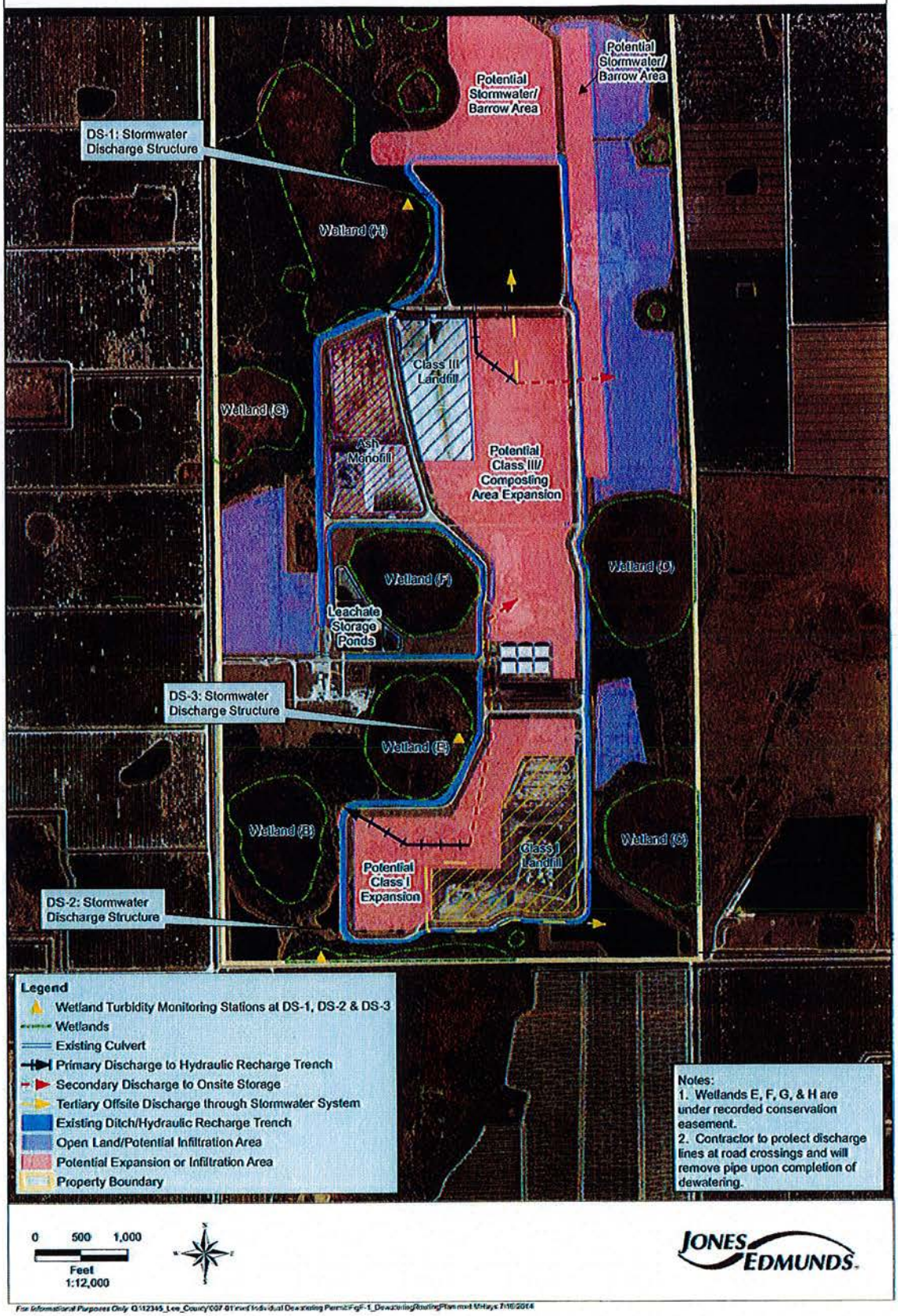
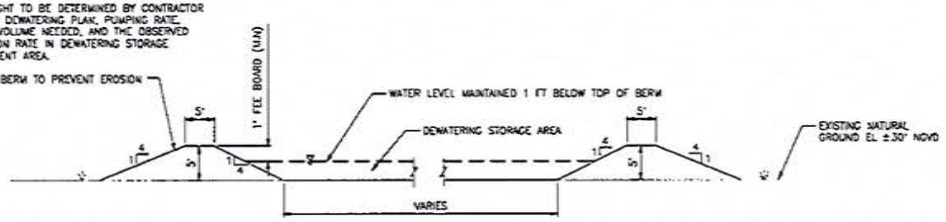


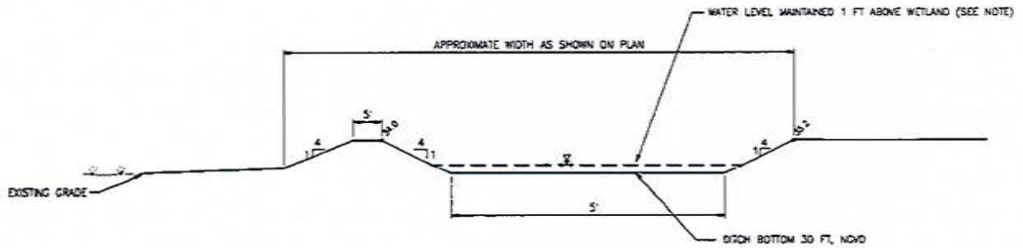
Exhibit 5A

- FINAL HEIGHT TO BE DETERMINED BY CONTRACTOR BASED ON DEWATERING PLAN, PUMPING RATE, STORAGE VOLUME NEEDED, AND THE OBSERVED INFILTRATION RATE IN DEWATERING STORAGE IMPOUNDMENT AREA.
- STABILIZE BERM TO PREVENT EROSION



PROPOSED TEMPORARY WATER STORAGE AREA PROFILE VIEW

NTS



NOTE: WATER LEVEL IN TRENCH TO BE MAINTAINED AT ELEVATION OF 1' ABOVE THE EXISTING WETLAND GROUND SURFACE ELEVATION.

EXISTING DITCH/HYDRAULIC RECHARGE TRENCH

NTS

ATTACHMENT 11 (F.2)
DEWATERING PROFILE VIEW
LEE/HENDRY COUNTY REGIONAL SOLID WASTE DISPOSAL FACILITY
HENDRY COUNTY, FLORIDA

JONES EDMUNDS

Exhibit 5B

PERMIT APPLICATION

PROJECT DURATION AND QUANTITIES

Total Number of Days for the Project:

A twenty (20) year permit is requested based on anticipated future dewatering needs. Dewatering will be performed as needed during the term of the permit and specific project details are unknown at this time. However, the anticipated dewatering projects or phases were estimated for the 20 year permit term requested. A conservative estimate of 5 dewatering projects, each 1 year in duration, were projected to occur over the 20 year permit term. These estimates were used to arrive at a total number of days for the project of 1,825 days. In accordance with the BOR, a site-specific dewatering plan to include the total number of days for the proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering. Dewatering will not be initiated prior to receiving written notice from the District that the proposed dewatering activity is consistent with the approved Master Permit.

PROJECT DESCRIPTION

A conservative estimate of five landfill expansions each requiring dewatering for a one year period was used to develop the information presented in this permit application. The proposed future expansion areas are shown on the Master Dewatering Routing Plan provided. The proposed dewatering projects will typically require pumpage of less than 10 million gallons per day; however, unforeseen conditions encountered during construction, an unusually wet rainy season, large cell or excavation sizes and/or an accelerated excavation rate, could increase this estimate significantly. Per the calculations provided below, it's estimated that the pumpage may range from 34 million gallons per day to 67 million gallons per day and the total project pumpage may be up to 122,275 million gallons. Excavation and associated dewatering may extend to 0.0 feet, NGVD (30 feet bls) depending on the proposed landfill expansion design. Pumps will be used to dewater the active part of the excavation to the desired depth and dewatering effluent will be routed first to hydraulic recharge trenches located between wetlands and active dewatering operations to prevent wetland impacts, and then to existing water storage/retention areas, the storm water management system and/or temporary retention areas. All efforts will be made to retain the dewatering effluent on site in undeveloped upland areas, temporary water storage or retention areas and/or the storm water management system. However, off-site discharge of dewatering effluent may be required if construction occurs when the storm water management system is actively discharging or as the amount of available open space for dewatering effluent storage is reduced with future expansions. If offsite discharge is necessary, silt fencing, other appropriate turbidity barriers and/or control measures will be used and a turbidity monitoring program will be implemented to prevent adverse impacts to wetlands and nearby surface waters. The dewatering water will be available to the Contractor to use in dust control or other needs during the project construction period.

Based on past landfill construction projects and associated dewatering activities, future dewatering will occur from the water table aquifer; dewatering from the sandstone aquifer is not proposed. Based on the hydrogeological and geotechnical study that was performed at the site (Jammal & Associates, May 1990) the hydraulic gradient in the water table aquifer varies from about 0.0004 feet/foot to 0.003 feet/foot. Field tests performed indicate that the horizontal hydraulic conductivity ranges from 28 feet/day to 48 feet/day. The effective porosity of the water table aquifer, the percentage of porous space available for flow, was determined to be in the range of 0.35 to 0.48 (no units). By entering these values in the equation for determining the average ground water flow velocity through a typical cross-section of the aquifer, the results indicate the potential range of groundwater flow rates across the site is large. The ground water flow rates in the water table aquifer range from 0.024 feet/day to 0.69 feet/day. These site-specific values were used in the calculations to determine the approximate dewatering volumes as presented in Part C.7. The exception to this is that a hydraulic gradient of 0.1 feet/foot was used in the calculations as this gradient is typical for most dewatering operations.

METHOD OF EXCAVATION

Specific excavation methods will be selected by the Contractor based on specific project needs, but will generally be accomplished using excavation equipment (hydraulic excavators, backhoes and/or scrapers) and off-road trucks. The excavated material may be used at the project site as backfill or will be stockpiled for use as future landfill cover material. The specific excavation methods will be provided in the site-specific dewatering plan to be submitted to the District for review and approval at least two weeks prior to dewatering.

MAXIMUM (MINIMUM) ELEVATION OF EXCAVATION

The maximum excavation depth and/or minimum elevation of excavation for future construction activities is proposed to be approximately 30 feet below land surface (bls) or 0.0 feet, NGVD, respectively. The actual maximum excavation depth will vary depending on the specific project design which is not defined at this time. In accordance with the Basis of Review (BOR), Section 2.5.3.B., a site-specific dewatering plan to include the maximum excavation depth for each proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering. Dewatering will not be initiated prior to receiving written notice from the District that the proposed dewatering activity is consistent with the approved Master Dewatering Permit.

Lee/Hendry Co. Regional Solid Waste Landfill Facility
Application 140711-10 Permit 26-01163-W **Exhibit 5D**

MAXIMUM (MINIMUM) ELEVATION OF DEWATERING

A maximum dewatering depth and/or minimum elevation of dewatering for future projects is proposed to be approximately 30 feet bls or 0.0 feet, NGVD, respectively. In accordance with the BOR, a site-specific dewatering plan to include the maximum dewatering depth for each proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering. Dewatering will not be initiated prior to receiving written notice from the District that the proposed dewatering activity is consistent with the approved Master Dewatering Permit.

DEWATERED AREAS/PROJECT PHASING

Dewatering will be performed as needed for the anticipated landfill expansions at the Facility. The projected expansions are expected to include 2 expansions of the existing Class I landfill and 3 expansions of the existing Class III Landfill within the appropriate landfill expansion area as shown on the Master Dewatering Routing Plan provided. The individual expansion areas (5) are not delineated on this Plan as the specifics of each expansion are unknown at this time and will depend on future conditions. The total potential Class I landfill and Class III landfill/composting expansion areas as shown on Attachment 10 comprise approximately 52.5 acres and 83.4 acres, respectively, or a total of approximately 136 acres. These areas are not expected to change as they are approved by the Facility's FDEP Permits and SFWMD Permit 26-00541-S.

Based on the total size of the potential expansion areas, each expansion project area is expected to range from 20 to 30 acres although dewatering will not be required over the entire expansion area. Based on previous expansion designs, it's estimated that dewatering will only be necessary for the leachate collection trenches proposed for each expansion area. The number of leachate collection trenches can vary from one to five depending on the size of the expansion area and the leachate collection system design; however, for the calculations presented in Part C.7, three leachate collection trenches are estimated for each of the five projected landfill expansion/dewatering projects. It was assumed that the trenches will range from 200 to 400 foot by 800 to 1000 foot. A trench size of 400 foot by 1000 foot with a perimeter length of 2,800 feet was used in the pumpage volume calculations. This is similar to the trench size proposed in the application for Dewatering Permit 26-01163-W issued for the Ash Monofill Expansion project currently underway at the Facility.

In accordance with the BOR, a site-specific dewatering plan to include the specific dewatering location, size and areal extent of the cells or trenches requiring excavation and dewatering and other project specific details for each proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering. Dewatering will not be initiated prior to receiving written notice from the District that the proposed dewatering activity is consistent with the approved Master Dewatering Permit.

Lee/Hendry Co. Regional Solid Waste Landfill Facility
Application 140711-10 Permit 26-01163-W **Exhibit 5E**

METHOD OF DEWATERING

Specific dewatering methods will be determined by the Contractor based on the proposed landfill expansion design and dewatering needs. The dewatering systems will generally include well point pumps or vacuum-assisted trash pumps or a combination of both. In accordance with the BOR, a site-specific dewatering plan describing the specific dewatering system, number of pumps, withdrawal and discharge locations maximum dewatering depth for each proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering.

The proposed project dewatering plan will specify areas to be used for temporary storage of dewatering effluent and the locations of existing and/or proposed ditches to be used as hydraulic recharge trenches between wetlands and the dewatering operation. The potential expansion areas, wetland locations, hydraulic recharge trench locations, storm water system detention basins and other upland areas that may be used for temporary water storage are shown on the Master Dewatering Routing Plan provided. Silt fence will be placed around the perimeter of wetlands located near the dewatering operation, on the other side of the hydraulic trenches and in other locations as needed to prevent impacts to the wetlands. Dewatering effluent will be discharged first to the hydraulic recharge trenches to establish water levels at a minimum of 1 foot above natural land surface and as needed to other storage areas on site. The recharge trenches will be designed and maintained to ensure that dewatering effluent discharges are consistent with the conditions of the Master Dewatering Permit and applicable District criteria. Once the required water level is established in the hydraulic recharge trenches, additional dewatering effluent will be routed to temporary water storage/retention areas capable of accommodating up to 4 feet of dewatering effluent and/or the existing storm water management system, depending on the specific project location. Dewatering effluent will be pumped to the hydraulic recharge trenches as needed to maintain the required water level to protect the wetlands. Undeveloped areas may also be bermed to provide dewatering effluent storage. Temporary retention areas constructed to store dewatering effluent will be removed upon completion of the project. Cross-sections of the proposed hydraulic recharge trenches/existing ditches and temporary water storage areas are provided. Additional details of the proposed hydraulic trenches and temporary water storage areas will be submitted to the District with the site-specific dewatering project details at least 2 weeks prior to the start of dewatering. Dewatering will not be initiated until written approval is received from the District.

DEWATERING WATER DISCHARGE

DEWATERING WATER STORAGE

During dewatering, existing ditches will be used as hydraulic recharge trenches to protect the nearby wetlands from drawdown. Temporary ditch blocks will be constructed and existing culverts will be blocked to create the hydraulic recharge trenches and to re-route stormwater flow around the dewatering areas.

Lee/Hendry Co. Regional Solid Waste Landfill Facility
Application 140711-10 Permit 26-01163-W **Exhibit 5F**

As dewatering begins and as needed during the dewatering operations, the primary discharge route will be to the hydraulic recharge trenches or existing ditches located between the wetlands and the dewatering area. The water level in the ditches will be maintained a minimum of 1 foot above the natural wetland elevation. Once the hydraulic recharge trenches are filled, a secondary discharge route will be used to route water to areas selected for onsite temporary water storage. The temporary water storage areas will be selected based on available upland areas onsite and the location of the specific project dewatering activities. Temporary retention or water storage areas will be sized using the following calculations:

Dewatered Area x Dewatering Depth = Total Volume
Total Volume x Porosity = Actual Volume
Actual Volume/Retention Depth = Retention Area

Hydraulic recharge trenches and existing detention areas, where necessary, will also provide for additional storage for dewatering effluent. Additionally, the sizing of the retention areas does not account for seepage and infiltration back into the water table aquifer from the detention areas. Temporary water storage areas may be constructed in the future expansion areas; however, as future landfill expansions are constructed, the area available for temporary water storage within these areas will decrease. While the future expansion areas are the most convenient for temporary water storage due to their proximity to the expansion areas, temporary water storage areas can be constructed in the potential stormwater/borrow areas and/or the open land/potential infiltration areas shown on the Master Dewatering Routing Plan provided in Attachment 10 (F.1).

The water level in temporary water storage areas will be monitored to prevent overflow. Attempts will be made to store all dewatering water on-site; however, if this it is not feasible, a tertiary discharge route will be used to direct water to the surface water system as described in Part D.2 below. The SWD will make all efforts to schedule the expansion projects such that the majority of the dewatering occurs during the dry season when the storm water management system is typically not discharging and has available storage capacity. In the event of a major storm that requires the full operating capacity of the storm water management system, any temporary ditch and/or culvert blocks installed for the dewatering project will be removed and the system will be restored to operate in accordance with Permit No. 26-00541-S. If this occurs, and off-site discharge of dewatering effluent via the site's storm water management system is deemed necessary, the procedures described in Part D.2 will be implemented. The Master Dewatering Routing Plan provided in Attachment 10 (F.1) shows potential landfill expansion construction areas, existing ditches to be used for hydraulic recharge trenches, temporary water storage areas, discharge structures and turbidity monitoring locations for offsite discharges.

Lee/Hendry Co. Regional Solid Waste Landfill Facility
Application 140711-10 Permit 26-01163-W **Exhibit 5G**

In accordance with the BOR, a site-specific dewatering plan to include details of any temporary modifications to the storm water management system, operation of the site's storm water management system and/or the management of storm water during the proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering. Dewatering will not be initiated prior to receiving written notice from the District that the proposed dewatering activity is consistent with the approved Master Permit.

OFFSITE DEWATERING DISCHARGE

During times when the storm water management system is discharging, off-site discharge of dewatering effluent may be necessary. If it is determined that the specific project dewatering effluent cannot be retained onsite, offsite discharge will be made only through the facilities authorized in Surface Water Management Permit 26-00541-S in accordance with the conditions of that Permit. The surface water management system has three existing discharge structures, DS-1, DS-2 and DS-3, as shown on the Master Dewatering Routing Plan in Attachment 10 (F.1).

Structure DS-1 is located on the west side of the north pond and discharges west to Wetland H. Structure DS-2 is located on the south side of the small pond located immediately west of the Class I landfill footprint (south central pond) and discharges south to Fussel Slough Basin through existing culverts under Church Road and a series of ditches. Structure DS-3 is located on the northwest perimeter of the Class I landfill footprint and discharges west to Wetland E. Wetland E discharges to Wetland B via an interconnect swale constructed as required when the Facility was initially developed. Discharge from Wetland B combines with the discharge from DS-2 prior to discharging offsite as described above.

The North and Central Basins of the project were previously approved to discharge 46 cfs and the South Basin of the project was previously approved to discharge 36 cfs. Based on the flood routing calculations for the 25-year, 72-hour storm event for the combined discharge from the Central and North Basins through structure DS-1 (Central to North Basin discharge) and an existing 3 foot diameter corrugated metal pipe (Central and North Basin combined discharge), the peak design discharge stage and rate are 31.8 feet, NGVD and 29.86 cfs. Based on the flood routing calculations for the 25-year, 72-hour storm event, for the South Basin through structures DS-2 and DS-3, the peak design discharge stage and rate are 33.4 feet, NGVD and 36 cfs. Thus, the permitted project discharges are within the allowable limit for the area.

Dewatering effluent will be routed through temporary storage areas and/or through the existing storm water system authorized by Permit No. 26-00541-S as needed in order to use as much of the available onsite capacity and to allow for reduction of turbidity before offsite discharge occurs.

Lee/Hendry Co. Regional Solid Waste Landfill Facility
Application 140711-10 Permit 26-01163-W **Exhibit 5H**

All offsite discharge will be in accordance with the conditions of Permit No. 26-00541-S and the Master Dewatering Permit. In no case will the quantity of offsite discharge exceed the maximum permitted amount noted above for each discharge structure. The two areas proposed for future expansion include the Class I Landfill and the Class III Landfill/Composting Area. The Class III Landfill/Composting Area is in the north central portion of the Facility and the Class I Landfill is in the south portion of the Facility as shown on the Master Dewatering Routing Plan provided in Attachment 10 (F.1).

During the Class III Landfill/Composting Area expansions, the dewatering effluent will be routed first to the ditches to the east and/or west which will serve as hydraulic recharge trenches to protect the wetlands. Additional dewatering will be routed to the open areas within the potential Class III/Composting Expansion Area and/or to the north and east where water will be allowed to infiltrate. If it is not feasible to store all dewatering effluent in the open areas onsite, the effluent will be routed to the storm water pond to the north of the Class III Landfill. The north storm water pond discharges to Wetland H via discharge structure DS-1 to the North Basin and ultimately offsite as previously described.

During the Class I Landfill expansions, dewatering effluent will first be routed to the existing ditches to the east, west and/or south which will serve as hydraulic recharge trenches to protect the wetlands. Additional water will be routed to open areas within the potential Class I Expansion Area and/or to the north and east where the effluent will be allowed to infiltrate. If it is not feasible to store all dewatering effluent in the open areas onsite, the effluent will be routed to one or more of the storm water ponds located south of the Class I Landfill. The southeast and southwest storm water ponds discharge to the south central storm water pond which discharges offsite via structure DS-2 as previously described. Per the storm water management system design, storm water within the Class I Landfill footprint discharges via DS-3 to Wetland E which then discharges to Wetland B. Discharge from Wetland B combines with discharge from DS-2 before discharging offsite as previously described. In all cases, dewatering effluent will be managed in accordance with the conditions of the Master Dewatering Permit and Permit 26-00541-S.

Before off-site discharge of dewatering effluent is initiated, turbidity control measures including silt fence and/or floating turbidity barriers will be placed around outfall structures and at intermediary points between the dewatering location and the ultimate discharge point(s). The existing surface water management system includes large wet detention areas that should reduce turbidity to acceptable levels prior to off-site discharge. Should off-site discharge of dewatering effluent become necessary, a turbidity monitoring program will be implemented to monitor turbidity levels of dewatering effluent discharging from the site. The Turbidity Monitoring Plan provided in Attachment 7 (D.2) will be implemented to ensure that discharge from the project does not exceed 29 NTU above background levels.

Turbidity levels will be monitored in accordance with the Turbidity Monitoring Plan at one or more of the three discharge structures (DS-1, DS-2 and DS-3) depending on the location of the expansion if offsite discharge is necessary. The turbidity monitoring stations at each of the three discharge structures are shown on the Master Dewatering Routing Plan provided in Attachment 10 (F.1). Additional turbidity monitoring stations may be located as needed based on the project specific conditions. Based on the results of monitoring, additional turbidity control measures may be installed. Based on these measures, no impacts to the environment or existing permitted users are anticipated from the proposed dewatering activities. In accordance with the BOR, a site-specific dewatering plan to include the routing of dewatering effluent and management and monitoring of any off-site discharge of dewatering effluent for each proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering. Dewatering will not be initiated without written notice from the District that the proposed dewatering activity is consistent with the Master Permit.

INVENTORY OF DEWATERING PHASES

The inventory of dewatering phases is projected to contain 5 dewatering projects coinciding with the 5 projected landfill expansions at the Facility. While this will likely change with time, the projected schedule is as follows:

Period	Dewatering Project	Dewatering Needs	Pumpage Range
Years 0-5	Class I Landfill Expansion	Leachate trench excavation	< 10 mgd – 34 mgd
Years 4-8	Class III Landfill Expansion	Leachate trench excavation	< 10 mgd – 34 mgd
Years 8-12	Class I Landfill Expansion	Leachate trench excavation	< 10 mgd – 34 mgd
Years 12-16	Class III Landfill Expansion	Leachate trench excavation	< 10 mgd – 34 mgd
Years 16-20	Class III Landfill Expansion	Leachate trench excavation	< 10 mgd – 34 mgd

In accordance with the BOR, a site-specific dewatering plan to include the specific methods proposed to protect sensitive areas from dewatering effluent and/or impacts due to dewatering discharges for each proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering. Dewatering will not be initiated prior to receiving written notice from the District that the proposed dewatering activity is consistent with the approved Master Dewatering Permit.

Lee/Hendry Co. Regional Solid Waste Landfill Facility
Application 140711-10 Permit 26-01163-W **Exhibit 5J**

FLOW VOLUME DERIVATION/CALCULATIONS

Average and Maximum (gallons per day) Pumpage

The anticipated average daily pumpage volumes were calculated using the values and equations shown below.

Hydraulic gradient (typical for dewatering operations) = 0.1 feet/foot
Hydraulic conductivity (conservative value) = 100 feet/day
Porosity = 0.5
Daily excavation rate = 1 acre
Excavation depth = 30 feet
Perimeter of excavation area (conservative value) = 2,800 feet (1000 ft. x 400 ft.)
Number of leachate trenches per expansion = 3 - 6

Daily excavation volume = 1 acre/day x 43,560 sf/acre x 30 feet = 1,306,800 cf/day
Volume of water in excavation = 1,306,800 cf/day x 0.5 = 653,400 cf/day

Flow of water into cell (cf/day) = Perimeter of cell (feet) x max. depth of dewatering (feet) x hydraulic conductivity (feet/day) x hydraulic gradient (feet/foot).

This represents the upper limit of flow into the system at the time the entire cell or trench has been excavated. Inflow may be less when the excavation begins as the perimeter will be smaller.

The daily volume of water that will flow into the area being dewatered is based on the estimated hydraulic conductivity and the application of Darcy's Law is:

2,800 feet x 30 feet x 100 feet/day x 0.1 = 840,000 cf/day

Therefore, the combined volume of water in the excavated trench and the flow of water to the excavated trench or cell per day is:

653,400 cf/day + 840,000 cf/day = 1,493,400 cf/day x 7.48 gallons/cf = 11.2 mgd per cell

With 3 cells or trenches excavated simultaneously, the estimated pumpage during an active dewatering project is:

Daily Pumpage Volume: 3 cells x 11.2 mgd/cell=33.6 mgpd or 34 mgd

If the landfill design incorporates 6 trenches, and the contractor chooses to excavate them all simultaneously, the maximum daily dewatering volume would be:

Maximum Pumpage Volume: 6 trenches x 11.2 mgd/cell = 67.2 mgd

Based on the estimated pumpage volume, a maximum monthly volume of 1,277 million gallons per month is requested.

Maximum Monthly Pumpage Volume: 1,277 MGM

Thus, the average and maximum daily dewatering volumes of 34 and 67 million gallons per day and a maximum monthly dewatering volume of 1,277 million gallons per month are requested.

Total Project Days and Pumpage

Since each dewatering project is estimated to last one year or 365 days, the total number of dewatering days for the 20 year permit term is: 365 days/project x 5 projects = 1,825 days.

Thus, the total maximum pumpage over the 20 year permit is:
67 mgd x 5 years x 365 days/year = ***122,275 million gallons total for the 5 expansions projects***.

And the total average project pumpage over the 20 year permit is:

34 mgd x 5 years x 365 days/year = ***62,000 million gallons total for the 5 expansion projects.***

Based on the estimated maximum daily dewatering volume noted above, the proposed pumps are identified in Table B provided in Attachment 6 (C.6).

In accordance with the BOR, a site-specific dewatering plan to include the proposed pumps and the average and maximum day pumpage in gallons per minute for each proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering. Dewatering will not be initiated prior to receiving written notice from the District that the proposed dewatering activity is consistent with the approved Master Permit.

Turbidity Monitoring Plan

Before beginning offsite discharge of dewatering effluent this Turbidity Monitoring Plan will be implemented to ensure that offsite discharges do not exceed 29 nephelometric turbidity units (NTUs) above background levels in accordance with State Water Quality Standards.

In accordance with Permit 26-00541-S, offsite discharge will be from the permitted discharge structures, DS-1, DS-2 and DS-3, only. Prior to the start of offsite discharge, background turbidity levels will be established for the receiving waters and/or wetlands to which dewatering effluent will be discharged. The discharge structures, turbidity monitoring locations and receiving water bodies/wetlands are shown on the Master Dewatering Routing Plan provided in Attachment 10 of this permit application.

Turbidity monitoring will begin on the first day of dewatering during which off-site discharge occurs. Samples of the dewatering effluent discharge(s) will be collected daily to determine the turbidity levels of the discharge water. The sampling locations will be identified each day of sampling. The monitoring data must demonstrate that the turbidity of the dewatering effluent discharges offsite are less than or equal to 29 NTUs above natural background turbidity. If monitoring results demonstrate this turbidity standard is not met, discharge of dewatering effluent will cease and additional turbidity control measures will be implemented to reduce the turbidity levels to within 29 NTU of background. Turbidity monitoring will cease when all dewatering activities are completed or when off-site discharge of dewatering effluent ceases.

All monitoring data will be maintained on site and be available to SFWMD staff during regular business hours. This data will include: 1) Permit and application numbers; 2) Dates of sampling and analyses; 3) A statement describing the methods used in collection, handling, storage and analyses of the samples; and 4) A map indicating the sampling locations.

Monitoring reports will be submitted to the District upon request. The monitoring reports shall include the following information for each sample collected and analyzed for turbidity:

- Date and time of sample collection;
- Sample location;
- Sample results in NTU
- Name of person collecting samples;
- Depth of water;
- Direction of water flow; and
- Antecedent weather conditions

Water Quality Monitoring Plan

Before beginning offsite discharge of dewatering effluent this Water Quality Monitoring Plan will be implemented to ensure that offsite discharges of dewatering effluent do not exceed State Water Quality Standards or background levels. In accordance with Permit 26-00541-S, offsite discharge will be from the permitted discharge structures, DS-1, DS-2 and DS-3, only.

Prior to the start of offsite discharge, background water quality will be established for the receiving waters and/or wetlands to which dewatering effluent will be discharged. Samples of the receiving waters and/or wetlands will be collected and analyzed for the parameters listed in Tables 1 and 2 to establish background concentrations. The dewatering effluent proposed for offsite discharge will also be sampled and analyzed for the parameters identified in Tables 1 and 2 prior to commencing offsite discharge. Offsite discharge of dewatering effluent may commence only if the monitoring results confirm that the dewatering effluent concentrations are at or below the water quality standards or the previously established background levels for the parameters listed in Tables 1 and 2.

To ensure that the dewatering effluent continues to be at or below the water quality standards or background concentrations while offsite discharge is occurring, water quality monitoring will continue to be performed as outlined below until offsite discharge ceases. While offsite discharge is occurring, samples of offsite discharge will be collected daily and analyzed for the parameters listed in Table 1 which include turbidity, specific conductivity, pH, temperature and dissolved oxygen. In addition, samples of the offsite discharge will be collected monthly and analyzed for the parameters listed in Table 2. The discharge structures, monitoring locations and receiving water bodies/wetlands are shown on the Master Dewatering Routing Plan provided in Attachment 10 of this permit application.

The monitoring results must demonstrate that the dewatering effluent concentrations are at or below the water quality standards or background levels of the parameters listed in Tables 1 and 2. If the monitoring results do not demonstrate this, offsite discharge of dewatering effluent will cease and measures will be taken to improve the water quality of the dewatering effluent. Prior to resuming offsite discharge, the dewatering effluent proposed for discharge will be sampled and analyzed for the parameters identified in Tables 1 and 2. The monitoring results must demonstrate that the concentrations of the dewatering effluent intended for offsite discharge are at or below the water quality standards or previously established background levels for the parameters in Tables 1 and 2 before discharge may resume.

All sampling and field monitoring will be performed in accordance with the Florida Department of Environmental Protection's Standard Operating Procedures for Field Activities, DEP-SOP-001/01, effective December 3, 2008. Monitoring data will be maintained on site and available to District staff during regular business hours. Monitoring data will include the date and time of sampling and analyses, sample locations, parameters monitored and corresponding results.

Water quality monitoring reports will be submitted to the District by the end of the month following the month in which samples were collected. The results of the daily field monitoring will be summarized and included in the water quality monitoring report. The monitoring reports will include the following information:

- Date and time of sample collection;
- Sample location;
- Sample results
- Name of person collecting samples;
- Depth of receiving waters;
- Direction of water flow; and
- Antecedent weather conditions

Table 1-Indicator Parameters	
Parameter	Units
pH	***Standard Units***
Temperature	Degrees Celsius
Field Conductivity	umhos/cm
Dissolved Oxygen	mg/L
Turbidity	NTU

Table 2-Water Quality Monitoring Parameters			
Parameter	Units	Parameter	Units
Alkalinity	mg/L	***Lead***	***ug/L***
Arsenic	mg/L	***Mercury***	***ug/L***
Cadmium	***ug/L***	Nitrate-N	mg/L
Chloride	mg/L	Oil and Grease	mg/L
Chromium	***ug/L***	Lab pH	Standard Units
COD	mg/L	Specific Conductance	umhos/cm
Copper	***ug/L***	***TOC***	***mg/L***
Fecal Coliform	C/100	TSS	mg/L
Iron	mg/L	***Zinc***	***ug/L***

NOTES:

1. *Parameters in bold, italic font are also required for the Generic Permit for the Discharge of Produced Ground Water from any non-Contaminated Site Activity as contained in Rule 62-621.300(2), FAC*

2. *Monitoring will be performed in accordance with this plan. Offsite discharge will occur only if monitoring results confirm the discharge water concentrations are at or below the above-noted water quality standards or the previously established background concentrations, whichever is greater.*

Attachment 4 (B.3)

Aerial Photo

Ash Monofill Expansion

Application 140711-10 Permit 26-01163-W

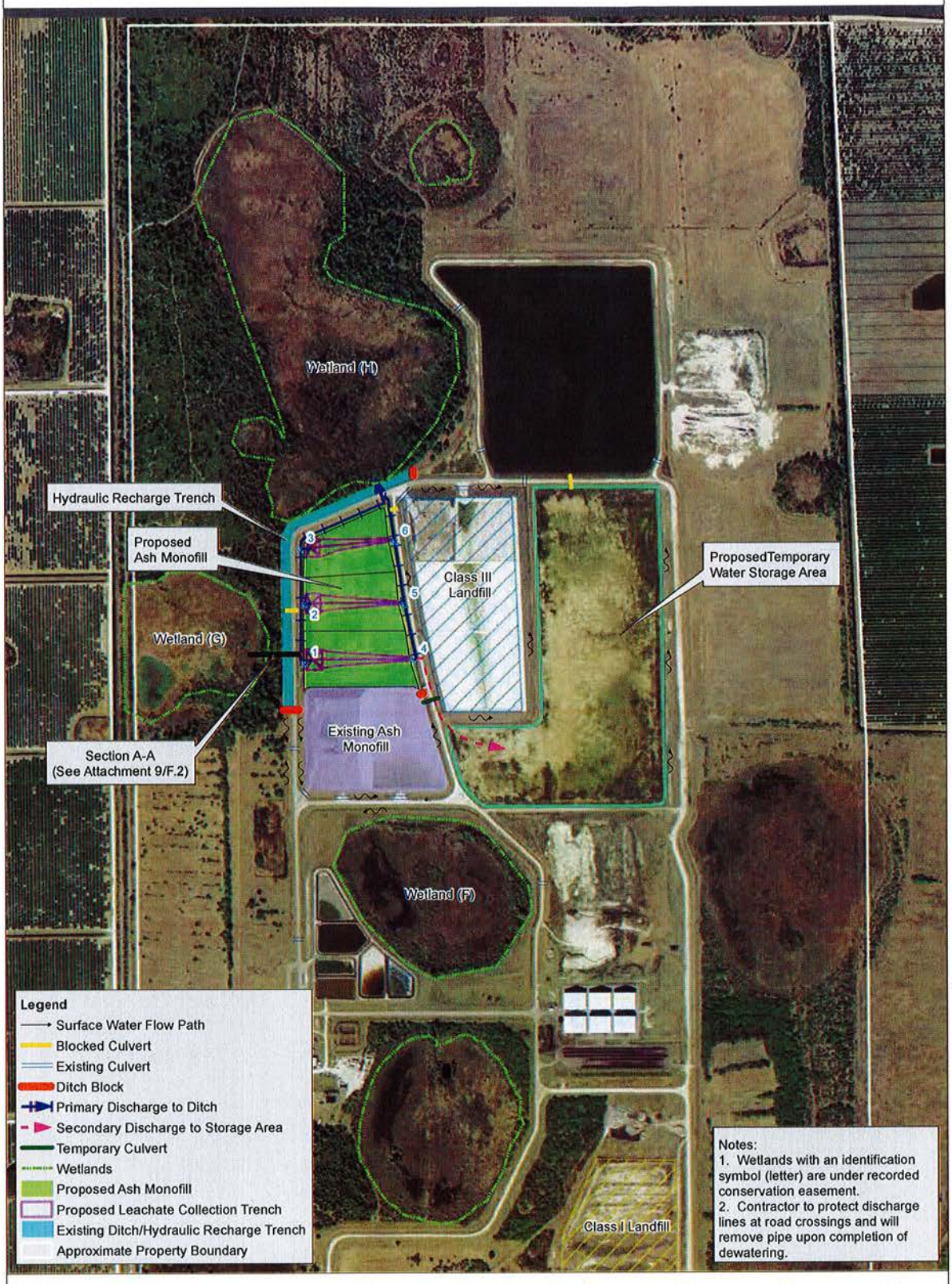
Ash Monofill Specific Dewater Plans

Exhibit 9A

Attachment 8 (F.1)

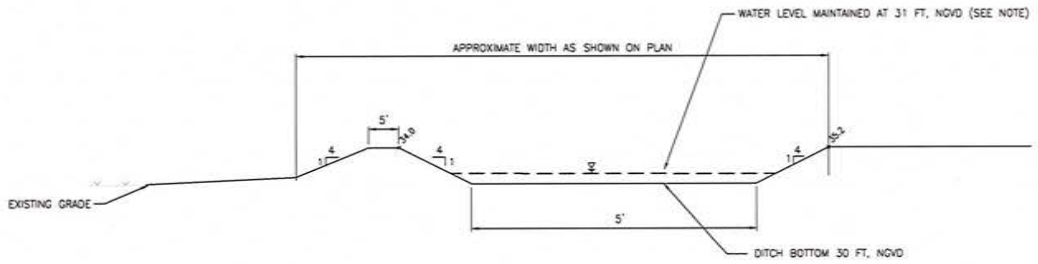
Dewatering Routing Plan

Ash Monofill Expansion



Application 140711-10 Permit 26-01163-W
Ash Monofill Specific Dewater Plans

Exhibit 9B



NOTE: WATER LEVEL IN TRENCH TO BE MAINTAINED AT ELEVATION OF 31' OR 1' ABOVE THE EXISTING LAND SURFACE ELEVATION OF 30'.

EXISTING DITCH/HYDRAULIC RECHARGE TRENCH
SECTION A-A
NTS

NOTE: NO PROFILE NECESSARY FOR THE EXISTING TEMPORARY WATER STORAGE AREA WHICH IS A NATURALLY DEPRESSED PASSIVE STORAGE AREA. NO CONSTRUCTION OR CONTROLS NEEDED EXCEPT AS SHOWN ON PLAN.

ATTACHMENT 9 (F.2)
DEWATERING PROFILE VIEW
ASH MONOFILL EXPANSION
HENDRY COUNTY, FLORIDA

JONES EDMUNDS

Application 140711-10 Permit 26-01163-W
Ash Monofill Specific Dewater Plans

Exhibit 9C

WETLAND AND SURFACE WATER MANAGEMENT

The surface water management system is divided into three main basins, South, Central and North. The North Basin consists of the undeveloped portions of Sections 4 and a portion of Section 9. The Central Basin consists of part of the developed area in Section 9. The South Basin consists of portions of Sections 9 and 16. Storm water discharges off-site via 3 discharge control structures DS-1, DS-2 and DS-3. DS-1 (North/Central 1) consists of a 2.5' wide by 4.5' high rectangular notch with an invert at elevation 28.0 feet, NGVD. DS-2 (South 1) consists of a 1' wide by 3' high rectangular notch at elevation 30.5' NGVD and DS-3 (South 2) consists of a 1' wide by 0.5' high rectangular notch with invert at elevation 32.0' NGVD. The control structures overflow elevations are set such that there is no discharge other than through the bleeder notches on the structures until the 25-year, 72-hour flood stage is exceeded.

The North Basin accepts discharge from the Central Basin via discharge structure DS-1. The combined discharge from the North and Central Basins discharges to the Cooperative Producers, Inc., (CPI) Canal through an existing 3 foot diameter corrugated metal pipe located in the western dike of Section 4. The CPI Canal discharges north to the Duda Canal which then discharges to the Townsend Canal. The South Basin discharges via DS-2 and DS-3. DS-3 discharges to Wetland E which discharges to Wetland B via an interconnect swale. Discharge from Wetland B combines with discharge from DS-2 prior to discharging to the Fussel Slough Basin through existing culverts under Church Road and a series of ditches. The Facility is also authorized to discharge offsite via the above-noted discharge structures under the Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity (MSGP) under the NPDES regulatory program. The current MSGP No. FLR05F517-003 became effective June 10, 2012 and will expire on June 9, 2017. The Facility monitors discharges from the discharge structures in accordance with the MSGP for Sector L, Landfills.

PROTECTION OF SENSITIVE AREAS FROM DEWATERING DISCHARGE

Existing ditches will be used as a hydraulic recharge trenches as necessary to protect wetland areas from drawdown due to the dewatering operations. The locations of the existing ditches that may potentially be used are shown on the Master Dewatering Routing Plan provided. Additional description and information regarding the maintenance and control of the water levels in the hydraulic recharge trenches are provided. Storage in the existing storm water management system and temporary retention areas will reduce turbidity.

Additional controls such as silt fence, floating turbidity barriers, hay bales, sedimentation basins will be used as necessary. If the monitoring demonstrates turbidity water quality standards are not met, other provisions such as use of water tanks, settling tanks, sediment basins, or sediment screens will be used. In accordance with the BOR, a site-specific dewatering plan to include the specific methods proposed to protect sensitive areas from dewatering effluent and/or impacts due to dewatering discharges for each proposed dewatering project will be submitted to the District for review and approval at least two weeks prior to dewatering. Dewatering will not be initiated prior to receiving written notice from the District that the proposed dewatering activity is consistent with the approved Master Dewatering Permit.

IMPACTED WETLANDS

The dewatering operations will be designed with hydraulic recharge trenches to protect the wetlands on the site and all construction will maintain a 25-foot setback from wetlands. If offsite discharge becomes necessary, the Turbidity Monitoring Plan provided will be implemented to monitor discharges from the project to ensure the background turbidity levels are not exceeded.

Requirement by Permit Condition Report

App No: 140711-10
Permit No: 26-01163-W
Project Name: LEE / HENDRY COUNTY REGIONAL SOLID WASTE DISPOSAL FACILITY

Permit Condition No: 26 **Permit Condition Code:** WUZZUD001-1

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
Pump 1	Water Use Report for Pump 1 (Only when discharging off-site)	Monthly	Monthly	30-NOV-2014
Pump 2	Water Use Report for Pump 2 (Only when discharging off-site)	Monthly	Monthly	30-NOV-2014
Pump 3	Water Use Report for Pump 3 (Only when discharging off-site)	Monthly	Monthly	30-NOV-2014
Pump 4	Water Use Report for Pump 4 (Only when discharging off-site)	Monthly	Monthly	30-NOV-2014
Pump 5	Water Use Report for Pump 5 (Only when discharging off-site)	Monthly	Monthly	30-NOV-2014
Pump 6	Water Use Report for Pump 6 (Only when discharging off-site)	Monthly	Monthly	30-NOV-2014

Permit Condition No: 27 **Permit Condition Code:** WUDWT002-5

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Off-site Discharge-Turbidity Monitoring at point of Discharge Twice Daily	Data Held On Site	Data Held On Site	01-NOV-2014
PERMIT	Off-site Discharge -Background Turbidity monitoring twice Daily	Data Held On Site	Data Held On Site	01-NOV-2014

Permit Condition No: 28 **Permit Condition Code:** WUZZUD001-1

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Prior to Off-site discharge Water Quality Monitoring	Daily	Weekly	07-NOV-2014

Permit Condition No: 29 **Permit Condition Code:** WUDWT018-1

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Site-specific dewater plans for Proposed Expansions.	One time Only	One time Only	01-NOV-2014

Exhibit No: 11

STAFF REPORT DISTRIBUTION LIST

LEE / HENDRY COUNTY REGIONAL SOLID WASTE DISPOSAL FACILITY

Application No: 140711-10

Permit No: 26-01163-W

INTERNAL DISTRIBUTION

X S. Korf

EXTERNAL DISTRIBUTION

X Permittee - Lee County Solid Waste Division
X Engr Consultant - Lee County Solid Wast Divisioin

GOVERNMENT AGENCIES

X Hendry County - Bd of County Comm (Myra Johnson)
X Hendry County Engineer

OTHER INTERESTED PARTIES

X LAURA A GRAY P E

Exhibit No:12