STATE OF FLORIDA

DEPARTMENT

OF

ENVIRONMENTAL PROTECTION

Conditions of Certification

Pasco County

Pasco County Resource Recovery Facility

PA 87-23G

11/17/2022

Table of Contents

SECTION A: GENERAL CONDITIONS 1

I. SCOPE 1

II. APPLICABLE DEPARTMENT RULES 2

III. REVISIONS TO DEPARTMENT STATUTES AND RULES 4

IV. DEFINITIONS 4

V. FEDERALLY DELEGATED OR APPROVED PERMIT PROGRAMS 5

VI. DESIGN AND PERFORMANCE CRITERIA 6

VII. NOTIFICATION 6

VIII. EMERGENCY CONDITION NOTIFICATION AND RESTORATION 7

IX. CONSTRUCTION PRACTICES 7

A. Local Building Codes 7

B. Open Burning 7

C. Vegetation 7

D. Existing Underground Utilities 7

E. Electric and Magnetic Fields (EMF) 8

F. Existing Wells 8

G. Abandonment of Existing Septic Tanks 8

X. RIGHT OF ENTRY 8

XI. DISPUTE RESOLUTION 9

A. General 9

B. Modifications 9

C. Post-Certification Submittals 9

XII. SEVERABILITY 9

XIII. ENFORCEMENT 9

XIV. REVOCATION OR SUSPENSION 10

XV. REGULATORY COMPLIANCE 10

XVI. CIVIL AND CRIMINAL LIABILITY 10

XVII. USE OF STATE LANDS 11

XVIII. PROCEDURAL RIGHTS 11

XIX. AGENCY ADDRESSES FOR POST-CERTIFICATION SUBMITTALS AND NOTICES 12

XX. PROFESSIONAL CERTIFICATION 13
XXI. PROCEDURES FOR POST-CERTIFICATION SUBMITTALS 13
A. Purpose of Submittals 13
B. Filings 13
C. Completeness 14
D. Interagency Meetings 14
E. Determination of Compliance 14
F. Commencement of Construction 14
G. Revisions to Design Previously Reviewed for Compliance 14
XXII. POST-CERTIFICATION SUBMITTAL REQUIREMENTS SUMMARY 15
XXIII. POST CERTIFICATION AMENDMENTS 15
XXIV. MODIFICATION OF CERTIFICATION 15
XXV. COASTAL ZONE CONSISTENCY 16
XXVI. WATER QUALITY CERTIFICATION 16
XXVII. TRANSFER OF CERTIFICATION 16
XXVIII. FINANCIAL RESPONSIBILITY 17
XXIX. LABORATORIES AND QUALITY ASSURANCE 17
XXX. ENVIRONMENTAL RESOURCES 17
A. General 17
B. Surface Water Management Systems 19
C. Wetland and Other Surface Water Impacts 20
XXXI. THIRD PARTY IMPACTS 21
XXXII. FACILITY OPERATION 21
XXXIII. RECORDS MAINTAINED AT THE FACILITY 21
XXXIV. WATER DISCHARGES 22
A. Discharges 22
B. Wastewater Incident Reporting 22
XXXV. SOLID AND HAZARDOUS WASTE 23
A. Solid Waste 23
B. Hazardous Waste, Used Oil, Petroleum Contact Water and Spent Mercury 23
C. Hazardous Substance Release Notification 24

D. Contaminated Site Cleanup 24
E. Water Quality Reporting Requirements for the Solid Waste Program 24
XXXVI. STORAGE TANK SYSTEMS 25
A. Incident Notification Requirements. 25
B. Discharge Reporting Requirements 26
C. Discharge Cleanup 26
D. Out of Service and Closure Requirements 26
SECTION B: SPECIFIC CONDITIONS 27
I. DEPARTMENT OF ENVIRONMENTAL PROTECTION 27
A. Water Discharges 27
B. Groundwater Quality Monitoring Plan 27
C. Resource Recovery Facility 28
D. Solid Waste 28
E. Solid Waste Disposal Unit Construction 29
F. Cooling Tower 30
G. Operational Contingency Plans 30
H. Wastewater Disposal 30
II. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT 31
III. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION 38
A. General Listed Species Survey 38
B. Specific Listed Species Surveys 38
C. Listed Species Locations 39
D. Gopher Tortoise Management Plan 39
E. Specifically for Unit 4 40
1. General Listed Species Surveys 40
2. Specific Listed Species Surveys 40
3. Listed Species Locations 41
4. Gopher Tortoise Management Plan 41
IV. DEPARTMENT OF TRANSPORTATION 42
A. Access Management to the State Highway System 42
B. Overweight or Overdimensional Loads 42
C. Use of State of Florida Right of Way or Transportation Facilities 42
D. Standards 43

E. Drainage 43
F. Use of Air Space 43
G. Best Management Practices 44
V. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES 44
VI. DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES 44
VII. PASCO COUNTY 45
A. Noise 45
B. Screening 45
C. Dust and Odors 45
VIII. HISTORY 45

ATTACHMENTS

Attachment A ..... Certified Site/Areas/Facilities Delineation Map(s)
Attachment B ..... Surface Water Management System Plan(s)
Attachment C ..... Mitigation Plans
Attachment D ..... Groundwater Quality Monitoring Requirements
Attachment E ..... Solid Waste Construction and Operations Requirements
Appendix I ..... Solid Waste Operations Plan
Appendix II…Procedures for Receiving, Handling, and Feeding MSW

SECTION A: GENERAL CONDITIONS

I. SCOPE

A. Pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Sections 403.501-518, Florida Statutes (F.S.), and Chapter 62-17, Florida Administrative Code (F.A.C.), this certification is issued to Pasco County as owner/operator and Licensee of the Pasco County Resource Recovery Facility. Subject to the requirements contained in these Conditions of Certification (Conditions), Pasco County is authorized to construct and operate the Resource Recovery Facility, a nominal 49 megawatt (MW) facility consisting of four municipal waste combustors (Units 1-4), two steam turbine electric generators, and Associated Facilities as described in the Site Certification Application and Supplemental Site Certification Application (collectively, SCA). The facility is located on a 751-acre site at 14230 Hays Road in Spring Hill, Pasco County, Florida. The UTM coordinates are: Zone 17; 347.11 km East; 3139.21 km North; and the latitude/longitude coordinates are: 28°22'12" North/ 82°33'36" West. The Department does not intend, solely by the incorporation of these General Conditions, to require the retrofitting of existing Certified Facilities.

B. The Certified Facility includes but is not limited to the following major Associated Facilities;

- 4 Municipal Waste Combustors (Units 1-4)
- Steam Turbine Electric Generators
- Ash Landfill/Solid Waste Disposal Unit (Class I Landfill)
- Ash Building and Handling System
- Cooling Towers
- Scale House and Truck Scales
- Switchyard
- Retention Ponds
- Maintenance Facility

C. These Conditions, unless specifically amended or modified, are binding upon the Licensee and shall apply to the construction, operation, and maintenance of the Certified Facility. If a conflict should occur between the design criteria of this Certified Facility and the Conditions, the Conditions shall prevail unless amended or modified. In any conflict between any of these Conditions, the more specific condition governs.

D. Within 60 days after completion of construction of the electrical power plant as defined by 403.503(14), F.S., but excluding off-site linear and non-linear associated facilities, the Licensee shall provide to the Department in .pdf format: a survey map signed by a professional land surveyor, or acceptable equivalent documentation such as an official legal description, delineating the boundaries of the site as defined by Section 403.503(28), F.S., and an aerial photograph delineating the boundaries of the site. The survey map and aerial photograph shall be identified as the Site Delineation and attached hereto as part of Attachment A (Maps). The requirements of this paragraph do not require the submittal of a new map following the construction of Unit 4.

The Licensee shall notify the Department of any change to the site boundary depicted in the Site Delineation in Attachment A (Maps). The notification shall be accompanied by an updated land survey map (or legal description) and aerial photograph delineating the new

boundaries of the site for review by the Department. Absent the above description/delineation of the site, the Department will consider the perimeter fence line of the property on which the electrical power plant's generating facility and on-site support facilities are located to be the boundaries of the site.

E. If both certified and uncertified Facilities lie within the boundaries of the site, the Licensee shall also comply with the requirements of this paragraph. Within 60 days after completion of construction of the plant and on-site associated facilities, but excluding off-site linear and non-linear associated facilities, the Licensee shall provide to the Department in .pdf format: an acceptable documentation, identifying the certified and non-certified facilities within the site such as an aerial photograph. Certified facilities identified within the site shall include both the certified electrical power plant's generating facilities as defined in Section 403.503(28), F.S. and its on-site certified associated facilities (including on-site linear facilities) as defined by Section 403.503(7), F.S. The document shall be known as the Certified Facilities Identification and attached hereto as part of Attachment A (Maps).

F. Within 120 days after completion of construction of any off-site associated non-linear facilities, the Licensee shall provide to the Department in .pdf format; a survey map signed by a professional land surveyor, or acceptable equivalent documentation such as an official legal description, delineating the boundaries of the certified areas for each off-site non-linear Certified Facility; and an aerial photograph delineating the boundaries of the certified area for each off-site non-linear Certified Facility. The survey map(s) and aerial photograph(s) shall be known as Delineation of the Certified Offsite Non-linear Facilities and attached hereto as part of Attachment A (Maps).

G. Within 180 days after completion of construction of any new off-site associated linear facilities, as defined by Section 403.503(7), F.S., the Licensee shall provide; an aerial photograph(s)/map(s) at a scale of at least 1:400, or acceptable equivalent documentation such as an official legal description or survey map(s) signed by a professional land surveyor, delineating the boundaries of the certified site for the linear facilities, following acquisition of all necessary property interests and the corridor narrowing as described in Section 403.503(11), F.S., which shall be known as the Delineation of Certified Off-Site Linear Facilities and attached as part of Attachment A (Maps).

Following any post-certification approvals that require a change to the boundaries of the certified area(s) depicted in the Delineation of Certified Off-Site Linear Facilities in Attachment A (Maps), the Licensee shall submit an updated aerial photograph/map, survey map or legal description.

[Sections 403.511,403.5113, F.S.; Rules 62-4.160(1), (2) and 62-17.205(2), F.A.C.]

II. APPLICABLE DEPARTMENT RULES

The construction, operation and maintenance of the Certified Facility shall be in accordance with all applicable non-procedural provisions of Florida Statutes and Florida Administrative Code, including, but not limited to, the applicable non-procedural portions of the following regulations, except to the extent a variance, exception, exemption or other relief is granted in the Final Order of Certification or in a subsequent modification to the Conditions, under any federal permit or as otherwise provided under Chapter 403:

Florida Administrative Codes:

18-2 (Management of Uplands Vested in the Board of Trustees)
18-14 (Administrative Fines for Damaging State Lands)
18-20 (Aquatic Preserves)
18-21 (Sovereign Submerged Lands Management)
62-4 (Permits)
62-17 (Electrical Power Plant Siting)
62-40 (Water Resource Implementation Rule)
62-150 (Hazardous Substance Release Notification)
62-160 (Quality Assurance)
62-204 (Air Pollution Control-General Provisions)
62-210 (Stationary Sources-General Requirements)
62-212 (Stationary Sources-Preconstruction Review)
62-213 (Operation Permits for Major Sources of Air Pollution)
62-214 (Requirements for Sources Subject to the Federal Acid Rain Program)
62-256 (Open Burning)
62-296 (Stationary Sources-Emission Standards)
62-297 (Stationary Sources-Emission Monitoring)
62-302 (Surface Water Quality Standards)
62-304 (Total Maximum Daily Loads)
62-330 (Environmental Resource Permitting)
62-340 (Delineation of the Landward Extent of Wetlands and Surface Waters)
62-342 (Mitigation Banks)
62-345 (Uniform Mitigation Assessment Method)
62-520 (Groundwater Classes, Standards and Exemptions)
62-522 (Groundwater Permitting and Monitoring Requirements)
62-528 (Underground Injection Wells – if applicable)
62-531 (Water Well Contractor Licensing Requirements)
62-532 (Water Well Permitting and Construction Requirements)
62-550 (Drinking Water Standards, Monitoring and Reporting)
62-555 (Permitting, Construction, Operation, and Maintenance of Public Water Systems)
62-560 (Requirements for Public Water Systems That Are Out of Compliance)
62-600 (Domestic Wastewater Facilities)
62-601 (Domestic Wastewater Treatment Plant Monitoring)
62-604 (Collection Systems and Transmission Facilities)
62-610 (Reuse of Reclaimed Water and Land Application)
62-620 (Wastewater Facility and Activities Permitting)
62-621 (Generic Permits)
62-650 (Water Quality Based Effluent Limitations)
62-660 (Industrial Wastewater Facilities)
62-699 (Classification and Staffing of Water or Domestic Wastewater Treatment Plants and Water Distribution Systems)
62-701 (Solid Waste Management Facilities)
62-710 (Used Oil Management)
62-730 (Hazardous Waste)

62-737 (Management of Spent Mercury-Containing Lamps and Devices Destined For Recycling)
62-740 (Petroleum Contact Water)
62-761 (Underground Storage Tank Systems)
62-762 (Aboveground Storage Tank Systems)
62-769 (Florida Petroleum Liability and Restoration Insurance Program)
62-777 (Contaminant Cleanup Target Levels)
62-780 (Contaminated Site Clean-Up Criteria)
62-814 (Electric and Magnetic Fields)

III. REVISIONS TO DEPARTMENT STATUTES AND RULES

A. The Licensee shall comply with rules adopted by the Department subsequent to the issuance of the certification under the PPSA which prescribe new or stricter criteria, to the extent that the rules are applicable to electrical power plants. Except when express variances, exceptions, exemptions, or other relief have been granted, subsequently adopted Department rules which prescribe new or stricter criteria shall operate as automatic modifications to the Certification.

B. Upon written notification to the Department, the Licensee may choose to operate the certified electrical power plant in compliance with any rule subsequently adopted by the Department which prescribes criteria more lenient than the criteria required by the terms and conditions in the certification which are not site-specific.

[Section 403.511(5)(a) and (b), F.S; Rule 62-4.160(10), F.A.C.]

IV. DEFINITIONS

The meaning of terms used herein shall be governed by the applicable definitions contained in Chapters 253, 373, 379 and 403, F.S., and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these Conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative by the use of the commonly accepted meaning. As used herein, the following shall apply:

A. "Application" as defined in Section 403.503(6), F.S. For purposes of this license, "Application" or "SCA" are used interchangeably and they include materials submitted for post-certification amendments and petitions for modification to the Conditions of Certification, as well as supplemental applications.

B. "Associated Facilities" as defined by Section 403.503(7), F.S.

C. "Certified Facility" or "Certified Facilities" means the certified electrical power generation facilities and all certified on- or off-site associated structures and facilities identified/described in the Application, in the Final Order of Certification, or in a post-certification amendment or modification.

D. "DEO" means the Florida Department of Economic Opportunity.

E. "DEM" shall mean the Florida Division of Emergency Management.

F. "DEP" or "Department" means the Florida Department of Environmental Protection.

G. "DHR" means the Florida Department of State, Division of Historical Resources.

H. "DOT" means the Florida Department of Transportation.

I. "Emergency conditions" or "Emergency reporting" means urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity.

J. "Feasible" or "practicable" means reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.

K. "FWC" means the Florida Fish and Wildlife Conservation Commission.

L. "Licensee" as defined in Section 403.503(18), F.S., means an applicant that has obtained a certification order for the subject project. In this case, the Licensee is Pasco County.

M. "NPDES permit" means a federal National Pollutant Discharge Elimination System permit issued by DEP in accordance with the federal Clean Water Act.

N. "Post-certification submittal" shall mean a submittal made by the Licensee pursuant to a Condition of Certification.

O.

"ROW" means the right-of-way to be selected by the Licensee within the certified corridor in accordance with the Conditions of Certification and as defined in Section 403.503(27), F.S.

P. "Site" as defined in Section 403.503(28).

Q. "State water quality standards" shall mean the numerical and narrative criteria applied to specific water uses or classifications set forth in Chapter 62-302, F.A.C.

R. "Surface Water Management System" or "System" means a stormwater management system, dam, impoundment, reservoir, appurtenant work, or works, or any combination thereof. The terms "surface water management system" or "system" include areas of dredging or filling, as those terms are defined in Sections 373.403(13) and (14), F.S.

S. "SWD" shall mean the DEP's Southwest District office.

T. "SWFWMD" means the Southwest Florida Water Management District.

U. "Wetlands" shall mean those areas meeting the definition set forth in Section 373.019(27), F.S., as delineated pursuant to Chapter 62-340, F.A.C.

V. FEDERALLY DELEGATED OR APPROVED PERMIT PROGRAMS

Subject to the conditions set forth herein, this certification shall constitute the sole license of the state and any agency as to the approval of the location of the site and any associated facility and the construction and operation of the proposed electrical power plant, except for the issuance of Department Licenses required under any federally delegated or approved permit program. This Certification is not a waiver of any other Department approval that may be required under federally delegated or approved programs. In the event of a conflict

between the certification process and federally required procedures, the applicable federal requirements shall control.

[Sections 403.5055, 403.508(8), and 403.511(1), F.S.]

VI. DESIGN AND PERFORMANCE CRITERIA

Certification, including these Conditions, is predicated upon preliminary designs, concepts, and performance criteria described in the SCA or in testimony and exhibits in support of certification. Final engineering design will be consistent and in substantial compliance with the preliminary information described in the SCA or as explained at the certification hearing (if any). Conformance to those criteria, unless specifically modified in accordance with Sections 403.516, F.S., and Rule 62-17.211, F.A.C., is binding upon the Licensee in the design, construction, operation, and maintenance of the Certified Facility.

[Sections 403.511 (2)(a), 403.516, F.S.; Rules 62-4.160(2), 62-17.211, F.A.C.]

VII. NOTIFICATION

A. If, for any reason, the Licensee does not comply with or will be unable to comply with any condition or limitation specified in this license, the Licensee shall immediately provide the appropriate DEP District and/or Branch Office with the following information:

1. A description of and cause of noncompliance; and

2. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The Licensee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this certification.

All notifications which are made in writing shall additionally be immediately provided to the Siting Coordination Office (SCO) via email to SCO@dep.state.fl.us.

[Rule 62-4.160(8), F.A.C.]

B. The Licensee shall promptly notify the SCO in writing (email acceptable) of any previously submitted information concerning the Certified Facility that is later discovered to be inaccurate.

[Rule 62-4.160(15), F.A.C.]

C. Within 60 days after certification of an associated linear facility the Licensee shall file a notice of the certified route with the Department and the clerk of the circuit court for each county through which the corridor will pass.

The notice shall consist of maps or aerial photographs in the scale of 1:24,000 which clearly show the location of the certified route and shall state that the certification of the corridor will result in the acquisition of rights-of-way within the corridor. The Licensee shall certify to the Department and clerk that all lands required for the transmission line rights-of-way within the corridor have been acquired within such county.

[Section 403.5112, F.S.]

VIII. EMERGENCY CONDITION NOTIFICATION AND RESTORATION

If the Licensee is temporarily unable to comply with any of the conditions of the License due to breakdown of equipment or destruction by hazard of fire, wind or following an emergency as defined by Sections 252.34(3), (6), (7) or (9), F.S., the Licensee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the Licensee from any liability for failure to comply with Department rules. Any exceedances and/or violations recorded during emergency conditions shall be reported as such, but the Department acknowledges that it intends to use its enforcement discretion during this timeframe. This acknowledgement by the Department does not constitute a waiver or variance from any requirements of any federal permit. Relief from any federal agency must be separately sought.

[Rule 62-4.130, F.A.C.]

IX. CONSTRUCTION PRACTICES

A. Local Building Codes

Subject to the conditions set forth herein, this certification constitutes the sole license of the state and any agency as to the approval of the location of the site and any associated facility and the construction and operation of any Certified Facility. The Licensee is not required to obtain building permits for Certified Facilities. However, this Certification shall not affect in any way the right of any local government to charge appropriate fees or require that construction of installations used by the electric utility that are not an integral part of a generating plant, substation, or control center (such as office buildings, warehouses, garages, machine shops, and recreational buildings) be in compliance with applicable building construction codes.

[Section 403.511(4), F.S.]

B. Open Burning

Prior to open burning in connection with land clearing, the Licensee shall seek authorization from the Florida Forest Service in accordance with the requirements of Chapters 62-256 and 5I-2, F.A.C.

[Chapters 5I-2 and 62-256, F.A.C.]

C. Vegetation

For areas located in any Florida Department of Transportation (DOT) ROW, Chapter 3.18 of the 2017 Florida DOT *Utility Accommodation Manual* available on the DOT website ((https://www.fdot.gov/programmanagement/utilities/default.shtm) shall serve as guidelines for best management practices.

[Chapter 14-46, F.A.C.]

D. Existing Underground Utilities

The Licensee must follow all applicable portions of the Underground Facility Damage Prevention and Safety Act, Chapter 556, F.S. The Licensee shall provide the affected

local government and the SCO with copies of valid tickets obtained from Sunshine State One Call of Florida upon request. Tickets shall be available for request until the underground work is completed for the affected area.

[Chapter 556, F.S.]

E. Electric and Magnetic Fields (EMF)

Any associated transmission lines and electrical substations shall comply with the applicable requirements of Chapter 62-814, F.A.C.

[Chapter 62-814, F.A.C.]

F. Existing Wells

Any existing wells to be impacted in the path of construction of Certified Facilities that will no longer be used shall be abandoned by a licensed well contractor. All abandoned wells shall be filled and sealed in accordance with subsection 62-532.500(5), F.A.C., or with the rules of the authorizing agency, or consistent with these Conditions.

[Rules 62-532.400 and 62-532.500(5), F.A.C.]

G. Abandonment of Existing Septic Tanks

Any existing septic tanks to be impacted by construction and that will no longer be used shall be abandoned in accordance with Rule 62-6.011, F.A.C., unless these Conditions provide otherwise.

[Chapter 62-6, F.A.C.]

X. RIGHT OF ENTRY

A. Upon presentation of credentials or other documents as may be required by law, the Licensee shall allow authorized representatives of the Department or other agencies with jurisdiction over a portion of the Certified Facility and any authorized off-site mitigation/compensation or otherwise associated areas:

1. At reasonable times, to enter upon the Certified Facility in order to monitor activities within their respective jurisdictions for purposes of assessing compliance with this certification; or

2. During business hours, to enter the Licensee's premises in which records are required to be kept under this certification; and to have access to and copy any records required to be kept under this certification.

B. When requested by the Department, on its own behalf or on behalf of another agency with regulatory jurisdiction, the Licensee shall within 10 working days, or such longer period as may be mutually agreed upon by the Department and the Licensee, furnish any information required by law, which is needed to determine compliance with the certification.

[Rules 62-4.160(7)(a) and 62-4.160(15), F.A.C.]

XI. DISPUTE RESOLUTION

A. General

If a situation arises in which mutual agreement between either the Department and the Licensee, or the Department and an agency with substantive regulatory jurisdiction over a matter cannot be reached, the Department can act as a facilitator in an attempt to resolve the issue. If the dispute is not resolved in this initial informal meeting, Licensee may request a second informal meeting in which both Licensee and the agency with substantive regulatory jurisdiction over the matter at issue can participate in an attempt to resolve the issue. If, after such meetings, a mutual agreement cannot be reached between the parties, then the matter shall be referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, F.S. The Licensee or the Department may request DOAH to establish an expedited schedule for the processing of such a dispute. Any filing with DOAH shall state with particularity the specific project and geographic location to which the dispute relates. Work unrelated to the specific project and in areas other than the location to which the dispute relates will not be affected by the dispute.

B. Modifications

If written objections are filed regarding a modification, and the objections address only a portion of a requested modification, then the Department shall issue a Final Order approving the portion of the modification to which no objections were filed, unless that portion of the requested modification is substantially related to or necessary to implement the portion to which written objections are filed.

C. Post-Certification Submittals

If it is determined, after assessment of a post-certification submittal, that compliance with the Conditions will not be achieved for a particular portion of a submittal, the Department may make a separate assessment of other portions of the submittal, unless those portions of the submittal are substantially related to or necessary to implement that portion for which it has been determined that compliance with the Conditions will not be achieved.

[Section 120.57, F.S. and Rule 62-17.211, F.A.C.]

XII. SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification or the application of any provision of this certification to any circumstance is held invalid, the remainder of the certification or the application of such provision to other circumstances shall not be affected thereby.

XIII. ENFORCEMENT

A. The terms, conditions, requirements, limitations, and restrictions set forth in these Conditions are binding and enforceable pursuant to Sections 403.141, 403.161, 403.514, 403.727, and 403.859 through 403.861, F.S., as applicable. Any noncompliance by the Licensee with these Conditions constitutes a violation of Chapter 403, F.S., and is grounds for enforcement action, license termination, license revocation, or license revision. The Licensee is placed on notice that the Department may review this certification periodically and may initiate enforcement action for any violation of these Conditions.

B. All records, notes, monitoring data and other information relating to the construction or operation of the Certified Facility which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the Certified Facility and arising under the Florida Statutes or Department rules, subject to the restrictions in Sections 403.111 and 403.73, F.S. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

[Sections 403.121, 403.131, 403.141, 403.151, 403.161, and 403.514, F.S.; Rules 62-4.160(1) and 62-4.160(9), F.A.C.]

XIV. REVOCATION OR SUSPENSION

The Certification shall be final unless revised, revoked, or suspended pursuant to law. This Certification may be suspended or revoked pursuant to Section 403.512, F.S. This Certification is valid only for the specific processes and operations identified in the SCA and approved in the Final Order of Certification and indicated in the testimony and exhibits in support of certification or approved in a subsequent amendment or modification of the Certification. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this approval may constitute grounds for revocation and enforcement action by the Department. Any enforcement action, including suspension and revocation, shall only affect the portion(s) of the Certified Facility that are the cause of such action, and other portions of the Certified Facility shall remain unaffected by such action.

[Section 403.512, F.S.; Rule 62-4.160(2), F.A.C.]

XV. REGULATORY COMPLIANCE

As provided in Sections 403.087(7) and 403.722(5), F.S., except as specifically provided in the Final Order of Certification, a subsequent modification or amendment, or these conditions, the issuance of this license does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This License is not a waiver of or approval of any other Department license/permit that may be required for other aspects of the Certified Facility which are not addressed in this License. This License does not relieve the Licensee from liability for harm or injury to human health or welfare, animal, or plant life, or public or private property caused by the construction or operation of the Certified Facility, or from penalties therefore.

[Rules 62-4.160(3) and 62-4.160(5), F.A.C.]

XVI. CIVIL AND CRIMINAL LIABILITY

Except to the extent a variance, exception, exemption, or other relief is granted in the final order of certification, in a subsequent modification to these Conditions, or as otherwise provided under Chapter 403, F.S, this certification does not relieve the Licensee from civil or criminal penalties for noncompliance with any condition of certification, applicable rules or regulations of the Department, or any other state statutes or regulations which may apply.

[Sections 403.141, 403.161, and 403.511, F.S.]

XVII. USE OF STATE LANDS

A. Except as specifically provided in the Final Order of Certification or these Conditions, the issuance of this License conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

B. If any portion of the Certified Facility is located on sovereign submerged lands, state-owned uplands, or within an aquatic preserve, then the Licensee must comply with the applicable portions of Chapters 18-2, 18-20, and 18-21, F.A.C., and Chapters 253 and 258, F.S., except as specifically provided in the Final Order of Certification or these Conditions. If any portion of the Certified Facility is located on sovereign submerged lands, the Licensee must submit section F of Form 62-330.060(1), *Application for Individual and Conceptual Approval Environmental Resource Permit* (State 404 Program Permit) *and Authorization to Use State-Owned Submerged Lands* to the Department prior to construction. If any portion of the Certified Facility is located on state-owned uplands, the Licensee must submit an Upland Easement Application to the Department prior to construction.

C. If a portion of the Certified Facility is located on sovereign submerged lands or state-owned uplands owned by the Board of Trustees of the Internal Improvement Trust Fund, pursuant to Article X, Section 11 of the Florida Constitution, then the proposed activity on such lands requires a proprietary authorization. Under such circumstances, the proposed activity is not exempt from the need to obtain a proprietary authorization. Unless otherwise provided in the Final Order of Certification or these Conditions, the Department has the responsibility to review and take action on requests for proprietary authorization in accordance with Rules 18-2.018 or 18-21.0051, F.A.C.

D. The Licensee is hereby advised that Florida law states: "No person shall commence any excavation, construction, or other activity involving the use of sovereign or other state lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund or the Department of Environmental Protection under this chapter, until such person has received the required lease, license, easement, or other form of consent authorizing the proposed use." Pursuant to Chapter 18-14, F.A.C., if such work is done without consent, or if a person otherwise damages state land or products of state land, the Board of Trustees may levy administrative fines of up to $10,000 per offense.

E. The terms, conditions, and provisions of any required lease or easement issued by the State shall be met. Any construction activity associated with the Certified Facility shall not commence on sovereign submerged lands or state-owned uplands, title to which is held by the Board of Trustees of the Internal Improvement Trust Fund, until all required lease or easement documents have been executed.

[Chapters 253 and 258, F.S.; Chapters 18-2, 18-14, 18-21, 62-340, and Rules 62-330.060(1) and 62-4.160(4), F.A.C.]

XVIII. PROCEDURAL RIGHTS

Except as specified in Chapter 403, F.S., or Chapter 62-17, F.A.C., no term or condition of certification shall be interpreted to preclude the post-certification exercise by any

party of whatever procedural rights it may have under Chapter 120, F.S., including those related to rule-making proceedings.

[Sections 403.511(5)(c), F.S.]

XIX. AGENCY ADDRESSES FOR POST-CERTIFICATION SUBMITTALS AND NOTICES

Where a Condition requires post-certification submittals and/or notices to be sent to a specific agency, the following agency addresses shall be used unless the Conditions specify otherwise or unless the Licensee and the Department are notified in writing of an agency's change in address for such submittals and notices:

Florida Department of Environmental Protection
Siting Coordination Office, MS 5500
2600 Blair Stone Rd.
Tallahassee, Florida 32399-3000
SCO@dep.state.fl.us

Florida Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637

Florida Department of Environmental Protection
Solid Waste, MS 4565
2600 Blair Stone Rd.
Tallahassee, Florida 32399-3000
SWPP@dep.state.fl.us

Florida Fish & Wildlife Conservation Commission
Conservation Planning Services
620 South Meridian Street, MS 5B5
Tallahassee, Florida 32399-1600
ConservationPlanningServices@myfwc.com

Florida Department of Transportation
District Administration
605 Suwannee Street
Tallahassee, Florida 32399-0450

Florida Department of Agriculture and Consumer Services
Office of General Counsel
407 South Calhoun Street
Tallahassee, Florida 32399-0800

Southwest Florida Water Management District
Office of General Counsel
2379 Broad Street

Brooksville, Florida 34064-6899

Florida Department of State
Division of Historical Resources
500 S. Bronough Street
Tallahassee, Florida 32399-0250
CompliancePermits@DOS.MyFlorida.com

[Section 403.511, F.S.]

XX. PROFESSIONAL CERTIFICATION

To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, or of a public drinking water supply, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S.; and all final geological papers or documents involving the practice of the profession of geology shall be in accordance with sound professional geological practices pursuant to Chapter 492, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of amendment requests, petitions for modifications, post certification submittals, and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

[Rule 62-4.050, F.A.C.]

XXI. PROCEDURES FOR POST-CERTIFICATION SUBMITTALS

A. Purpose of Submittals

Conditions which provide for the post-certification submittal of information to DEP or other agencies by the Licensee are for the purpose of facilitating the agencies' monitoring of the effects arising from the location of the Certified Facility and the construction and maintenance of the Certified Facility. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with these Conditions, without further agency action. A submittal of information or determination of compliance pursuant to a post-certification submittal under this Condition does not provide a point of entry for a third party.

B. Filings

All post-certification submittals of information by Licensee are to be filed with the SWD District Office and any other agency that is entitled to receive a submittal pursuant to these Conditions. The SCO shall be copied on all post-certification submittals in electronic .pdf format only, unless otherwise requested, via email to SCO@dep.state.fl.us. Each submittal shall clearly identify the Certified Facility name, PA#, and the condition number/s (i.e. Section X, Condition XX.y.(z)) requiring the submittal. As required by Section 403.5113(2), F.S., each post-certification submittal will be reviewed by each agency with regulatory authority over the matters addressed in the submittal on an expedited and priority basis.

[Section 403.5113, F.S., Rule 62-17.191(3), F.A.C.]

C. Completeness

DEP shall review each post-certification submittal for completeness. This review may include consultation with the other agency/ies receiving the post-certification submittal with regulatory jurisdiction over the matter addressed in the submittal. DEP's finding of completeness shall specify the area of the Certified Facility affected and shall not delay further processing of the post-certification submittal for non-affected areas.

If any portion of a post-certification submittal is found to be incomplete, the Licensee shall be so notified. Failure to issue such a notice within 30 days after filing of the submittal shall constitute a finding of completeness. Subsequent findings of incompleteness, if any, shall address only the newly filed information.

[Rule 62-17.191(1)(c) 2, F.A.C.]

D. Interagency Meetings

DEP may conduct an interagency meeting with other agencies that received a post-certification submittal. The purpose of such an interagency meeting shall be for the agencies with regulatory jurisdiction over the matters addressed in the post-certification submittal to discuss whether compliance with these Conditions has been provided. Failure of DEP to conduct an interagency meeting or failure of any agency to attend an interagency meeting shall not be grounds for DEP to withhold a determination of compliance with these Conditions nor to delay the timeframes for review established by these Conditions. At DEP's request, a field inspection shall be conducted with the Licensee and the agency representative in conjunction with the interagency meeting.

E. Determination of Compliance

DEP shall give written notification within 90 days, to the Licensee and the other agency(ies) to which the post-certification information was submitted of DEP's determination of whether there is demonstration of compliance with these Conditions. If it is determined that compliance with the Conditions has not been provided, the Licensee shall be notified with particularity of the deficiencies and possible corrective measures suggested. Failure to notify Licensee in writing within 90 days of receipt of a complete post-certification submittal shall constitute a determination of compliance. A post-certification compliance review may be the basis for initiating modifications to the relevant Condition or to other related Conditions.

F. Commencement of Construction

If DEP does not object within the time period specified in paragraph E. above, Licensee may begin construction pursuant to the terms of these Conditions and the subsequently submitted construction details.

G. Revisions to Design Previously Reviewed for Compliance

If revisions to site-specific designs occur after submittal, the Licensee shall submit revised plans prior to construction for review in accordance with the post-certification process specified in this Condition.

[Sections 120.569, 373.413, 373.416, and 403.511, F.S.; Rules 62-17.191 and 62-17.205, F.A.C.]

XXII. POST-CERTIFICATION SUBMITTAL REQUIREMENTS SUMMARY

Within 90 days after certification, and within 90 days after any subsequent modification or certification, the Licensee shall provide the SCO a complete summary of those post-certification submittals that are identified in these Conditions when due-dates for the information required of the Licensee have been identified. A summary shall be provided as a separate document for each transmission line, if any. Such submittals shall include, but are not limited to, monitoring reports, management plans, wildlife surveys, etc. The summary shall be provided to the SCO, in a sortable spreadsheet, electronically, in the format shown below or equivalent. For subsequent modifications and certifications, a Post-Certification Submittal Requirements Summary shall be required for only those resulting in new or altered post-certification requirements.

Condition Number	Requirement and Timeframe	Due Date	Name of Agency or Agency Subunit to whom the submittal is required to be provided

[Section 403.5113, F.S.; Subsection 62-17.191(3), F.A.C.]

XXIII. POST CERTIFICATION AMENDMENTS

If, subsequent to certification, the Licensee proposes any material change to the SCA and revisions or amendments thereto, as certified, the Licensee shall submit a written request for amendment and a description of the proposed change to the SCA to the Department. Within 30 days after the receipt of a complete request for an amendment, the Department shall determine whether the proposed change to the SCA requires a modification to the Conditions.

A. If the Department concludes that the change would not require a modification to the Conditions, the Department shall provide written notification of the approval of the proposed amendment to the Licensee, all agencies, and all other parties to the certification.

B. If the Department concludes that the change would require a modification to the Conditions, the Department shall provide written notification to the Licensee that the proposed change to the SCA requires a request for modification pursuant to Sections 403.516, F.S.

[Section 403.5113, F.S]

XXIV. MODIFICATION OF CERTIFICATION

A. Pursuant to Subsection 403.516(1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling,

monitoring, reporting, specification of control equipment, related time schedules, emission limitations, (subject to notice and opportunity for hearing), conservation easements, or any special studies conducted as necessary to attain the objectives of Chapter 403, Florida Statutes. Requests for modifications shall not be unreasonably withheld by the Department.

B. The Department may modify Conditions, in accordance with Section 403.516(1)(b), F.S., which are inconsistent with the terms of any subsequent and separately DEP-issued permits, permit amendments, permit modifications, or permit renewals under a federally delegated or federally approved permit program. Such modification may be made without further notice if the matter has been previously noticed under the requirements for any federally delegated or approved permit program.

C. In accordance with Section 403.516(1)(c), F.S., the Licensee may file a petition for modification with the Department, or the Department may initiate the modification upon its own initiative.

D. Any anticipated facility expansions, production increases, or process modifications which may result in new, different, or increased discharge or emission of pollutants, change in fuel, or expansion in generating capacity must be reported by submission of an appropriate request for an amendment, modification, or certification.

E. Any anticipated facility change that results in a change to the Site Delineation or the Delineation of the Certified Area, attached hereto as part of Attachment A (Maps), must be accompanied by a map or aerial photo showing the proposed new boundaries of the site and/or certified area. Within 120 days after completion of construction of the approved facility change, the Licensee shall provide the information required by Section A. General Conditions, Condition I. Scope, paragraphs D, E, F, or G, as appropriate.

[Section 403.516, F.S.; Rule 62-17.211, F.A.C.]

XXV. COASTAL ZONE CONSISTENCY

Pursuant to Sections 373.428 and 403.511, F.S., certification of the facility constitutes the State's concurrence that the licensed activity or use is consistent with the federally approved program under the Florida Coastal Management Act.

[Sections 373.428, 380.23 and 403.511(7), F.S.]

XXVI. WATER QUALITY CERTIFICATION

Pursuant to the Operating Agreement between the Department, Water Management Districts and U.S. Army Corps of Engineers, a written final order granting 'certification' constitutes the granting of water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. 1341.

[2012 Operating Agreement, Jacksonville District USACOE, DEP and Water Management Districts, Section II.A.1.(f)]

XXVII. TRANSFER OF CERTIFICATION

A. This certification is transferable in whole or in part, upon Department approval, to an entity determined to be able to comply with these Conditions. A transfer of certification of

all or part of the Certified Facility may be initiated by the Licensee's filing of a Notice of Intent to Transfer Certification with the Department. The notice of intent shall: identify the intended new certification holder or Licensee; identity current and new entity responsible for compliance with the certification; and include a written agreement from the intended Licensee/Transferee to abide by all Conditions of Certification and applicable laws and regulations. Upon receiving a complete notice of intent, the transfer shall be approved by the Department unless the Department objects to the transfer on the grounds that the new Licensee will be unable to comply with the Conditions of Certification, specifies in writing its reasons for its objections, and gives notice and an opportunity to petition and administrative hearing pursuant to Section 120.57, F.S. Upon approval, the Department will initiate a modification to the Conditions to reflect the change in ownership in accordance with Rule 62-17.211, F.A.C.

B. In the event of the dissolution of the Licensee, the Department may transfer certification to successor entities which are determined to be competent to construct, operate and maintain the Certified Facility in accordance with the conditions of certification and which are proper applicants as defined by the PPSA. Upon determination that such a successor entity complies with the requirements for transfer of certification, the Department will initiate a modification to the Conditions to reflect the change in ownership in accordance with Rule 62-17.211, F.A.C.

[Chapter 120, F.S.; Rule 62-17.211, F.A.C]

XXVIII. FINANCIAL RESPONSIBILITY

The Department may require the Licensee to submit proof of financial responsibility and may require the Licensee to post an appropriate bond in those instances where the Department is authorized to require proof of financial responsibility or a bond pursuant to a law or Department rule that is applicable to the Certified Facility.

[Rule 62-701.630, F.A.C.]

XXIX. LABORATORIES AND QUALITY ASSURANCE

Chemical, physical, biological, microbiological, and toxicological data collected as a requirement of these Conditions must be reliable and collected and analyzed by scientifically sound procedures. Unless otherwise specified in these Conditions, the Licensee shall adhere to the minimum field and laboratory quality assurance, methodological and reporting requirements of the Department as set forth in Chapter 62-160, F.A.C.

[Chapter 62-160, F.A.C.]

XXX. ENVIRONMENTAL RESOURCES

A. General

1. Submittals for Construction Activities

Prior to the commencement of construction of new facilities and/or associated facilities the Licensee shall provide to the Southwest District's Environmental Resource Permitting Section for review, all information necessary for a complete *Application for Individual and Conceptual Approval Environmental Resource Permit* (State 404 Program Permit), DEP Form 62-330.060(1), F.A.C. A copy of this submittal shall also be provided to the SCO.

This form may: a) be submitted concurrently with a SCA; b) be submitted as part of an amendment request or a petition for modification; or c) be submitted as a post-certification submittal following approval of a Project through certification, modification, or amendment. Post-certification submittal information may be submitted by discrete portions of the Certified Facilities for a determination of compliance with these Conditions of Certification. Such Environmental Resource Permit (ERP), once received, shall be reviewed in accordance with the non-procedural standards and criteria for issuance of an ERP, including all the provisions related to reduction and elimination of impacts, conditions for issuance, additional conditions for issuance, and mitigation contained in Chapters 62-330, F.A.C., as applicable, unless otherwise stated in these Conditions. While the information is provided for review via submittal of the ERP form, pursuant to section 403.511, Florida Statutes, issuance of a separate ERP is not required for Certified Facilities.

Those forms submitted as part of a SCA, an amendment, or modification, shall be processed concurrently with, and under the respective certification, amendment, or modification procedures. Those forms submitted as a post-certification submittal (after certification, modification, or amendment and prior to construction) shall be processed in accordance with Section A. General Conditions, Condition XXI. Procedures for Post-Certification Submittals.

No construction shall commence on a Project feature, or in a particular segment for a linear facility, until the Department has determined that there is a demonstration of compliance with these Conditions. For post-certification submittal reviews, the Department's determination is governed by Section A. General Conditions, Condition XXI. Procedures for Post-Certification Submittals.

b. Concurrent with submittal of the DEP form required in Subparagraph A.1.a. above, the Licensee shall submit, as applicable, a survey of wetland and surface water areas as delineated in accordance with Chapter 62-340, F.A.C., and verified by appropriate agency staff for Department compliance review. Available DEP-approved wetland and surface water delineations within the boundaries of a certified site or a portion thereof may be used and reproduced for this delineation submittal and verification.

[Section 373.416, F.S.; Chapters 62-330 and 62-340, F.A.C.]

2 Construction, operation, and maintenance of the proposed Project (including any access roads and structures constructed within wetlands and other surface waters, and/or associated facilities) shall satisfy any applicable non-procedural requirements in the Department rules.

[Section 373.414(1)(a), F.S.]

3. Any delineation of the extent of a wetland or other surface water submitted as part of the DEP ERP Application Form required by Subparagraph A.1.a. above, including plans or other supporting documentation, shall not be considered binding on the Department unless a specific condition of this Certification or a formal wetlands jurisdictional determination under Section 373.421(2), F.S., provides otherwise.

[Sections 373.421 and 403.504, F.S.]

B. Surface Water Management Systems

1. Information regarding surface water management systems (SWMS) will be reviewed for consistency with the applicable non-procedural requirements of Part IV of Chapter 373, F.S., following submittal of Form 62-330.060(1) F.A.C., to SWD office of the Department.

2. All construction, operation, and maintenance of the SWMS(s) for the Certified Facilities shall be as set forth in the plans, specifications and performance criteria contained in the SCA and other materials presented during the certification proceeding, post-certification submittals, and as otherwise approved. If specific requirements are necessary for construction, operation and/or maintenance of an approved SWMS, those requirements shall be incorporated into a SWMS Plan for that system and included in Attachment B (Surface Water Management System Plans). Any alteration or modification to the SWMS Plan or the SWMS as certified requires prior approval from the Department.

3. To allow for stabilization of all disturbed areas, immediately prior to construction, during construction of the SWMS, and for the period of time after construction of the SWMS, the Licensee shall implement and maintain erosion and sediment control best management practices, such as silt fences, erosion control blankets, mulch, sediment traps, polyacrylamide (PAM), temporary grass seed, permanent sod, and floating turbidity screens to retain sediment on-site and to prevent violations of state water quality standards. These devices shall be installed, used, and maintained at all locations where the possibility exists of transferring suspended solids into the receiving waterbody due to the licensed work, and shall remain in place at all locations until construction in that location is completed and soils are permanently stabilized. All best management practices shall be in accordance with the guidelines and specifications described in *the State of Florida Erosion and Sediment Control Designer and Reviewer Manual* (Florida Department of Transportation and Florida Department of Environmental Protection, by HydroDynamics Incorporated in cooperation with Stormwater Management Academy, June 2007) unless a project-specific erosion and sediment control plan is approved as part of this License. If project-specific Conditions require additional measures during any phase of construction or operation to prevent erosion or control sediments beyond those specified in the approved erosion and sediment control plan, the Licensee shall implement additional best management practices as necessary, in accordance with the guidelines and specifications in *the State of Florida Erosion and Sediment Control Designer and Reviewer Manual*. The Licensee shall correct any erosion or shoaling that causes adverse impacts to the water resources as soon as feasible. Once project construction is complete in an area, including the re-stabilization of all side slopes, embankments, and other disturbed areas, and before conversion to the operation and maintenance phase, all silt screens and fences, temporary baffles, and other materials that are no longer required for erosion and sediment control shall be removed.

4. The Licensee shall complete construction of all aspects of the SWMS described in the ERP Application Form, submitted as part of a post-certification submittal, amendment, modification, or SCA including water quality treatment features, and discharge control facilities prior to use of the portion of the Certified Facility being served by the SWMS.

5. At least 48 hours prior to the commencement of construction of any new SWMS for any part of a Certified Facility authorized by this certification, the Licensee shall

submit to the Department a written notification of commencement using an "Environmental Resource Permit Construction Commencement Notice" (DEP Form 62-330.350(1), F.A.C.), indicating the actual start date and the expected completion date.

6 Each phase or independent portion of the approved system must be completed in accordance with the submitted DEP Form prior to the operation of the portion of the Certified Facility being served by that portion or phase of the system.

7. Within 30 days, or such other date as agreed to by DEP and the Licensee, after completion of construction of any new portions of the SWMS, the Licensee shall submit to the SWD's ERP Section, and copy the SCO, a written statement of completion and certification by a registered professional engineer (P.E.), or other appropriate registered professional, as authorized by law, utilizing the required "As-Built Certification and Request for Conversion to Operation Phase" (DEP Form 62-330.310(1), F.A.C.). Additionally, if deviations from the approved drawings are discovered, the As-Built Certification must be accompanied by a copy of the approved drawings with deviations noted.

8. Any substantial deviation from the approved drawings, exhibits, specifications, or Conditions, may constitute grounds for revocation or enforcement action by the Department.

9. The operation phase of any new SWMS approved by the Department shall not become effective until the Licensee has complied with the requirements of the conditions herein, the Department determines the system to be in compliance with the approved plans, and the entity approved by the Department accepts responsibility for operation and maintenance of the system.

10. The SWD ERP Section must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or surface waters, a written dewatering plan must be submitted to and approved by the Department prior to the dewatering event. Additional authorizations may be required for certain dewatering activities.

[Section 373.414, F.S.; Chapters 62-302, 62-330, and Rule 62-4.242, F.A.C.]

C. Wetland and Other Surface Water Impacts

1. All Certified Facilities shall be constructed in a manner which will eliminate or reduce adverse impacts to on-site and/or adjacent wetlands or other surface waters to the extent practicable or otherwise comply with substantive criteria for elimination or reduction. When impacts to wetlands will occur as a result of a future amendment, modification, or certification, and cannot be practicably eliminated or reduced, the Licensee may propose, and the Department or Board shall consider mitigation to offset otherwise unpermittable activities under the ERP review process pursuant to subparagraph A.1. above.

2. Proposed mitigation plans submitted with the DEP ERP Application forms required in subparagraph A.1.a. above, or submitted and approved as part of an amendment, modification, or certification, and that are deemed acceptable by DEP, shall include applicable construction conditions, success criteria and monitoring plans, and shall be incorporated into these Conditions as Attachment C (Mitigation Plans).

[Sections 373.413, 373.414, 373.4145, 403.511, and 403.814(6), F.S.; Chapters 62-312, 62-330, 62-340, 62-342, and 62-345, F.A.C.]

XXXI. THIRD PARTY IMPACTS

The Licensee is responsible for maintaining compliance with these Conditions even when third party activities authorized by the Licensee occur in or on the certified site.

[Section 403.506(1), F.S.]

XXXII. FACILITY OPERATION

The Licensee shall properly operate and maintain the Certified Facility and systems of treatment and control (and related appurtenances) that are installed and used by the Licensee to achieve compliance with these Conditions, as required by the Final Order of Certification, these Conditions, or a post-certification amendment or modification. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the Final Order of Certification, these Conditions, or a post-certification amendment or modification. Further, the Licensee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

[Rule 62-4.160(6), F.A.C.]

XXXIII. RECORDS MAINTAINED AT THE FACILITY

A. These Conditions or a copy thereof shall be kept at the Site.

B. The Licensee shall hold at the site, or other location designated by these Conditions, records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation required by these Conditions, copies of all reports required by these Conditions, and records of all data used to complete the SCA for this approval. These materials shall be retained at least three (3) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

C. Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used; and,
6. the results of such analyses.

[Rules 62-4.160(12) and 62-4.160(14)(b), F.A.C.]

XXXIV. WATER DISCHARGES

A. Discharges

1. Except as otherwise authorized by a permit issued by the Department under a federally approved or delegated program or to the extent a variance, exception, exemption or other relief is granted or authorized by these Conditions, the Licensee shall not discharge to surface or ground waters of the State wastes in concentrations which alone or in combinations with other substances, or components of discharges (whether thermal or non-thermal) are carcinogenic, mutagenic, or teratogenic to human beings (unless specific criteria are established for such components in Rule 62-520.400, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.

2. Except as otherwise authorized by a permit issued by the Department under a federally approved or delegated program or to the extent a variance, exception, exemption or other relief is granted or authorized by these Conditions, all discharges and activities must be conducted so as to not cause a violation of the water quality standards set forth in Chapters 62-4, 62-302, 62-520, and 62-550, 62-620, F.A.C., including the provisions of Rules 62-4.243, 62-4.244, and 62-4.246, F.A.C., the antidegradation provisions of Rules 62-4.242(1)(a) and (b), F.A.C., and 62-302.300, F.A.C., and any special standards for Outstanding Florida Waters and Outstanding National Resource Waters set forth in Rules 62-4.242(2) and (3), F.A.C.;

[Chapters 62-4, 62-302, 62-520, 62-550, and 62-620, F.A.C.]

B. Wastewater Incident Reporting

1. The Licensee shall report to the appropriate district office any noncompliance with industrial wastewater requirements which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Licensee becomes aware of the circumstances.

The Licensee shall provide the following information, to the extent known, to the applicable DEP District Office in the 24-hr oral report:

a. Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,

b. Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,

c. Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and

d. Any unauthorized discharge to surface or ground waters.

A written submission shall also be provided within five days of the time the Licensee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

2. For unauthorized releases or spills of treated or untreated wastewater reported that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the Department by calling the STATE WARNING POINT NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the Licensee becomes aware of the discharge. The Licensee, to the extent known, shall provide the following information to the State Warning Point:

a. Name, address, and telephone number of person reporting;

b. Name, address, and telephone number of Licensee or responsible person for the discharge;

c. Date and time of the discharge and status of discharge (ongoing or ceased);

d. Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);

e. Estimated amount of the discharge;

f. Location or address of the discharge;

g. Source and cause of the discharge;

h. Whether the discharge was contained on-site, and cleanup actions taken to date;

i. Description of area affected by the discharge, including name of water body affected, if any; and

j. Other persons or agencies contacted.

3. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department shall waive the written report.

[Chapter 403, F.S.; Rule 62-620.610(20), F.A.C.]

XXXV. SOLID AND HAZARDOUS WASTE

A. Solid Waste

The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-701, F.A.C., for any solid waste generated within the Certified Facility during construction, operation, maintenance, and closure.

[Chapters 62-701, F.A.C.]

B. Hazardous Waste, Used Oil, Petroleum Contact Water and Spent Mercury

The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-730, F.A.C., for any hazardous waste generated within the Certified Facility. An EPA identification number must be obtained before beginning hazardous waste activities unless the facility is a Conditionally Exempt Small Quantity Generators (CESQGs). CESQGs generate no more than 100 kg (220 lbs) of hazardous waste in any month.

The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-710, F.A.C., for any used oil and used oil filters generated within the Certified Facility.

The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-737, F.A.C., for any spent mercury-containing lamps and devices generated within the Certified Facility.

The Licensee shall comply with all applicable provisions of Chapter 62-740, F.A.C. for any petroleum contact water located within the Certified Facility.

[Chapters 62-710, 62-730, 62-737, and 62-740, F.A.C.]

C. Hazardous Substance Release Notification

1. Any owner or operator of a facility who has knowledge of any release of a hazardous substance from a Certified Facility in a quantity equal to or exceeding the reportable quantity in any 24-hour period shall notify the Department by calling the STATE WATCH OFFICE, (800) 320-0519, as soon as possible, but not later than one working day of discovery of the release.

2. Releases of mixtures and solutions are subject to these notification requirements only where a component hazardous substance of the mixture or solution is released in a quantity equal to or greater than its reportable quantity.

3. Notification of the release of a reportable quantity of solid particles of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, or zinc is not required if the mean diameter of the particles released is larger than 100 micrometers (0.004 inches).

[Chapter 62-150, F.A.C.]

D. Contaminated Site Cleanup

The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-780, F.A.C., for any violations of relevant provisions of Chapter 376 or 403, F.S., that result in legal responsibility for site rehabilitation pursuant to those chapters. This responsibility for site rehabilitation does not affect any activity or discharge permitted or exempted pursuant to Chapter 376 or 403, F.S., or rules promulgated pursuant to Chapter 376 or 403, F.S.

[Chapter 62-780, F.A.C.]

E. Water Quality Reporting Requirements for the Solid Waste Program

All solid and/or hazardous wastewater quality monitoring reports and all solid and/or hazardous waste ground water, surface water and leachate analytical results shall be submitted electronically. Water quality monitoring reports shall be submitted in a pdf format. The water quality data Electronic Data Deliverable (EDD) shall be provided to the Department in an electronic format consistent with requirements for importing the data into the Department's databases. Water quality monitoring reports shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations and shall include the following:

1. Cover letter;
2. Summary of exceedances and recommendations;
3. Ground water contour maps;
4. Laboratory report of results including chain of custody forms;
5. Water levels, water elevation table;
6. Ground Water Monitoring Report Certification, using the appropriate Department form;
7. Appropriate sampling information on Form FD 9000-24 (DEP-SOP-001/01); and,
8. Laboratory and Field EDDs and error logs, as applicable.

All submittals in response to this specific condition shall be sent both to:

Florida Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, FL 33637
SWD_Waste@dep.state.fl.us

And to:

Florida Department of Environmental Protection
Solid Waste Section
2600 Blair Stone Road, MS 4565
Tallahassee, Florida, 32399-2400

ADaTP.EDDs.and.Reports@dep.state.fl.us

And to:

Florida Department of Environmental Protection
Siting Coordination Office
SCO@dep.state.fl.us

[Rules 62-160.110, 62-160.240, 62-160.340, 62-701.510(9)(a), 62-710, 62-730.225 62-737, 62-740, and 62-780, F.A.C.]

XXXVI. STORAGE TANK SYSTEMS

Registration, construction, installation, operation, maintenance, repair, closure, and disposal of storage tank systems within a Certified Area that store regulated substances shall be in accordance with Chapters 62-761 and 62-762, F.A.C., in order to minimize the occurrence and environmental risks of releases and discharges. Mineral acid storage tank systems are subject only to Rule 62-762.891, F.A.C.

A. Incident Notification Requirements.

Notification of any condition or situation indicating that a release or discharge may have occurred from a storage tank system or system component shall be made to the County

on Incident Notification Form 62-761.900(6) or 62-762.901(6) within 24 hours of discovery or before the close of the County's next business day.

B. Discharge Reporting Requirements

Notification of the discovery of a discharge of a regulated substance shall be made to the county in writing or electronic format on Form 62-761.900(1), Discharge Report Form (DRF) within 24 hours of the discovery or before the close of the County's next business day, except as provided in subsection 62-761.440(5), F.A.C.

C. Discharge Cleanup

If a discharge of a regulated substance occurs at a Certified Facility, actions shall be taken immediately to contain, remove, and abate the discharge under all applicable Department rules. The Licensees is advised that other federal, state, or local requirements may apply to these activities. If the contamination present is subject to the provisions of Chapter 62-780, F.A.C., corrective action, including free product recovery, shall be performed in accordance with that Chapter.

D. Out of Service and Closure Requirements

Storage tank systems shall be taken out-of-service and/or closed as necessary in accordance with Rules 62-761.800 and 62-762.801, F.A.C., as applicable.

[Chapters 62-761, 62-762, and 62-780 F.A.C.]

SECTION B: SPECIFIC CONDITIONS

I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

A. Water Discharges

All discharges to groundwaters, such as landfill leachate, shall be collected and treated as necessary, or otherwise be of high enough quality, to be able to meet the applicable ground water minimum criteria and ground water quality standards of Rules 62-520.400 and 62-520.420, F.A.C., respectively, at the boundary of the site. If monitoring should indicate a violation of the standards, the Licensee shall immediately notify the Southwest District Office and SWFWMD and institute evaluation monitoring/corrective action.

B. Groundwater Quality Monitoring Plan

1. The Licensee shall comply with the requirements contained in PCRRF Groundwater Quality Monitoring Requirements (GWQMR) and incorporated herein as Attachment D to these Conditions. A violation of the requirements of the GWQMR shall be a violation of these Conditions of Certification and may constitute grounds for enforcement.

a. Groundwater monitoring is required around all solid waste landfill sites. The Licensee shall install a solid waste ground water monitoring well network to monitor the water quality of the aquifer around each site, in accordance with applicable provisions of Chapters 62-520 and 62-701, F.A.C., and the GWQMR (Attachment D).

b. During the period of operation authorized by this Site Certification, the Licensee shall conduct ground water monitoring at the specified monitor wells for the parameters and frequency identified in the GWQMR, in accordance with Rules 62-520 and 62-701 F.A.C. and the GWQMR.

2. Revisions to the GWQMR other than those described in 5. Revisions Requiring Modification to the Conditions of Certification below, shall be submitted to the DEP Southwest District Office, Solid Waste Section and the Tallahassee Solid Waste Section for review and approval, with a copy submitted to the DEP Siting Office in accordance with Section A, Condition XX. Procedures for Post-Certification Submittals.

3. For any approved new or revised solid waste disposal area, a revised GWQMR shall be submitted to the Solid Waste Section of the DEP Tallahassee office and to SCO@DEP.state.fl.us for review at least 12 months prior to operation of a new site, 90-days prior to implementation of a revised site, or such other date as the Licensee and DEP agree.

4. Zone of Discharge

a. The zone of discharge for this site shall extend horizontally 100 feet from the limits of the landfill liner or to the property boundary, whichever is less, and shall extend vertically to the top of the Floridan Aquifer.

b. The water quality standards and minimum criteria for Class G-II groundwaters shall not be exceeded at the boundary of the zone of discharge according to F.A.C. 62-520.420.

5. Revisions Requiring Modification to the Conditions of Certification

Projects which involve any one of the following shall be considered a modification to these Conditions and shall be processed in accordance with Section 403.516(1)(c), F.S., and Rule 62-17.211, F.A.C. as applicable:

Any change which is reasonably expected to lead to substantially different environmental impacts, including but not limited to vertical expansion, horizontal expansion, and/or base grade elevation changes.

[Chapters 62-520, 62-620, and 62-701, F.A.C.]

C. Resource Recovery Facility

1. Classification. The resource recovery Facility shall be operated in accordance with all applicable requirements of Chapter 62-701, F.A.C.

2. Waste Records. The owner or operator of the resource recovery Facility shall record, in tons (or cubic yards) per day, the amount of waste received, and ash removed for disposal. This information shall be compiled monthly and made available to the Department upon request.

3. Plans and Drawings. A copy of these conditions of certification, and record drawings, shall be kept at the Facility at all times for reference and inspections.

4. Drainage and Leachate Management. All liquids from residuals shall be contained.

[Chapter 62-701, F.A.C.]

D. Solid Waste

1. Tallahassee Solid Waste Section approval of specific plans submitted will be required based upon a determination of consistency with the approved design concepts, regulations, and these Conditions prior to initiating construction of the: liner system; leachate collection system, stormwater runoff system, landfill closure plans and hazardous, toxic, or pathological handling Facilities or areas. Review and action by the Tallahassee Solid Waste Section on said plans shall be accomplished in no longer than thirty (30) days from the date of a complete submittal of such plans and any action may be subject to review pursuant to Chapter 120, F.S.

2. All new or revised solid waste management facilities will be approved through a site certification, modification, or amendment as applicable. All new or revised solid waste management facilities shall be constructed, operated, closed, monitored, and maintained in accordance with all applicable requirements of Chapters 62-4, 62-302, 62-330, 62-520, 62-550, and 62-701, F.A.C. The facilities' solid waste requirements are contained in the Solid Waste Construction and Operations Requirements (SWCOR) and incorporated herein as Attachment E, including requirements for beneficial ash reuse consistent with 403.7045(5), F.S. A violation of the requirements in Attachment E will be considered a violation to these Conditions of Certification and may constitute grounds for enforcement. Revisions to the Operations Plan, incorporated as Appendix I to Attachment E, shall be submitted to the Department's Solid Waste Section (SWPP@dep.state.fl.us) for review in accordance with Section A, Condition XXI. Procedures for Post-Certification Submittals.

a. Pollution Prevention. The landfill shall be designed, constructed, operated, maintained, closed, and monitored throughout its design period to control the movement of waste and waste constituents into the environment so that ground water and surface water quality standards and criteria of Chapters 62-302 and 62-520, F.A.C., will not be violated beyond the zone of discharge specified for the landfill.

b. Revisions. Revisions to Attachment E of these Conditions shall be submitted to the DEP Southwest District Office, Solid Waste Section and the Tallahassee Solid Waste Section for review and approval, with a copy submitted to the DEP Siting Office. Review of proposed revisions to Attachment E to these Conditions shall be in accordance with Section A, Condition XXI. Procedures for Post-Certification Submittals.

c. Records Maintenance. As required by F.A.C. Rule 62-701.500(13), records shall be kept of all information used to develop or support the landfill design and any supplemental information provided to DEP pertaining to construction of the landfill. Records pertaining to the operation of the landfill shall be kept for the design period of the landfill. Records of all monitoring information, including calibration and maintenance records, all original chart recordings for continuous monitoring instrumentation, and copies of all reports required by these Conditions, shall be kept for at least ten years. Background water quality records shall be kept for the design period of the landfill.

d. No suspected or known hazardous, toxic, or infectious wastes as defined by applicable Federal, State, or local statutes, rules, regulations, or ordinances shall be burned or landfilled at the site.

e. The secondary underdrain system shall be monitored weekly for the presence of leachate which would indicate leakage from the primary liner. A contingency plan will be developed for actions to be taken in event that the failure of a liner or underdrain is detected. The contingency plan shall include:

(i) Methods for determining which cell is leaking,

(ii) Plans for immediate expansion of the monitor well network downgradient of the problematic cell for early detection of leachate in the aquifer if the secondary liner fails,

(iii) Plans for repair of a leaking liner, and

(iv) Plans for restoration of the aquifer if aquifer contamination occurs.

3. Any ash residue generated by the Licensee at the certified facility shall be disposed of, and/or managed, at a permitted solid waste facility in accordance with Chapter 62-701, F.A.C., and as authorized in Attachment E to these Conditions of Certification.

E. Solid Waste Disposal Unit Construction

1. Applicable Rules

The Class I landfill disposal units associated with this site shall be constructed in accordance with all applicable requirements of Chapter 62-701, F.A.C., and in accordance with all applicable requirements of other Department rules, and Attachment E to these Conditions.

2. Construction Quality Assurance

As required by Rules 62-701.400(7) and (8), F.A.C., liner systems shall have a construction quality assurance plan to provide personnel with adequate information to achieve continuous compliance with the liner construction requirements. The plan shall include or refer to specifications and construction methods which use established engineering practices to construct a liner system and provide for quality control testing procedures and sampling frequencies.

F. Cooling Tower

Prior to use in the cooling tower, reclaimed water shall be disinfected by use of chlorine or other suitable biocide to achieve a 1.0 mg/l concentration of total chlorine residual after a 15-minute contact time.

G. Operational Contingency Plans

1. Operating Procedures

The Licensee shall develop and furnish the Southwest District Office and the Tallahassee Solid Waste Section a copy of written operating instructions for all aspects of the operation which are critical to keeping the Facility working properly. The instructions shall also include procedures for the handling of suspected hazardous, toxic, and infectious wastes.

2. Contingency Plans

The Licensee shall develop and furnish to the Southwest District Office and the Tallahassee Solid Waste Section written contingency plans for the continued operation of the system in event of breakdown. Stoppages which compromise the integrity of the operations must have appropriate contingency plans. Such contingency plans should identify critical spare parts to be readily available.

3. Current Engineering Plans

The Licensee shall maintain a complete current set of modified engineering plans, equipment data books, catalogs, and documents in order to facilitate the smooth acquisition or fabrication of spare parts or mechanical modifications.

4. Application Modifications

The Licensee shall furnish appropriate modifications to drawings and plot plans submitted as part of the application, including operational procedures for isolation and containment of hazardous wastes which will be processed as post-certification submittals (see Section A. Condition XXI.)

H. Wastewater Disposal

Any new or revised leachate collection systems, pumps, lift stations, sewage collection systems, and wastewater collection systems shall be approved through a site certification, modification, or amendment. A complete submittal of plans, drawings, and specifications for approved leachate collection systems, pumps, lift stations, sewage collection systems, and wastewater collection systems in accordance with appropriate DEP rules shall be furnished to the Southwest District Office and Tallahassee Solid Waste Section for approval at least 60 days prior to start of construction for the particular of such component. In order to

obtain approval, the receiving sewage treatment plant shall indicate its ability and willingness to accept the wastewater. Plans and specifications for connections to approved off-site sewage and wastewater transmission systems shall be furnished to the Southwest District Office for approval 60 days prior to construction.

[Chapters 62-4, 62-302, 62-330, 62-520, 62-550, and 62-701, F.A.C].

II. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

Existing Withdrawal Facility

District ID No.	Pasco ID No.	Casing Diameter (inches)	Casing Depth (feet)	Total Depth (feet)	Annual Average (gpd)	Peak Month (gpd)	Maximum Day (gpd)
3	New Well No. 1	12	100	550	720,000	720,000	1,150,000
5	Industrial Supply Well No. 2	17	350	420	0	0	0

A. With advance notice to the Licensee, District staff with proper identification shall have permission to enter, inspect, collect samples, take measurements, observe permitted and related facilities, and collect and document any information deemed necessary to determine compliance with the District's conditions of certification. The Licensee shall either accompany District staff onto the property or make provision for access onto the property.

B. The COCs are contingent upon continued ownership or legal control of all property on which pumps, wells, diversions, or other water withdrawal facilities are located.

C. When necessary to analyze impacts to the water resource or existing users, the District shall require the Licensee to install flow metering or other measuring devices to record withdrawal quantities and submit the data to the District.

D. A District identification tag shall be prominently displayed at each withdrawal point that is required by the District to be metered or for which withdrawal quantities are required to be reported to the District, by permanently affixing the tag to the withdrawal facility.

E. Licensee shall mitigate to the satisfaction of the District any adverse impacts to environmental features or off-site land uses as a result of withdrawals. When adverse impacts occur or are imminent, the District shall require Licensee to mitigate the impacts. Adverse impacts include the following:

1. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams, or other watercourses; or

2. Damage to crops and other vegetation causing financial harm to the owner; and

3. Damage to the habitat of endangered or threatened species.

F. Licensee shall mitigate, to the satisfaction of the District, any adverse impacts to existing legal users caused by withdrawals. When adverse impacts occur or are imminent, the District may require Licensee to mitigate the impacts. Adverse impacts include:

1. A reduction in water levels which impairs the ability of a well to produce water;

2. A significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams, or other watercourses; or

3. A significant inducement of natural or manmade contaminants into a water supply or into a usable portion of an aquifer or water body.

G. Licensee shall notify the District in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of legal control of the Project and/or related facilities from which the authorized water use is made. Where Licensee's control of the land subject to the District's conditions of certification was demonstrated through a lease, the Licensee must either submit documentation showing that it continues to have legal control or transfer control of the project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of Rule 40D-1.6105, F.A.C.

H. All withdrawals authorized by the District's conditions of certification shall be implemented as forth herein, including any documents submitted as part of the site certification process. These conditions of certification are subject to review and modification, enforcement action, or revocation, in whole or in part, pursuant to Section 373.136 or 373.243, F.S.

I. The District conditions of certification do not convey to the Licensee any property rights or privileges other than those specified herein, nor relieve the Licensee from complying with any applicable local government, state, or federal law, rule, or ordinance.

J. Licensee shall cease or reduce surface water withdrawals as directed by the District if water levels in lakes fall below the applicable minimum water level established in Chapter 40D-8, F.A.C., or rates of flow in streams fall below the minimum levels established in Chapter 40D-8, F.A.C.

K. Licensee shall cease or reduce withdrawals as directed by the District if water levels in aquifers fall below the minimum levels established by the Governing Board.

L. Licensee shall not deviate from any of the terms or conditions of certification without written approval by the District.

M. Licensee shall practice water conservation to increase the efficiency of transport, application, and use, as well as to decrease waste and to minimize runoff from the property. At such time as the Governing Board adopts specific conservation requirements for power plants, these conditions of certification shall be subject to those requirements upon notice and after a reasonable period for compliance.

N. Nothing in these COCs should be construed to limit the authority of the District to declare a water shortage and issue orders pursuant to chapter 373, F.S. In the event of a declared water shortage, the Licensee must adhere to the water shortage restrictions, as specified by the District. The Licensee is advised that during a water shortage, reports shall be submitted as required by District rule or order.

O. These COCs are issued based on information provided by Licensee demonstrating that the use of water is reasonable and beneficial, consistent with the public interest, and will not interfere with any existing legal use of water. If, during the term of operation, it is determined by the District that a statement in the application and in the supporting data are found to be untrue and inaccurate, the use is not reasonable and beneficial, in the public interest, or does impact an existing legal use of water, the District shall modify its conditions of certification or shall initiate action for suspension or revocation of certification following notice and hearing, pursuant to Sections 373.136 or 373.243, F.S. The Licensee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

P. If the District determines that significant water quantity or quality changes, impacts to existing legal uses, or adverse environmental impacts are occurring, Licensee shall be provided with a statement of facts upon which the District based its determination and an opportunity to address the change or impact prior to a reconsideration by the District of the quantities authorized in the conditions of certification.

Q. The District may establish special regulations for Water-Use Caution Areas. At such time as the Governing Board adopts such provisions, the District's conditions of certification shall be subject to them upon notice and after a reasonable period for compliance.

R. All reports, and data required by the District's conditions of certification, shall be submitted to the District according to the due dates contained in the specific conditions. If the condition specifies that a District-supplied form is to be used, Licensee should use that form in order for their submission to be acknowledged in a timely manner. The only alternative to this requirement is to use the District Permit Information Center (www.swfwmd.state.fl.us/permits/epermitting/) to submit data, plans or reports online. There are instructions at the District's website on how to register to set up an account to do so. If the report or data is received on or before the tenth day of the month following data collection, it shall be deemed as a timely submittal. All mailed reports and data are to be sent to:

Southwest Florida Water Management District
Tampa Service Office, Water Use Permit Bureau
7601 U.S. Hwy. 301 North
Tampa, Florida 33637-6759

Submission of plans and reports: Unless submitted online or otherwise indicated in the District's conditions of certification, the original and two copies of each plan and report, such as conservation plans, environmental analyses, aquifer test results, etc. are required.

Submission of data: Unless otherwise indicated in the District's conditions of certification, an original (no copies) is required for data submittals such as meter readings and/or pumpage, rainfall, water level, evapotranspiration, or water quality data.

S. Licensee is authorized to withdraw groundwater from the Upper Floridan aquifer and use for process water systems, makeup water for the cooling towers, and boiler makeup water purposes. In support of 31 MW nominal net ultimate generating capacity, the quantity of groundwater that Licensee is authorized to withdraw shall be limited to 0.720 MGD on an annual average basis, 0.720 MGD on a peak month basis, and 1.15 MGD on a maximum basis, subject to the following conditions:

1. The authorized sources of process and cooling water in support of such generating capacity shall consist of existing water on site, on-site rainwater and stormwater capture, reuse of internal wastewater streams, and other alternative water supply sources including, but not limited to, treated wastewater (reclaimed water).

2. Licensee shall demonstrate that any incremental quantity of process or cooling water which it proposes to withdraw from the Upper Floridan aquifer in support of that increment of generating capacity will be minimized to the greatest extent practicable by prudent technologically and economically feasible water conservation practices consistent with those generally required within the SWUCA, including but not limited to the following:

a. Minimization of loss of water from the site during construction;
b. Use of water-conserving electric generation and pollution control technologies;
c. On-site rainwater and stormwater capture and management;
d. Reuse of internal wastewater streams of technologically suitable quality;
e. Reuse of treated wastewater of technologically suitable quality available from other sources, such as publicly owned sewage treatment facilities, which Licensee shall diligently pursue; and
f. Use of other available sources of non-potable water of technologically suitable quality.

T. The following withdrawal facilities shall continue to be maintained and operated with existing, non-resettable, totalizing flow meters or other measuring devices as approved by the Water Use Permit Bureau Chief: District ID Nos. 3 and 4, Permittee ID Nos. New Well No. 1 and Reclaimed Water. Meter reading and reporting, as well as meter accuracy checks every five years shall be in accordance with the metering instructions described below.

U. Metering Instructions. Licensee shall meter withdrawals/discharges from surface waters and/or the ground water resources, and meter readings from each withdrawal facility shall be recorded on a monthly basis within the last week of the month. The meter readings shall be reported to the District's Water Use Permit Bureau on or before the tenth day of the following month. Licensee shall submit meter readings online using the Permit Information Center at www.swfwmd.state.fl.us/permits/epermitting/ or on District supplied scanning forms unless another arrangement for submission of this data has been approved by the District. Submission of such data by any other unauthorized form or mechanism may result in loss of data and subsequent delinquency notifications. Call the District's Water Use Permit Bureau in Tampa at (813) 985-7481 if difficulty is encountered.

The meters shall adhere to the following descriptions and shall be installed or maintained as follows:

1. The meters shall be non-resettable, totalizing flow meters that have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months authorized quantities. If other measuring devices are proposed, prior to installation, approval shall be obtained in writing from the District's Water Use Permit Bureau Chief.

2. Licensee shall report non-use on all metered standby withdrawal facilities on the scanning form or approved alternative reporting method.

3. If a metered withdrawal facility is not used during any given month, the meter report shall be submitted to the District indicating the same meter reading as was submitted the previous month.

4. The flow meters or other approved devices shall have and maintain an accuracy within five percent of the actual flow as installed.

5. Meter accuracy testing requirements:

a. For newly metered withdrawal points, the flow meter installation shall be designed for inline field access for meter accuracy testing.

b. The meter shall be tested for accuracy on-site, as installed according to the Flow Meter Accuracy Test Instructions, every five years in the assigned month for the county, beginning from the date of its installation for new meters containing the metering condition with an accuracy test requirement for existing meters.

c. The testing frequency will be decreased if Licensee demonstrates to the satisfaction of the District that a longer period of time for testing is warranted.

d. The test will be accepted by the District only if performed by a person knowledgeable in the testing equipment used.

e. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, the Licensee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary.

Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.

6. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe where there is at least an upstream length equal to 10 times the outside pipe diameter and a downstream length equal to 2 times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the upstream line.

7. Broken or malfunctioning meter:

a. If the meter or other flow measuring device malfunctions or breaks, Licensee shall notify the District within 15 days of discovering the malfunction or breakage.

b. The meter must be replaced with a repaired or new meter, subject to the same specifications given above, within 30 days of the discovery.

c. If the meter is removed from the withdrawal point for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal from the withdrawal. In either event, a fully functioning meter shall not be off the withdrawal point for more than 60 consecutive days.

8. While the meter is not functioning correctly, the Licensee shall keep track of the total amount of time the withdrawal point was used for each month and multiply those minutes times the pump capacity (in gallons per minute) for total gallons. The estimate of the number of gallons used each month during that period shall be submitted on District scanning forms and noted as estimated per instructions on the form. If the data is submitted by another approved method, the fact that it is estimated must be indicated. The reason for the necessity to estimate pumpage shall be reported with the estimate.

9. In the event a new meter is installed to replace a broken meter, it and its installation shall meet the specifications of this condition. Licensee shall notify the District of the replacement with the first submittal of meter readings from the new meter.

V. Flow Meter Accuracy Test Instructions.

1. Accuracy Test Due Date - Licensee is to schedule their accuracy test according to the following schedule:

a. For existing metered withdrawal points, add five years to the previous test year, and make the test in February.

b. For withdrawal points for which metering is added for the first time, the test is to be scheduled five years from the issue year in February.

c. For proposed withdrawal points, the test date is five years from the completion date of the withdrawal point in February.

d. For Licensee's convenience, if there are multiple due-years for meter accuracy testing because of the timing of the installation and/or previous accuracy tests of meters, Licensee can submit a request in writing to the District's Water Use Permit Bureau Chief for one specific year to be assigned as the due date year for meter testing.

e. The month for accuracy testing of meters is February. Licensee is requested but not required to have testing done in February. This is to have sufficient District staff available for assistance.

2. Accuracy Test Requirements: Licensee shall test the accuracy of flow meters on authorized withdrawal points as follows:

a. The equipment water temperature shall be set to 72 degrees Fahrenheit for ground water, and to the measured water temperature for other water sources.

b. A minimum of two separate timed tests shall be performed for each meter. Each timed test shall consist of measuring flow using the test meter and the installed meter for a minimum of four minutes duration. If the two tests do not yield consistent results, additional tests shall be performed for a minimum of eight minutes or longer per test until consistent results are obtained.

c. If the installed meter has a rate of flow, or large multiplier that does not allow for consistent results to be obtained with four- or eight-minute tests, the duration of the test shall be increased as necessary to obtain accurate and consistent results with respect to the type of flow meter installed.

d. The results of two consistent tests shall be averaged, and the result will be considered the test result for the meter being tested. This result shall be expressed as a

plus or minus percent (rounded to the nearest one-tenth percent) accuracy of the installed meter relative to the test meter. The percent accuracy indicates the deviation (if any), of the meter being tested from the test meter.

3. Accuracy Test Report: Licensee shall demonstrate that the results of the meter test(s) are accurate by submitting the following information within 30 days of the test:

a. A completed Flow Meter Accuracy Verification Form, Form LEG-R.014.00 (07/08) for each flow meter tested. This form can be obtained from the District's website (www.watermatters.org) under "ePermitting and Rules" for Water Use Permits.

b. A printout of data that was input into the test equipment if the test equipment is capable of creating such a printout.

c. A statement attesting that the manufacturer of the test equipment, or an entity approved or authorized by the manufacturer, has trained the operator to use the specific model test equipment used for testing.

d. The date of the test equipment's most recent calibration that demonstrates that it was calibrated within the previous twelve months, and the test lab's National Institute of Standards and Testing (N.I.S.T.) traceability reference number.

e. A diagram showing the precise location on the pipe where the testing equipment was mounted shall be supplied with the form. This diagram shall also show the pump, installed meter, the configuration (with all valves, tees, elbows, and any other possible flow disturbing devices) that exists between the pump and the test location clearly noted with measurements. If flow straightening vanes are utilized, their location(s) shall also be included in the diagram.

f. A picture of the test location, including the pump, installed flow meter, and the measuring device, or for sites where the picture does not include all of the items listed above, a picture of the test site with a notation of distances to these items.

W. Any wells not in use and in which pumping equipment is not installed shall be capped or valved in a water-tight manner in accordance with Chapter 62-532.500(3)(a)(4), F.A.C.

X. The Licensee shall investigate the feasibility of increasing the use of or using reclaimed water for irrigation when notified by the District that reclaimed water may be available in sufficient supply to be utilized for this facility. The Licensee shall submit a report documenting the feasibility investigation within six months of the notification. The report shall contain an analysis of reclaimed water sources for the area, including the relative location of these sources to the Licensee's property, the quantity of reclaimed water available, the projected date(s) of availability, costs associated with obtaining the reclaimed water, and an implementation schedule for reuse, if feasible. Infeasibility shall be supported with a detailed explanation. If the use of reclaimed water is determined to be feasible, the SWFWMD may request that FDEP initiate a modification to this Site Certification to include reclaimed water as a source of water. The modification shall include a date when the reclaimed water will be available, a reduction in authorized withdrawals, and shall provide for the placement of equal quantities of authorized ground and/or surface water withdrawals on standby. The standby quantities may be used in the event that some or all of the reclaimed water is not available.

Y. Licensee shall implement a leak detection and repair program as an element of an ongoing system maintenance program. This program shall include a system-wide inspection at least once a year.

Z. Licensee shall comply with allocated quantities. If the allocated quantities are exceeded, upon request by the District, Licensee shall submit a report that includes reasons why the allocated quantities were exceeded, measures taken to attempt to meet the allocated quantities, and a plan to bring the Licensee back into compliance with District's conditions of certification. The District will evaluate the information submitted to determine whether the lack of achievement is justifiable, and a variance is warranted. The report is subject to approval by the District; however, justification for exceeding the allowed withdrawal quantity does not constitute a waiver of the District's authority to enforce the District's conditions of certification.

[Chapters 40D-1, 40D-8, and 62-532, F.A.C.; Sections 373.136 and 373.243, F.S.]

III. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

A. General Listed Species Survey

1. The Licensee shall follow the current survey protocols for all listed species that may occur within the Certified Facility as well as accessible appropriate buffers within the property or rights-of-way as defined by the listed species' survey protocols, prior to conducting detailed surveys. Guidance related to species-specific survey protocols can be found in the FWC's Florida Wildlife Conservation Guide at http://myfwc.com/conservation/value/fwcg/. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols.

[Article IV, Section 9, Florida Constitution; Section 379.2291, F.S.; Chapter 68A-27, and Rule 62-17.191, F.A.C.]

B. Specific Listed Species Surveys

1. Surveys shall be conducted in accordance with U.S. Fish and Wildlife Service (USFWS)/FWC guidelines and methodologies by a person or firm that is knowledgeable and experienced in conducting flora and fauna surveys for each potentially occurring listed species.

2. FWC's survey protocols may be downloaded from https://myfwc.com/wildlifehabitats/wildlife/species-guidelines/.

3. FWC's permitting guidelines for the gopher tortoise may be downloaded from https://myfwc.com/media/11854/gt-permitting-guidelines.pdf.

4. This survey shall identify locations of breeding locations, nests, and burrows for listed wildlife species. Nests and burrows shall be recorded with GPS coordinates, identified on an aerial photograph, and submitted with the final listed species report. These locations should also be physically marked so that clearing and construction will avoid impacting them.

5. This survey shall include an estimate of the acreage and percent cover of each existing vegetation community that is contained within the Certified Facility prior to land clearing and construction activities using GIS. Examples of such wildlife-based habitat

classification schemes include Florida's State Wildlife Action Plan[1] (FWC 2019) or the Natural Communities Guide[2] (Florida Natural Areas Inventory 2010).

[Article IV, Section 9, Florida Constitution; Section 379.2291, F.S.; Chapters 68A-4, 68A-16, 68A-27, and Rule 62-17.191, F.A.C.]

1 Florida Fish and Wildlife Conservation Commission (FWC). 2019. Florida's Wildlife Legacy Initiative: Florida's State Wildlife Action Plan. Tallahassee, Florida.
2 Florida Natural Areas Inventory. 2010. Guide to the Natural Communities of Florida: 2010 edition. Florida Natural Areas Inventory, Tallahassee, Florida.

C. Listed Species Locations

Where any suitable habitat and evidence is found of the presence of listed species within the Certified Facility, the Licensee will report those locations to, and confer with, the appropriate regulatory agencies for possible additional pre-clearing surveys and to identify potential mitigation, or avoidance recommendations. If pre-clearing surveys are required, they shall be timed to be reasonably compatible with the construction schedule, considering the in-service date specified in the Public Service Commission's need determination. The Licensee will not construct in areas where evidence of listed species was identified during the initial survey until the particular listed species issues have been resolved.

1. *Listed Wildlife Species*: If listed wildlife species are found, their presence shall be reported to the DEP Siting Coordination Office, the appropriate DEP District Office(s), the FWC's Office of Conservation Planning Services, the appropriate WMD, the appropriate local government(s), and the USFWS.

2. *Listed Vegetation Species*: If listed vegetation species are found on public land or water, their presence shall be reported to the DEP Siting Coordination Office and the Florida Department of Agriculture and Consumer Services (DACS). Listed wildlife species and listed vegetation species on public land or water shall not be disturbed, if feasible.

3. *Species Management Plan:* If avoidance is not feasible, the Licensee shall consult with DEP, FWC, and, if necessary, the USFWS for listed wildlife species, and with the DACS for listed vegetation species on public land or water, to determine the steps appropriate for the species involved which are to be taken to avoid, minimize, mitigate, or otherwise appropriately address impacts within each agency's respective jurisdiction. For wildlife species, these steps shall be memorialized in a Wildlife Management Plan and submitted to DEP, FWC, and the appropriate local government.

[Article IV, Section 9, Florida Constitution; Section 379.2291, F.S.; Chapter 68A-27, and Rule 62-17.191, F.A.C.]

D. Gopher Tortoise Management Plan

1. The Licensee shall identify the proposed gopher tortoise preserve, to be located in the 170-acre southwest portion of the site, on the site master plan. The Licensee shall develop a management plan as approved by the Florida Game and Fresh Water Fish Commission staff, that will adequately ensure the maintenance and enhancement of the gopher tortoises and their commensals on this preserve area.

2. The approximately 45 acres of remnant sandhill community, located in the northeast corner of the project site, should be utilized for borrow only when other potential on-site areas have been exhausted. Should adequate borrow material be obtained elsewhere, this

remnant sandhill community should be incorporated into the management plan for the gopher tortoises or incorporated into the buffer area.

[Chapter 379, F.S.]

E. Unit 4 Conditions

1. General Listed Species Surveys

a. The Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain and follow the current survey protocols for all listed species that may occur within the areas to be impacted by Pasco County's proposed project (Project Site), prior to conducting detailed surveys. For the purposes of the FWC's Conditions of Certification, the Project Site means the areas where the new MWC unit (Unit 4) and Associated Facilities will be constructed, plus the temporary laydown area, and the adjacent buffer areas that are accessible to listed species. Guidance related to species-specific survey protocols can be found in the appropriate species conservation measures and permitting guidelines at https://myfwc.com/wildlifehabitats/wildlife/species-guidelines/, or in the Florida Wildlife Conservation Guide at https://myfwc.com/conservation/value/fwcg/.

b. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those surveys shall be provided to the FWC in a report, and coordination shall occur with the FWC on appropriate impact avoidance, minimization, or mitigation methodologies. Reports can be sent to ConservationPlanningServices@MyFWC.com.

[Article IV, Section 9, Florida Constitution; Sections 379.2291, 403.507, and 403.5113(2), F.S.; Chapter 68A-27, F.A.C.]

2. Specific Listed Species Surveys

a. Before land clearing and construction activities occur within the Project Site, the Licensee shall conduct an assessment for terrestrial listed species and shall note all habitat, occurrence, or evidence of listed species. Wildlife surveys shall be conducted during the reproductive or active season for each species that falls before the projected clearing activity schedule unless otherwise approved by the FWC. For species that are difficult to detect, the Licensee may make the assumption that the species is present and plan appropriate avoidance or mitigation measures after consultation with the FWC. The Licensee will submit avoidance or mitigation measures to the FWC for post-certification review and approval at least 60 days prior to commencing clearing or construction activities within the surveyed area. The surveys required by these Conditions of Certification may be conducted prior to issuance of the Final Order of Certification, in which case this Condition would be considered satisfied.

b. These surveys shall be conducted in accordance with U.S. Fish and Wildlife Service (USFWS) or FWC guidelines and methodologies and by a person or firm that is knowledgeable and experienced in conducting flora and fauna surveys for each potentially occurring listed species.

c. These surveys shall identify locations of breeding sites, nests, and burrows for listed wildlife species. Nests and burrows shall be recorded with global positioning system (GPS) coordinates, identified on an aerial photograph, and submitted with the final listed species report. Although nests and burrows may be recorded individually with GPS, FWC staff

prefers that any applicable protection radii surrounding groups of nest sites and burrows be included on a site-specific basis, rather than around individual nests and burrows, and be physically marked so that clearing and construction shall avoid impacting them.

d. These surveys shall include an estimate of the acreage and percent cover of each existing vegetation community that is contained within the Project Site, prior to land clearing and construction activities using a geographic information system (GIS). Examples of such wildlife-based habitat classification schemes include Florida's State Wildlife Action Plan[1] (FWC 2019) or the Natural Communities Guide[2] (Florida Natural Areas Inventory 2010).

[Article IV, Section 9, Florida Constitution; Section 379.2291, F.S.; Chapters 68A-4, 68A-16, and 68A-27, F.A.C.]

1 Florida Fish and Wildlife Conservation Commission (FWC). 2019. Florida's Wildlife Legacy Initiative: Florida's State Wildlife Action Plan. Tallahassee, Florida.
2 Florida Natural Areas Inventory. 2010. Guide to the Natural Communities of Florida: 2010 edition. Florida Natural Areas Inventory, Tallahassee, Florida.

3. Listed Species Locations

a. Where any suitable habitat or evidence is found of the presence of listed species, including but not limited to those specified in paragraph 4 below, within the Project Site, the Licensee shall report those locations to, and confer with, the FWC to determine whether additional pre-clearing surveys are warranted, and to identify potential mitigation or avoidance recommendations. If additional pre-clearing surveys are required by the FWC as appropriate and as specified in these Conditions of Certification, they shall occur in the reproductive season prior to the anticipated date for the start of construction within the Project Site. The Licensee shall not construct in areas where evidence of listed species was identified during the initial survey until the listed species issues have been resolved.

b. If listed wildlife species are found, their presence shall be reported to the Florida Department of Environmental Protection Siting Coordination Office, the FWC, and the USFWS.

c. If avoidance of state-listed wildlife species is not feasible, the Licensee shall consult with the FWC to determine the steps appropriate for the species potentially impacted to avoid, minimize, mitigate, or otherwise appropriately address potential impacts. These steps shall be memorialized in a Species Management Plan and submitted to the FWC.

[Article IV, Section 9, Florida Constitution; Sections 379.2291, 403.507, and 403.5113(2), F.S.; Chapter 68A-27, F.A.C.]

4. Gopher Tortoise Management Plan

a. The Licensee shall conduct surveys for gopher tortoise (*Gopherus polyphemus*) and their burrows, in accordance with the FWC-approved Gopher Tortoise Management Plan (as revised) and the FWC-approved Gopher Tortoise Permitting Guidelines, or subsequent FWC-approved versions of the Plan or Guidelines. A burrow survey covering a minimum of 15% of the potential gopher tortoise habitat to be impacted by development, including staging areas, is required in order to apply for a relocation permit. Immediately prior to capturing tortoises for relocation, a 100% survey is required to effectively locate and mark all potentially occupied tortoise burrows and to subsequently remove the tortoises. Burrow survey

methods are outlined in Appendix 4 of the Gopher Tortoise Permitting Guidelines, "Methods for Locating Gopher Tortoise Burrows on Sites Slated for Development." All surveys completed by authorized agents or other licensees are subject to field verification by the FWC.

b. The Licensee is not required to provide a monitoring compliance assessment for activities that occur more than 25 feet from a gopher tortoise burrow entrance, provided that such activities do not harm gopher tortoises or violate rules protecting gopher tortoises. Examples of such violations noted in the past by the FWC include, but are not limited to, killing or injuring a tortoise more than 25 feet away from its burrow, harassing a tortoise by blocking access to its burrow, and altering gopher tortoise habitat to such an extent that resident tortoises are taken.

c. The Licensee shall coordinate with the FWC and provide detailed gopher tortoise relocation information in accordance with the FWC-approved Gopher Tortoise Management Plan and Gopher Tortoise Permitting Guidelines as a post-certification submittal. This information shall provide details on the location for on-site recipient areas and any off-site FWC-approved temporary contiguous habitat, as well as appropriate mitigation contributions per tortoise, as outlined in the Gopher Tortoise Permitting Guidelines.

d. Any commensal species observed during the burrow excavations that are listed by the FWC shall be relocated in accordance with the applicable guidelines for that species in accordance with Appendix 9 of the Gopher Tortoise Permitting Guidelines.

e. To the maximum extent practicable or feasible, all staging and storage areas shall be sited to avoid impacts to gopher tortoise burrows and habitat.

[Article IV, Sec. 9, Florida Constitution; Sections 379.2291, 403.507, and 403.5113(2), F.S.; Rule 62-17.660, and Chapter 68A-27, FA.C.]

IV. DEPARTMENT OF TRANSPORTATION

A. Access Management to the State Highway System

Any access to the State Highway System will be subject to the requirements of Chapters 14-96, State Highway System Connection Permits, and 14-97, Access Management Classification System and Standards, F.A.C.

[Chapters 14-96, and 14-97, F.A.C.]

B. Overweight or Overdimensional Loads

Operation of overweight or overdimensional loads by the Licensee on State transportation facilities during construction and operation of the utility facility will be subject to applicable non-procedural requirements of Chapter 316, Florida Statutes, and Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, F.A.C.

[Chapter 316, F.S.; Chapter 14-26, F.A.C.]

C. Use of State of Florida Right of Way or Transportation Facilities

All usage and crossing of State of Florida right of way or transportation facilities will be subject to Chapter 14-46, Utilities Installation or Adjustment, F.A.C.; Florida Department of Transportation's Utility Accommodation Manual; Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways; Standard Specifications for

Road and Bridge Construction; and pertinent sections of the Florida Department of Transportation's Project Development and Environmental Manual.

[Sections 337.403 and 337.404, F.S.; Chapters 14-15, 14-46, and 14-96, F.A.C.]

D. Standards

The Manual on Uniform Traffic Control Devices; Florida Department of Transportation's Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; Florida Department of Transportation's Utility Accommodation Manual; and pertinent sections of the Department of Transportation's Project Development and Environmental Manual will be adhered to in all circumstances involving the State Highway System and other State-owned transportation facilities.

[Chapters 14-15, 14-46, and 14-96, F.A.C.]

E. Drainage

Any drainage onto State of Florida right of way and transportation facilities will be subject to the requirements of Chapter 14-86, Drainage Connections, F.A.C., including the attainment of any permit required thereby.

[Chapter 14-86, F.A.C.]

F. Use of Air Space

Any newly proposed structure or alteration of an existing structure will be subject to the applicable non-procedural requirements of Chapter 333, F.S., and Rule 14-60.009, Airspace Protection, F.A.C. Additionally, notification to the Federal Aviation Administration (FAA) is required prior to beginning construction, if the structure exceeds notification requirements of 14 CFR Part 77, Objects Affecting Navigable Airspace, Subpart B, Notice of Construction or Alteration. Notification will be provided to FAA Southern Region Headquarters using FAA Form 7460-1, Notice of Proposed Construction or Alteration in accordance with instructions therein. A subsequent Determination by the FAA stating that the structure exceeds any federal obstruction standard of 14 CFR Part 77, Subpart C, for any structure that is located within a 10-nautical-mile radius of the geographical center of a public-use airport or military airfield in Florida will be required to submit information for an Airspace Obstruction Permit from the Florida Department of Transportation as a post-certification submittal under Condition of Certification XXI or variance from local government depending on the entity with jurisdictional authority over the site of the proposed structure. The FAA Determination regarding the structure serves only as a review of its impact on federal airspace and is not an authorization to proceed with any construction. However, FAA recommendations for marking and/or lighting of the proposed structure are made mandatory by Florida law. For a site under Florida Department of Transportation jurisdiction, application will be made by submitting Florida Department of Transportation Form 725-040-11, Airspace Obstruction Permit Application, in accordance with the instructions therein as a post-certification submittal under Condition of Certification XXI.

[Chapter 333, F.S.; Rule 14-60.009, F.A.C.]

G. Best Management Practices

Traffic control during facility construction and maintenance will be subject to the standards contained in the Manual on Uniform Traffic Control Devices; Florida Department of Transportation's Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; and Florida Department of Transportation's Utility Accommodation Manual, whichever is more stringent. It is recommended that the applicant encourage transportation demand management techniques by doing the following:

• Placing a bulletin board on site for carpooling advertisements.

• Requiring that heavy construction vehicles remain onsite for the duration of construction to the extent practicable.

If the applicant uses contractors for the delivery of any overweight or overdimensional loads to the site during construction, the Applicant shall ensure that its contractors adhere to the necessary standards and receive the necessary permits required under Chapter 316, F.S., and Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, F.A.C.

[Chapter 316, F.S.; Chapters 14-15, 14-26, 14-46, and 14-96, F.A.C.]

V. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES

A. Prior to new construction in areas not previously surveyed, the Licensee shall conduct a survey of sensitive cultural resource areas, as determined in consultation with the Department of State, Division of Historical Resources (DHR). A qualified cultural resources consultant will identify an appropriate work plan for this project based on a thorough review of the Certified Facility. Prior to beginning any field work, the work plan will be reviewed in consultation with DHR. Upon completion of the survey, the results will be compiled into a report which shall be submitted to DHR. If feasible, sites considered to be eligible for the National Register shall be avoided during construction of the project and access roads, and subsequently during maintenance. If avoidance of any discovered sites is not feasible, impact shall be mitigated through archaeological salvage operations or other methods acceptable to DHR, as appropriate.

B. If historical or archaeological artifacts or features are discovered at any time within the Certified Facility, the Licensee shall notify the appropriate DEP District office (s) and the DHR, R.A. Gray Building, 500 S. Bronough Street, Rm 423, Tallahassee, Florida 32399-0250, telephone number (850) 245-6333, and the Licensee shall consult with DHR to determine appropriate action.

[Sections 267.061, 403.531, and 872.02, F.S.]

VI. DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

Only herbicides registered by the U.S. Environmental Protection Agency and the Florida Department of Agriculture and Consumer Services shall be used at Certified Facilities. Herbicide applications will be in accordance with label directions and will be carried out by a licensed applicator, in compliance with all federal, state, and local regulations. Herbicide applications shall be selectively applied to targeted vegetation. Broadcast application of herbicide shall not be used unless effects on non-targeted vegetation are minimized.

[Chapter 487, F.S.]

VII. PASCO COUNTY

A. Noise

The Licensee shall comply with applicable local noise ordinances, if any, during construction and operation of the Certified Facility.

B. Screening

The Licensee shall develop the site so as to retain a buffer of trees or shall plant a buffer of trees sufficient to minimize the aesthetic and noise impacts of the Facility. The buffer, as far as practicable, shall be of sufficient height and width suitable for the purpose of mitigating both construction and operational impacts of the Facility.

C. Dust and Odors

The Licensee shall employ proper odor and dust-control techniques to minimize odor and fugitive dust emissions. The applicant shall employ control techniques sufficient to prevent nuisance conditions on adjoining property.

[Original Certification, Final Order signed 8/23/88]

VIII. HISTORY

Certification Issued 08/24/88; signed by Governor Martinez
Modification 04/29/03; signed by Siting Administrator Hamilton Oven
Modified 05/09/07; signed by Siting Administrator Halpin
Modified 05/26/17; signed by Siting Administrator Mulkey
Modified 06/19/19; signed by Siting Administrator Mulkey
Modified 02/03/2020; signed by Siting Administrator Mulkey
Modified 05/03/2021; signed by Siting Administrator Mulkey
Modified 10/19/2021; signed by Siting Administrator Mulkey
Supplemental Certification Issued 11/17/2022; signed by Secretary Hamilton

ATTACHMENT A: Certified Site/Areas/Facilities Delineation Map(s)

82°34'30"W 82°34'0"W 82°33'30"W 82°33'0"W

28°22'45"N 28°22'30"N 28°22'15"N 28°22'0"N

Class I Landfill

Ash Monofill

Class III Landfill

Waste To Energy Facility

Leachate Storage Tank

Biosolids Facility

Duke Transmission Corridor

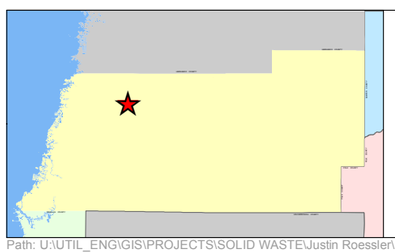
SHADY HILLS RD

SOFTWIND LANE

SUNCOAST PKWY

TOLL 589

HAYS RD



0 ¼ ½

Miles

N

West Pasco Resource Recovery Site

This map is for informational purposes only. The data contained herein is not collected under the supervision of, or approved by, a licensed surveyor. It is not intended for any legal use. The data does not meet the Standards of Practice under the Florida Administrative Code Chapter 5J-17 and Chapter 472 Florida Statutes. The Pasco County Board of County Commissioners does not accept any responsibility for errors or omissions of any kind contained in the data herein. All products and derivations from the data contained herein must retain this disclaimer.

Pasco County, Florida
Utilities Administration Office
Geographic Information Systems
(G.I.S.)
19420 Central Blvd.
Land O' Lakes, FL 34637

Power Plant Siting Act (PPSA) Certified/Non-Certified Facilities

Author: Gabriel Lama | April 25, 2018

Path: U:\UTIL_ENG\GIS\PROJECTS\SOLID WASTE\Justin Roessler\PPSA\WPRRS_PPSA.mxd

ATTACHMENT B: Surface Water Management System Operation and Maintenance Requirements

1. In accordance with Section 373.416(2), F.S., unless revoked or abandoned, all stormwater management systems, dams, impoundments, reservoirs, appurtenant works, or works permitted under Part IV of Chapter 373, F.S., must be operated and maintained in perpetuity. The operation and maintenance shall be in accordance with the designs, plans, calculations, and other specifications that are submitted with any amendment or modification and approved by the Department.

2. A registered professional must perform inspections annually after conversion of the project to the operation and maintenance phase to identify if there are any deficiencies in structural integrity, degradation due to insufficient maintenance, or improper operation of the stormwater management system or other surface water management systems that may endanger public health, safety, or welfare, or the water resources, and to insure that systems are functioning as designed and approved. Within 30 days of the inspection, a report shall be submitted electronically or in writing to the Department using Form 62-330.311(1), "Operation and Maintenance Inspection Certification".

3. If deficiencies are found, the PCRRF will be responsible for correcting the deficiencies so that the project is returned to the operational functions as designed and approved. The corrections must be done a timely manner to prevent compromises to flood protection and water quality.

4. If the operational maintenance and corrective measures are insufficient to enable the systems to meet the performance standards of this chapter, the PCRRF must either replace the systems or construct an alternative design.

5. The PCRRF shall provide for periodic inspections in addition to the annual inspections, especially after heavy rain. It must maintain a record of each inspection, including the date of inspection, the name and contact information of the inspector, whether the system was functioning as designed and approved, and make such record available upon request of the Department. Within 30 days of any failure of any system or deviation from these requirements, a report shall be submitted electronically or in writing to the Department using Form 62-330.311(1), "Operation and Maintenance Inspection Certification," describing the remedial actions taken to resolve the failure or deviation.

6. The PCRRF shall immediately notify the Department by telephone whenever a serious problem occurs at this facility. Notification shall be made to the Southwest District Office at (813) 470-5700. Within 7 days of telephone notification, a report shall be submitted electronically or in writing to the Department using Form 62-330.311(1), "Operation and Maintenance Inspection Certification," describing the extent of the problem, its cause, the remedial actions taken to resolve the problem.

7. The following operational maintenance activities shall be performed on approved systems on a regular basis or as needed:

(1) Removal of trash and debris from the surface water management systems,

(2) Inspection of culverts, culvert risers, pipes and screwgates for damage, blockage, excessive leakage or deterioration, if applicable,

(3) Inspection of stormwater berms, if applicable,

(4) Inspection of pipes for evidence of lateral seepage,

(5) Inspection of flapgates for excessive backflow or deterioration, if applicable,

(6) Removal of sediments when the storage volume or conveyance capacity of the surface water management system is below design levels,

(7) Stabilization and restoration of eroded areas,

(8) Inspection of pump stations for structural integrity and leakage of fuel or oil to the ground or surface water, if applicable, and

(9) Inspection of monitoring equipment, including pump hour meters and staff gauges, for damage and operational status, if applicable.

8. In addition to the practices listed above, specific operational maintenance activities are required, if applicable, depending on the type of approved system, as follows:

(1) Overland flow systems shall include provisions for:

a. Mowing and removal of clippings, and

b. Maintenance of spreader swales and overland flow areas to prevent channelization.

(2) Spray irrigation systems for reuse/disposal shall include provisions for:

a. Inspection of the dispersal system, including the sprayheads or perforated pipe for damage or clogging, and

b. Maintenance of the sprayfield to prevent channelization.

(3) Treatment systems which incorporate isolated wetlands shall include provisions for:

a. Stabilization and restoration of channelized areas, and

b. Removal of sediments which interfere with the function of the wetland or treatment system.

ATTACHMENT C: Wetland Mitigation Plan(s)

(To be attached as applicable)

ATTACHMENT D: Groundwater Quality Monitoring Requirements

ATTACHMENT D

GROUNDWATER QUALITY MONITORING REQUIREMENTS

Pasco County Resource Recovery Facility
14230 Hays Road
Spring Hill, FL 34610
Pasco County

Latitude: 28°22'12" North Longitude: 82°33'36" West

INTRODUCTION

These Groundwater Quality Monitoring Requirements (GWQMR) were developed by the Licensee, Pasco County, in conjunction with the Florida Department of Environmental Protection Solid Waste (SW) Section – Tallahassee. The GWQMR incorporates groundwater monitoring for the Class I landfill (Solid Waste Cells SW-1 & SW-2 and Ash Monofill Cells A-1 through A-4). The Department's SW Section is responsible for reviewing and approving all revisions to this document that are: a) submitted concurrently with a SCA; b) submitted as part of an amendment request or a petition for modification; or c) in accordance with Section A, Condition XX. Procedures for Post-Certification Submittals.

1. General

A. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapter 62-160, F.A.C. Approved methods as published by the Department or as published in Standard Methods, ASTM, or EPA Methods shall be used. [62-701.510(2)(b), F.A.C.]

B. The organization collecting samples at this site must use the Field and Laboratory Standard Operating Procedures (DEP-SOP-001/01) referenced in Chapter 62-160, F.A.C. The laboratory designated to conduct the chemical analyses must be certified by the Florida Department of Health Environmental Laboratory Certification Program (DOH ELCP). This Certification must be for the test method and analyte(s) that are reported. [62-160.210(1), 62-160.300(1), 62-701.510(2)(b), F.A.C. and DEP SOP FS 1008.]

NOTE: DEP-SOP-001/01 can be accessed at:
http://www.dep.state.fl.us/water/sas/sop/sops.htm

C. The licensee must ensure that the analytical laboratory conducting the analyses uses analytical methods capable of achieving detection limits at or below the Groundwater Cleanup Target Levels (GCTLs) or the Freshwater Surface Water Cleanup Target Levels (SWCTLs) in Table I, Chapter 62-777, F.A.C. except those listed in Table C of the "FDEP Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits dated 10/12/2004". GCTLs and SWCTLs that are not water quality standards are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated. [DEP SOP FM 1000]

D. If, at any time, analyses detect parameters which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., in the detection wells or at the edge of the Zone

.

of Discharge, the Licensee may confirm the data by resampling the affected wells within thirty (30) days of receipt of the sampling data. Should the licensee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility. If the data is confirmed, or if the licensee chooses not to resample, the licensee shall notify the Department within 14 days of this finding. [62-701.510(6)(a), F.A.C.]

If the resampling event detects parameters which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., the Licensee shall notify the Department in writing within 14 days of receipt of the sampling data. Confirmed data must be submitted to the Department within 60 days from completion of lab analyses, unless a different due date is approved. Use "CONF" (for confirmation data) in the report type column. [62-701.510(8)(a), F.A.C.]

Upon notification by the Department, the licensee shall initiate evaluation monitoring in accordance with Rule 62-701.510(6)(a), F.A.C.

2. Specific

A. The twenty-nine ground water monitoring wells/piezometers included in this monitoring plan and designated for water quality testing and water level measurements are listed on Table 1 and shown on Figure 1. [62-701.510(3)(d)2 & 3, F.A.C.]

B. Any initial sample collected from a new ground water monitoring well, unless the new monitoring well is installed to replace an existing well within the monitoring network, shall be analyzed for the following Initial Ground Water Monitoring Parameters. [62-701.510(5)(b), F.A.C.]

Field Parameters	Laboratory Parameters
1. Static water level in wells before purging	1. Ammonia – N, Total
2. Dissolved oxygen	2. Chlorides
3. pH	3. Iron
4. Specific conductivity	4. Nitrate
5. Temperature	5. Sodium
6. Turbidity	6. Total dissolved solids (TDS)
7. Colors and sheens (by observation)	7. Those parameters listed in 40 CFR Part 258, Appendix II.*

* Mercury not listed because it is included in Appendix II.

* Appendix I is not listed because it is a subset of Appendix II

C. The twenty-nine active monitoring wells for the landfill shall be routinely sampled and analyzed semi-annually (during the periods January 1-June 30, and July 1-December 31 of each year) for the following Ground Water Monitoring Parameters. [62-701.510(5)(c) & (7)(a), F.A.C.]

Field Parameters	Laboratory Parameters
1. Static water level in wells before purging	1. Ammonia – N, Total
2. Dissolved oxygen	2. Chlorides
3. pH	3. Iron
4. Specific conductivity	4. Mercury
5. Temperature	5. Nitrate
6. Turbidity	6. Sodium
7. Colors and sheens (by observation)	7. Total dissolved solids (TDS)
	8. Those parameters listed in 40 CFR Part 258 Appendix I

D. All water quality analyses will be performed on unfiltered samples unless approved by the Department.

3. Surface Water Monitoring

A. It is not anticipated that the existing stormwater management system will discharge from the property. However, in the event that discharges from the stormwater management system leave the property, representative samples of each discharge event shall be collected. [62-701.510(4)(c), F.A.C.]

B. The samples shall be analyzed for the following Surface Water Monitoring Parameters. [62-701.510(5)(d) & (7)(b), F.A.C.]

Field Parameters	Laboratory Parameters
1. Surface Water Elevation	1. Unionized ammonia as N
2. Specific Conductivity	2. Total hardness as CaCO3
3. pH	3. Biochemical oxygen demand (BOD_5)
4. Dissolved oxygen	4. Iron
5. Turbidity	5. Mercury
6. Temperature	6. Nitrate
7. Colors and sheens (by observation)	7. Total Dissolved Solids (TDS)
	8. Total Organic Carbon (TOC)
	9. Fecal Coliform
	10. Total Phosphorus as P
	11. Chlorophyll A
	12. Total nitrogen
	13. Chemical Oxygen Demand (COD)
	14. Total Suspended Solids (TSS)
	15. Those parameters listed in 40 CFR Part 258 Appendix I

4. Monitoring Requirements

A. If a monitoring well or piezometer becomes damaged or inoperable, the Licensee shall notify the Department within two (2) days of discovery with a written report within ten (10) days of notice. The written report shall describe what problem has occurred and the remedial measures that have been taken to prevent a recurrence. The Department can require the replacement of inoperable monitoring wells or piezometers. [62-520.600(6)(l), F.A.C.]

B. New or replacement monitoring well design or placement must be approved by the Department. The design and construction of these wells must be based on site-specific borings with appropriate supporting data such as grain size distribution analyses, in-situ hydraulic conductivity testing, and depth to water. Wells shall be installed using standard, accepted practices for well construction. [62-701.510(3), F.A.C. and 62-520.600(3) and (6), F.A.C.]

C. All wells and piezometers shall be clearly and permanently labeled and the well site maintained so that the well is visible at all times. Unless otherwise authorized in a Department permit, new monitoring wells, and existing monitoring wells at the time of permit renewal, shall have protective bollards or other devices installed around them if they are located in areas of high traffic flow to prevent damage from passing vehicles. [62-701.510(3)(d)5, F.A.C.]

D. The Department shall be notified in writing before any monitoring wells are abandoned or plugged. Wells shall be abandoned using standard, accepted practices for well abandonment. [62-701.510(3)(d)6, F.A.C.]

5. Reporting Requirements

A. Field Activities

The Department must be notified in writing, hard copy or e-mail, at least fourteen (14) days prior to the installation and/or sampling of any monitoring well(s) so that the Department may collect split samples. [62-701.510(8)(a), F.A.C.]

B. Monitoring Well Completion Report

One (1) paper copy and one (1) electronic copy (Adobe pdf format) of the Monitoring Well Completion Report, Form 62-701.900(30), F.A.C., must be submitted to the Department within thirty (30) days after installation of any new or replacement monitoring well(s). In addition, as-built well construction diagrams and soil boring logs that cover the entire depth of the monitoring well(s) must be submitted to the Department. [62-520.600(6)(j), F.A.C.]

NOTE: The top of casing elevation of each well, to the nearest 0.01 feet, and the latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, must be determined and certified by a Florida Licensed Surveyor and Mapper and provided on the form. [62-701.510(3)(d)1 & 62-520.600(6)(i), F.A.C.]

C. Surveying

1. One (1) paper copy and one (1) electronic copy (Adobe pdf format) of a drawing must be submitted within sixty (60) days following monitoring well installation showing the location of all monitoring sites (active, abandoned, and Evaluation Monitoring), piezometers, water bodies and waste filled areas. The location of features on the drawing must be horizontally and vertically located by standard surveying techniques. The drawing shall include all monitoring well locations, each monitoring well name and identification (WACS) number, the top of casing, pad elevation, permanent benchmark(s) and/or corner monument marker(s) referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988) to the nearest 0.01 feet. The latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, must be determined and provided on the drawing. The survey shall be conducted and certified by a Florida Licensed Surveyor and Mapper. [62-701.510(1)(c) and (3)(d)1, and 62-520.600(6)(i), F.A.C.]

2. If a monitoring well is being replaced or new wells are being added to an existing ground water monitoring plan, only the new wells need to be surveyed as long as all other monitoring wells in the monitoring plan have been surveyed and certified by a Florida Licensed Surveyor and Mapper and there is no reason to believe that the elevations have changed. The location and elevation determinations and the certification must be provided with the Monitoring Well Completion Report upon completion of each new well. [62-701.510(3)(d)1, F.A.C.]

D. Depth Measurements

A total depth measurement must be made on each well at time of the Technical Report or every five years. This measurement is to be reported as total apparent depth below ground surface and should be compared to the original total depth of the well.

E. Initial and Semi-Annual Sampling and Submitting Electronic Data

1. Required monitoring reports must be submitted to the Department within sixty (60) days from completion of laboratory analyses and no later than January 15th and July 15th of each year for the time periods July 1-December 1 and January 1-June 30, respectively and shall follow the Department's electronic reporting requirements using the ADaPT software. [Rule 62-701.510(8)(a), F.A.C.]

2. Required water quality monitoring reports and analytical results shall be submitted electronically. Water quality monitoring reports shall be submitted in Adobe pdf format. The water quality data Electronic Data Deliverable (EDD) shall be provided to the Department in a comma separated text file electronic format consistent with requirements for importing the data into the Department's databases as summarized at: http://www.dep.state.fl.us/waste/ADaPT/.

3. Water quality monitoring reports shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations and shall include the following:

(1) Cover letter;
(2) Summary of exceedances and recommendations;
(3) Ground water contour maps;
(4) Laboratory report of results including chain of custody forms;
(5) Water levels, water elevation table;
(6) Water Quality Monitoring Certification using Form Rule 62-701.900(31), F.A.C.;
(7) Appropriate information using the Groundwater Sampling Log, Form FD 9000-24 (DEP-SOP-001/01); and,
(8) Laboratory and Field EDDs and error logs, as applicable.

All submittals in response to this specific condition shall be sent both to:

Florida Department of Environmental Protection Southwest District Office Air/Solid Waste Section 13051 N. Telecom Parkway Tampa, Florida 33637-0926 Email to: SWD_Waste@dep.state.fl.us	Florida Department of Environmental Protection Solid Waste Section 2600 Blair Stone Road, MS 4565 Tallahassee, Florida, 32399-2400 Email to: ADaPT.EDDs.and.Reports@dep.state.fl.us

F. Water Elevations

Water levels in all monitoring wells, whether sampled or not, all piezometers and all surface water sites must be measured to the nearest 0.01 foot and reported semi-annually. Surface water elevations at sampling locations must be measured to the nearest 0.01 foot on the same day as ground water levels in the wells and piezometers and reported semiannually. All water level measurements must be made within a one-day period. These measurements should be reported in a table that includes well or surface water point name, date water level measured, measuring point elevation referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988), depth to water and calculated water level elevation referenced to the same nationally recognized datum. The ground water elevations shall be reported in the ADaPT data for the upload into WACS. [62-701.510(8)(a)8, F.A.C.]

G. Ground Water Contour Maps

Ground water elevation contour maps for each monitored aquifer zone must be submitted semi-annually to the Department, with contours at no greater than one foot intervals unless site specific conditions dictate otherwise. Ground water elevation contour map(s) should include monitoring well and piezometer locations, ground water elevation at each monitoring well or piezometer location referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988), a bar scale, north arrow, ground water contour interval, date of measurement and ground water flow direction. The map(s) must incorporate adjacent and on-site surface water elevations where appropriate. These maps shall be signed and sealed pursuant to Florida Statutes (F.S.) Chapters 471 and 492 which require that documents requiring the practice of professional engineering or professional geology, as described in Chapter 471 or 492, F.S., be signed and sealed by the professional(s) who prepared or approved them. This certification must be made by a licensed professional who is able to demonstrate competence in this subject area. [62-701.510(8)(a)9, F.A.C.]

H. Technical Report

1. A technical report, signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, shall be submitted to the Department approximately every two and one-half years during the active life of the facility, and every five years during the long-term care period. The report shall summarize and interpret the water quality monitoring results and water level measurements collected since the last Technical Report. The report shall contain, at a minimum, the following [62-701.510(8)(b), F.A.C.]:

a) Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected (such as pH, specific conductance, TDS, TOC, sulfate, chloride, sodium and iron), including hydrographs for all monitor wells;

b) Trend analyses of any monitoring parameters consistently detected;

c) Comparisons among shallow, middle, and deep zone wells;

d) Comparisons between background water quality and the water quality in detection and compliance wells;

e) Correlations between related parameters such as total dissolved solids and specific conductance;

f) Discussion of erratic and/or poorly correlated data;

g) An interpretation of the ground water contour maps, including an evaluation of ground water flow rates; and

h) An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.

2. One (1) paper and one (1) electronic copy (Adobe pdf format) of the Technical Report shall be submitted to the Department on the following schedule: [62-701.510(8)(b), F.A.C.]

Sampling Periods Covered	Number of Semi-annual Sampling	Date Technical Report Due
Second semi-annual event 2015 through Second semi-annual event 2017	5	March 31, 2018
First semi-annual event 2018 through first semi-annual event 2020	5	August 30, 2020
Second semi-annual event 2020 through Second semi-annual event 2022	5	March 31, 2023
First semi-annual event 2023 through First semi-annual event 2025	5	August 30, 2025
Second semi-annual event 2025 through Second semi-annual event 2027	5	March 31, 2028
First semi-annual event 2028 through First semi-annual event 2030	5	September 30, 2030

3.. Required water quality monitoring reports and water quality data for the Technical Report shall be submitted in electronic format as described in Specific Conditions E.5-8 of this Attachment. [62-160.240, and 62-701.510(8)(a), F.A.C.]

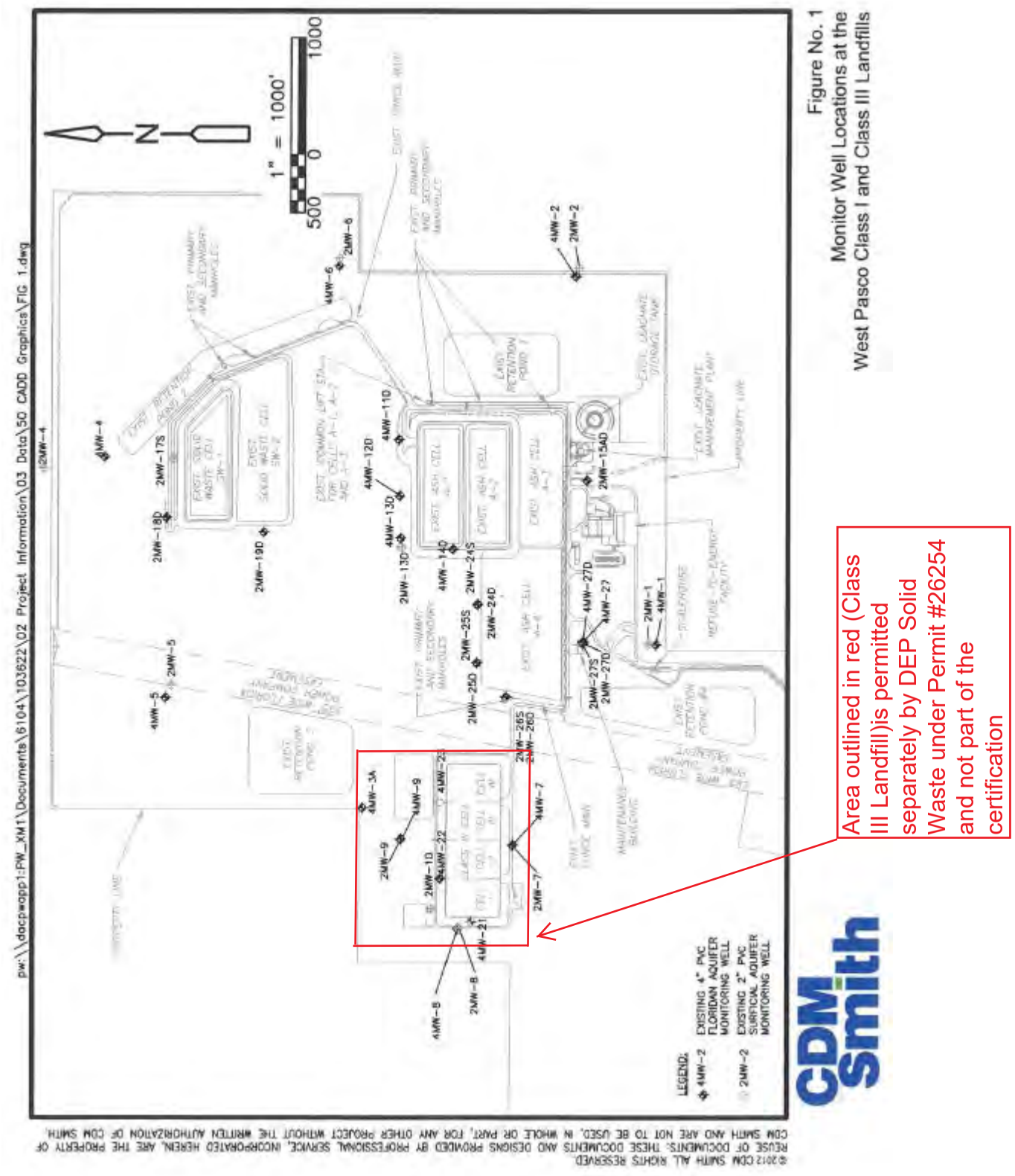
List of Attachments

Table 1 Water Quality Sampling Testsite Information
Figure 1 Groundwater Monitoring Locations Map

Table 1 – Water Quality Sampling Testsite Information

Testsite Name	Testsite WACS No.	Designation	Aquifer
2MW-1	2381	Surficial	Background
4MW-1	2386	Floridan	Background
2MW-2	2382	Surficial	Background
4MW-2	2387	Floridan	Background
2MW-6	2385	Surficial	Background
4MW-6	2390	Floridan	Background
2MW-15DA	19766	Floridan	Background
2MW-27S	23449	Surficial	Background
2MW-27D	23450	Floridan	~~Background~~ Piezometer
4MW-27	23451	Floridan	Background
4MW-27D	23452	Floridan	Background
4MW-11D	2510	Floridan	Detection
4MW-12D	2511	Floridan	Detection
2MW-13D	2515	Surficial	Detection
4MW-13D	19214	Floridan	Detection
4MW-14D	2512	Floridan	Detection
2MW-17S	19758	Surficial	Detection
2MW-18D	19759	Floridan	Detection
2MW-19D	19764	Floridan	Detection
2MW-24S	23443	Surficial	Detection
2MW-24D	23444	Floridan	Detection
2MW-25S	23445	Surficial	Detection
2MW-25D	23446	Floridan	Detection
2MW-26S	23447	Surficial	Detection
2MW-26D	23448	Floridan	Detection
2MW-4	2383	Surficial	~~Compliance~~ Piezometer
4MW-4	2388	Floridan	Compliance
2MW-5	2384	Surficial	~~Compliance~~ Piezometer
4MW-5	2389	Floridan	Compliance

Figure 1: Monitor Well Location Map



Attachment E: Solid Waste Construction and Operations Requirements

ATTACHMENT E

SOLID WASTE CONSTRUCTION AND OPERATIONS REQUIREMENTS

(WACS Facility ID: 45799)

1. General

This site shall be classified as a Class I landfill [Solid Waste Cells SW-1 & SW-2 and Ash Monofill Cells A-1 through A-4] and shall be constructed, operated, closed, monitored and maintained in accordance with all applicable requirements of Chapters 62-4, 62-302, 62-330, 62-520, 62-550, and 62-701, Florida Administrative Code (F.A.C.) and all applicable requirements of Department rules.

A. Prohibitions. The prohibitions of F.A.C. Rule 62-701.300 shall apply to operations and new structures.

B. Pollution Prevention. The landfill shall be designed, constructed, operated, maintained, closed and monitored throughout its design period to control the movement of waste and waste constituents into the environment so that ground water and surface water quality standards and criteria of Chapters 62-302 and 62-520, F.A.C., will not be violated beyond the zone of discharge specified for the landfill.

C. Access Control. To prevent unauthorized waste disposal, as required by F.A.C. Rule 62-701.500(5), access to and use of the Facility shall be controlled by fencing, gates, or other barriers, as well as signs and Facility personnel.

D. Records Maintenance. As required by F.A.C. Rule 62-701.500(13), records shall be kept of all information used to develop or support the landfill design and any supplemental information provided to DEP pertaining to construction of the landfill. Records pertaining to the operation of the landfill shall be kept for the design period of the landfill. Records of all monitoring information, including calibration and maintenance records, all original chart recordings for continuous monitoring instrumentation, and copies of all reports required by these conditions, shall be kept for at least ten years. Background water quality records shall be kept for the design period of the landfill.

E. Professional Certifications. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

F. Nuisance Conditions. Nuisance conditions shall be controlled by conducting site activities in the manner described in these Conditions of Certification, the operations plan, and applicable Department rules.

2. Construction

The Class I landfill disposal units associated with this site shall be constructed in accordance with all applicable requirements of Chapter 62-701, F.A.C., and in accordance with all applicable requirements of other Department rules.

A. General Construction Requirements. All construction shall be done in accordance with the approved design, drawings, CQA plan, and specifications. The Department shall be notified before any changes, other than minor deviations, to the approved design are implemented in order to determine whether an amendment or modification is required. If an

amendment or modification is not required, it may be processed in accordance with Section A, Condition XX Procedures for Post-Certification Submittals.

B. Certification of Construction Completion. Upon completion of construction, the engineer of record shall certify to the Department in accordance with Rule 62-701.320(9)(b), F.A.C., that the permitted construction is complete and was done in substantial conformance with the approved construction plans except where minor deviations were necessary. All deviations shall be described in detail and the reasons therefore enumerated. The following documents shall be submitted along with the Certification:

(1) The final report and record drawings showing that the liner system has been installed in substantial conformance with the plans and specifications for the liner system. The record drawings must include the results of the surveys of the liner, base grade and collection pipe slopes.

(2) The final report showing the results of the geomembrane liner leak location survey, if applicable.

(3) Results of testing of geosynthetic and soil components of the liner system.

C. Construction Quality Assurance Plan pursuant to 62-701.400(1), F.A.C.

D. Approval of Certification. The licensee shall not begin using newly constructed Class I disposal unit at the facility until one of the following has occurred: (1) the Department has stated in writing that it has no objection to the certification of construction completion; or (2) at least 30 days have passed since the certification was submitted and the Department has not responded in writing to the certification.

3. Operation

Operation of the associated landfill shall be done in accordance with all applicable portions of Chapter 62-701, F.A.C., including prohibitions, procedures for closing of the landfill, and final cover requirements, or, as provided in the Conditions Section B. Condition I. Department of Environmental Protection, C – Resource Recovery Facility in its entirety. Review shall be performed in accordance with the Conditions Section A. Condition VI. Design and Performance Criteria. The final plans for this Facility shall include provisions for the isolated temporary handling of suspected hazardous, toxic, or infectious wastes.

A. No suspected or known hazardous, toxic, or infectious wastes as defined by applicable Federal, State or local statutes, rules, regulations or ordinances shall be burned or landfilled at the site.

B. Special Wastes. The disposal or management of any "special wastes" shall be in accordance with F.A.C. 62-701.300(8), 62-701.520 and any other applicable Department rules, to protect the public safety, health and welfare. All solid wastes, recovered materials, or residues shall be managed in a manner so as not to constitute a fire or safety hazard or a sanitary nuisance, and shall comply with all applicable local or state regulations. Recovered resources which may be offered for sale shall comply with applicable regulations of all appropriate state agencies.

C. Landfill Operation Requirements. This Facility shall be operated in accordance with F.A.C. 62-701.500, Landfill Operation Requirements, and the current Department-approved Operations Plan (see attached Appendix I). Changes to the Operations Plan shall be submitted to the Department for review and written approval prior to implementation. The Department shall approve or disapprove requests for minor changes to the Operations Plan within 30 days of such change request. A minor change is defined to include: changes to filling sequence, changes to equipment used, dimensions of the working face, and similar daily operational issues.

D. Operating Personnel. As required by F.A.C. 62-701.320(15) and 62-701.500(1), at least one operator shall be at the landfill at all times when the landfill receives waste and at least one spotter shall be at the working Face when the landfill receives waste. Copies of the training verifications shall be maintained at the site for the Department's review.

E. Operation Plan and Operating Record. The landfill owner and operators shall have an operations plan which meets the requirements of F.A.C. 62-701.500(2). A copy of these Conditions of Certification, operations plan, construction reports and record drawings, and supporting information shall be kept at the Facility at all times for reference and inspections. The operating record as required by F.A.C. 62-701.500(3) is part of the operations plan and shall also be maintained at the site.

F. Authorized Waste Types. The facility is authorized to manage only the following waste types defined in Rule 62-701.200, F.A.C.:

(1) Fly Ash
(2) Bottom Ash
(3) Ash Residue
(4) Class I Waste

G. Unauthorized Waste Types. The facility is not authorized to accept, process or dispose any waste types not listed in F, above. Any unauthorized waste inadvertently received by the facility shall be managed in accordance with the approved Operation Plan.

H. Landfill Elevation. The final elevation for Ash Monofill Cells A-1, A-2, A-3, and A-4 shall not exceed +122 feet as shown in the approved Operation Plan (Appendix I). The final elevation of Solid Waste Cells SW-1 and SW-2 shall not exceed +121 feet as shown on Figure 7-1, Phasing Plan for Cells SW1 and SW2, of the approved Operation Plan (Appendix I).

I. Initial Waste Placement. The first layer of waste placed above the liner and leachate collection system shall be a minimum of four feet in compacted thickness and consist of selected wastes containing no large rigid objects that may damage the liner or leachate collection system.

J. Method and Sequence of Filling. The method and sequence of filling shall be in accordance with the current Department-approved Operations Plan.

K. Waste Records. Waste quantity records shall be maintained as required by F.A.C. 62-701.500(4) and submitted to the Department quarterly.

L. Control of Access. Access to, and use of, the Facility shall be controlled as required by F.A.C. 62-701.500(5).

M. Monitoring of Waste. Wastes shall be monitored as required by F.A.C. 62-701.500(6). No regulated hazardous waste as identified in Chapter 62-730, F.A.C. shall be accepted for disposal at this site. Hazardous waste should be disposed of in accordance with F.A.C. 62-701.300(4) and 62-701.500(6)(b).

N. Working Face and Waste Handling Requirements. All solid waste disposed of in Cells SW-1 and SW-2 area shall be covered as required by F.A.C. 62-701.500(7). As required by F.A.C. 62-701.500(7)(d), the operator shall minimize the size of the working Face. The working Face of a cell shall be only wide enough to accommodate vehicles discharging waste. Leachate from the working Face shall be managed as described in the approved Operations Plan. Runoff from the landfill will be considered stormwater if the flow passes over only areas with no exposed waste.

(1) Initial cover shall be applied and maintained in accordance with F.A.C. 62-701.500(7)(e), and as described in the approved Operations Plan.

(2) Alternate cover materials not identified herein shall be approved by the Department prior to use at the Facility. For those areas where solid waste will be deposited on the working Face within 18 hours, initial cover may consist of a temporary cover or tarpaulin. Waste tires that have been cut into sufficiently small parts, which means that 70 percent of the waste tire material is cut into pieces of 4 square inches or less and 100 percent of the waste tire material is 32 square inches or less and applied in a six (6) inch compacted layer, may be used as initial cover as described in the approved Operations Plan.

(3) Intermediate cover shall be applied and maintained in accordance with F.A.C. 62-701.500(7)(g). An intermediate cover of one (1) foot of compacted earth in addition to the six (6) inch initial cover shall be applied within seven (7) days of cell completion at all landfills if final cover or an additional lift is not to be applied within 180 days of cell completion.

O. Final Cover. Portions of the landfill which have been filled with waste to the extent of final closure designed dimensions shall be closed (shall receive final cover) in accordance with F.A.C. 62-701.500(7)(g) and all applicable requirements of Department rules.

P. Erosion Control. Erosion control measures shall be employed to correct any erosion which exposes waste or causes malfunction of the storm water management system. Such measures shall be implemented within three days of occurrence. If the erosion cannot be corrected within seven days of occurrence, the landfill operator shall notify the Department and propose a correction schedule.

Q. Leachate Management. Leachate shall be managed in accordance with the requirements of F.A.C. 62-701.500(8), these conditions of certification, and the current Department-approved Operations Plan.

(1) Leachate storage tanks shall be inspected as required by F.A.C. 62-701.400(6)(c)9, and inspection results shall be made available to the Department upon request.

(2) Each pump station shall be inspected on a semi-annual basis. Documentation of all inspections shall be kept on file at the Facility.

(3) Leachate generation reports as required by F.A.C. Rule 62-701.500(8) shall be compiled monthly and submitted to the Department quarterly.

(4) A report assessing the effectiveness of the leachate collection and removal system, force mains and gravity pipe lines, leachate storage tank and treatment Facility shall be submitted to the Department at least every five years. As part of the five-year assessment, the entire leachate collection and removal system, force mains and gravity pipelines, shall be visually or video inspected, or pressure tested where possible to verify adequate performance. Components not performing adequately shall be cleaned and/or repaired. Those portions of the tank secondary containment liner which can be readily visually inspected shall be inspected for damage and repaired if necessary. The report shall include the results of the inspection and any corrective measures undertaken to demonstrate adequate performance, signed and sealed by a professional engineer.

R. Landfill Gas Management

(1) Gas Monitoring and Control.

a. Landfills that receive biodegradable wastes shall have a gas management and control system designed to prevent explosions and fires, and to minimize off-site odors, lateral migration of gases and damage to vegetation. A gas management and control system is not necessary until such time as the methane generation rate exceeds the thresholds in 40 CFR 60, Subpart WWW.

b. Landfill gas shall be monitored to demonstrate compliance with the criteria established in Rule 62-701.530(1)(a), F.A.C. (less than 25% of the lower explosive limit (LEL) for combustible gases in structures and less than 100% of the LEL for combustible gases at or beyond the property boundary).

c. The results of **quarterly gas monitoring** required by Rule 62-701.530(2)(c), F.A.C., conducted at the locations listed in Specific Condition #F.3., shall be submitted to the Department by the following dates:

Measured During	**Report Submitted By**
Quarter 1	April 15th of each year
Quarter 2	July 15th of each year
Quarter 3	October 15th of each year
Quarter 4	January 15th of each year

2. Gas Monitoring Locations. The gas monitoring probes installed in proximity to solid waste cells SW-1 and SW-2 shall be sampled at least **quarterly** for concentrations of combustible gases determined as a percentage of the LEL calibrated to methane, as described in Rule 62-701.530(2), F.A.C.

Monitoring Probe	**Location Description**
Solid Waste Cell SW-1	GMP-1, GMP-2, GMP-3 and GMP-4
Solid Waste Cell SW-2	GMP-5 and GMP-6

All gas probes are to be clearly labeled and easily visible at all times

3. Gas Remediation. If the results of gas monitoring show that combustible gas concentrations exceed 25% of the LEL calibrated to methane in structures or 100% of the LEL calibrated to methane at the property boundary, the licensee shall immediately take all necessary steps to ensure protection of human health and notify the Department. Within 7 days of detection, a gas remediation plan detailing the nature and extent of the problem and the proposed remedy shall be submitted to the Department for approval. The remedy shall be completed within 60 days of detection unless otherwise approved by the Department.

4. Odor Remediation Plan. The facility shall be operated to control objectionable odors. If objectionable odors are confirmed beyond the property boundary then upon notification by the Department the licensee shall develop and implement an odor remediation plan in accordance with the requirements of Rule 62-701.530(3)(b), F.A.C.

S. Stormwater System Management. Stormwater shall be managed as required by F.A.C. 62-701.400(9). The system shall minimize stormwater from entering waste filled areas and avoid the mixing of stormwater with leachate.

T. Record Keeping Requirements

1. Waste Quantity Records. Waste records shall be compiled monthly, and copies shall be provided to the Department no less than annually by February 1st of each year. This information shall be reported to the Department through the DEP Business Portal located at: http://www.fldepportal.com/go.

2. Estimate of Remaining Life. The licensee shall submit the annual estimate of the remaining life and capacity by March 1st of each year. The report is required by Rule 62-701.500(13)(c), F.A.C. and must be submitted to the District Office and to:

Florida Department of Environmental Protection
Solid Waste Section, MS 4565
2600 Blair Stone Road
Tallahassee, Florida, 32399-2400
SWPP@dep.state.fl.us

U. Waste Burning. Open burning of solid waste is prohibited except in accordance with F.A.C. 62-701.300(3).

V. Liner Location. The top edge of the geomembrane liner shall be clearly identified in the field to prevent waste disposal and leachate runoff outside the geomembrane liner.

4. Closure Requirements.

A. Prior to initiating closure of a solid waste disposal unit, or part of a solid waste disposal unit, the Licensee shall receive authorization from the Department in one of the following ways.

(1) If the landfill is operating under a Department approved Closure Plan with sufficient detail to provide reasonable assurance of compliance with the closing requirements of Rule 62-701.600, F.A.C., then the Licensee shall notify the Department at least 30 days prior to initiating the closure activities and receive written approval from the Department prior to beginning the work in accordance with the Conditions Section A, Condition XX. Procedures for Post-Certification Submittals.

(2) If the landfill is operating under an approved Closure Plan that requires substantive changes to the closing activities in the permitted Closure Plan, then the Licensee shall request a modification of this license to include sufficient design detail to ensure compliance with the closing requirements of Rule 62-701.600, F.A.C., and shall initiate closing only after the license has been modified in accordance with the Conditions Section A, Condition XXIII. Modification of Certification.

(3) The Licensee shall submit an application to the Department for a closure permit on Form 62-701.900(1) and shall initiate closure activities only after the permit is issued. The application shall include a Closure Plan made up of the following:

a. A closure design plan;
b. A closure operation plan;
c. A plan for long-term care; and,
d. A demonstration that proof of financial assurance for long-term care will be provided.

B. Closure Design. All closure construction shall be done in accordance with the approved closure design plan. The Department shall be notified before any changes, other than minor deviations, to the approved closure design are implemented in order to determine whether a modification is required. If require it will be processed in accordance with the Conditions Section A, Condition XXIII. Modification of Certification.

C. Closure Operation Plan. All closure shall be done in accordance with the approved closure operation plan.

D. Certification of Closure Construction Completion. After closure construction has been completed, the engineer of record shall certify to the Department on Form 62-701.900(2) that the closure is complete and that it was done in accordance with the plans submitted to the Department except where minor deviation was necessary. All deviations shall be described in detail and the reasons therefore enumerated.

5. Financial Assurance and Cost Estimates

A. Financial Assurance Mechanism

The licensee may not receive waste for disposal or storage in any disposal unit for which financial assurance has not been approved. Proof that the financial mechanisms are established and funded in accordance with Rule 62-701.630, F.A.C. shall be submitted to the Department at least sixty (60) days prior to the planned acceptance of solid waste in any disposal unit. When established, the licensee shall maintain, in good standing, the financial assurance mechanisms. Supporting documentation and evidence of increases associated with cost estimate increases shall be submitted within the time frames specified in Rule 62-701.630, F.A.C.

All submittals in response to this specific condition shall be sent to:
Florida Department of Environmental Protection
Financial Coordinator - Solid Waste Section
2600 Blair Stone Road, MS 4548
Tallahassee, Florida 32399-2400

B. Cost Estimates.

(1) The licensee shall submit closure cost estimates, including annual adjustments for inflation, in accordance with the requirements of Rule 62-701.630(3) and (4), F.A.C., and 40 CFR Part 264.142(a) using Form 62-701.900(28).

(2) An owner or operator using an escrow account shall submit the annual inflation adjusted estimate(s) between July 1 and September 1. An owner or operator using a letter of credit, guarantee bond, performance bond, financial test, corporate guarantee, trust fund or insurance shall submit the inflation adjusted cost estimate(s) between January 1 and March 1.

(3) A revised closure cost estimate, made by recalculating the total cost of closure or long- term care, in current dollars shall be submitted every 5 years in accordance with 62-701.630(3), F.A.C.

(4) All submittals in response to this specific condition shall be sent to the District Office and a copy to the address identified in this Attachment (Attachment E) 5. Financial Assurance and Cost Estimates, A., or to the following email address: Solid.Waste.Financial.Coordinator@dep.state.fl.us.

6. Beneficial Ash Use Authorization

A. Beneficial Use Authorization by the Department.

Section 403.7045(5) of the Florida Statutes authorizes the Department to approve the beneficial use of ash residue when an applicant demonstrates that "no significant threat to public health will result and that applicable Department standards and criteria will not be violated."

B. Documents Submitted in Support of Beneficial Use of Ash Residue.
The following documents have been submitted by the Licensee and reviewed by the Department regarding the beneficial use of bottom ash residue by the Licensee:

(1) "Request for Approval of Standing Beneficial Use Encapsulated Bottom Ash Generated by the Pasco County Resource Recovery Facility". dated August 14, 2014.

(2) "Request for Amendment to Approval of Standing Beneficial Use of Encapsulated Bottom Ash Generated by the Pasco County Resource Recovery Facility", dated October 20, 2016.

(3) "Request for Amendment to the Previous Approval of the Standing Beneficial Uses of Bottom Ash Generated by the Pasco County Resource Recovery Facility", which was included as part of the "Request for Modification to Conditions of Certification", dated February 6, 2019.

C. Approval of Beneficial Use of Bottom Ash Residue Generated by the Licensee.
Based on review of the documents listed in Paragraph 6.B. above, the Licensee is hereby authorized to beneficially use bottom ash residue in accordance with Section 403.7045(5), F.S., as follows:

(1) Specified Materials:

The following materials (Specified Materials) are allowed for recycling or reuse within Pasco County by, under the direction of the Licensee:

a. Bottom Ash Residue as defined in Rule 62-701.200(7)(a), F.A.C., from the Pasco County Resource Recovery Facility (Facility), a waste-to-energy facility as defined in Section 403.7061(4), F.S. (bottom ash), andb. Any product or construction material, including asphalt or concrete, which contains bottom ash residue as referenced herein.

(2) Required Treatment:

a. The Specified Materials for recycling and reuse shall be conditioned, by or under the direction of the Licensee, in accordance with the following procedure:

Prior to recycling and reuse, bottom ash residue will be aged for a minimum period of 3 months. Aging will be conducted on top of or in a lined Class I landfill cell. During the entire treatment period, ash piles shall be no greater than 20 feet in height.

(3) Specified Uses:

a. The recycling and reuse of the above specified materials are limited to, and only approved for, the following specified uses where the Specified Materials shall be as required herein: (i) Covered use as a road base course, where bottom ash residue from the Facility has been screened to remove large pieces of waste materials (>3/4 inch), and the road base course will be completely covered by a pavement layer; (ii) Encapsulated use as a replacement for up to 50%, by weight, of the customarily used aggregate in Portland cement concrete pavement, where bottom ash residue from the Facility has been screened to remove large pieces of waste materials (>3/4 inch) and the fine fraction of the ash (<3/8 inch);

(iii) Encapsulated as an aggregate in hot mix asphalt pavement, where bottom ash residue from the Facility has been screened to remove large pieces of waste materials (>3/4 inch) and the fine fraction of the ash (<3/8 inch);

(iv) As a partial coarse aggregate replacement in Portland cement concrete slabs beneath structures; and

(v) As a structural base course, underlying multi-use paths.

(4) Recycling and Reuse Conditions:

The Licensee shall implement the recycling and reuse controls specified

herein. The following controls and conditions are binding upon the Licensee and are enforceable under Chapter 403, F.S:

a. Bottom ash residue shall be treated by conditioning, prior to recycling and reuse, in accordance with this Authorization.

b. The Licensee shall not allow recycling, reuse, or disposal of the Specified Materials in any manner inconsistent with the requirements of Chapter 62-701, F.A.C., or this Authorization.

c. Bottom ash residue shall not be placed within 3 feet of groundwater, or 15 feet of wetlands or natural water bodies, or within 100 feet of a potable well that is being used or might be used for human or livestock water consumption.

d. When utilized as road base, the placement of the bottom ash residue shall not extend beyond the outside edge of the pavement*. Bottom ash residue remaining outside the edge of the pavement after construction shall be removed and recycled in a manner consistent with this Authorization or placed in a permitted Class I lined landfill.

e. When utilized as road base, placement of the pavement shall be completed as soon as practicable after placement of the bottom ash residue.

f. When bottom ash residue is utilized as a road base course, only dense-graded asphalt mixes shall be placed as the overlying pavement layer with a 4-inch or greater as-built thickness, except that for two lane roads designed for lower density traffic loads, an overlying pavement layer with a 2-inch as-built thickness may be used.

g. All roadways shall be placed and maintained following generally accepted road construction practices consistent with those utilized in Pasco County at the time of the issuance of the COC modification that incorporates this Authorization.

h. When used as structural base for multi-use paths, the placement of the bottom ash residue shall not extend more than six inches beyond the edge of the pavement and shall be completely covered by a compacted soil layer of a thickness of at least one inch, or equal to the thickness of the pavement, whichever is greater.

i. Bottom ash residue remaining outside this distance after construction shall be removed and recycled in a manner consistent with this Authorization or placed in a permitted Class I lined landfill.

j. When bottom ash residue is utilized as a structural base layer under a multi-use path, only asphalt or concrete mixes shall be placed as the overlying pavement layer with a one-inch or greater as-built thickness.

k. When removed from service, asphalt or concrete products containing bottom ash residue as aggregates shall be managed as construction and demolition debris, recycled or reused in a manner consistent with this Authorization, or placed in a permitted Class I lined landfill.

l. When removed from service, bottom ash residue that has been used as a base course shall be recycled or reused in a manner allowed under this Authorization or placed in a permitted Class I lined landfill.

m. Fugitive dust emissions from the storage, processing, transport or placement of bottom ash residue shall be controlled by wetting.

n. Bottom ash residue used as an aggregate in asphalt and concrete shall be stored on site at batch plants for a period of no more than 120 hours. Loads shall be covered with a tarp, or a similar protective cover, during transportation and ash will not be transported during periods of inclement weather. Following batching of the concrete or asphalt products, the unused

o. Bottom ash residue shall be recovered and either used in a subsequent allowed construction project or placed in a Class I lined landfill.

p. The Licensee shall comply with the following record keeping requirements:

(i) Whenever not the owner, the Licensee shall receive written notice, from the owner or duly authorized agent of the owner (Owner) of the property where the Specified Materials are to be placed, providing the Licensee express authorization for the placement of the Specified Materials, detailing the Owner's authorized placement dates, placement locations, and the maximum quantities of bottom ash residue that may be recycled or reused, or otherwise placed, on the Owner's property;

(ii) The Licensee may receive such notices from Owner's electronically;

(iii) The Licensee shall provide and maintain records detailing the actual placement dates, locations, quantities, the nature of recycling or reuse including the types of associated construction materials (i.e., road base course, concrete pavement, or asphalt pavement) where the Specified Materials were placed, and the dates and disposition whenever any Specified Materials are removed from service;

(iv) Notices and records shall be maintained in a centralized record storage system accessible from the Facility, and also in association with the particular construction project records for any related road construction project that utilizes the Specified Materials; and

(v) Such notices and records shall be maintained by the Licensee for a period of not less than 30 years after the removal of the Specified Materials from service.

q. Recycling and reuse of the Specified Materials, and associated construction activities, shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including material storage, staging, and processing areas, to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), available at www.dep.state.fl.us/water/wetlands/docs/erp/FLErosionSedimentManual_6_07.pdf, and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), available at www.dep.state.fl.us/water/nonpoint/docs/erosion/erosion-inspectors-manual.pdf.

r. The Licensee shall immediately notify the Department in writing upon, or at least within 5 business days of, becoming aware of any condition, test result, or other information indicating that recycling or reuse of the Specified Materials, in accordance with this Authorization, may cause or contribute to violations of state water quality standards.

s. Upon reasonable notice to the Licensee, Department staff or agents with proper identification shall have permission to enter, inspect, sample and test as the Department may claim needed to verify compliance with the requirements of Chapter 403, F.S., and this Authorization.

t. Uses other than as specified herein are not approved under this Authorization. Where bottom ash residue from the Facility, or related materials, may be used or placed in a manner that does not comply with this Authorization, such materials shall be managed as a solid waste subject to the requirements of Chapter 62-701, F.A.C.

*Pavement is defined as including the paved shoulders

APPENDIX I

OPERATION PLAN
FOR THE
PASCO COUNTY
WEST PASCO COUNTY CLASS I LANDFILL

Prepared for:

Pasco County Public Infrastructure

Solid Waste & Resource Recovery

14230 Hays Road

Spring Hill, Florida 34610

Prepared by:

Jones Edmunds & Associates, Inc.

730 NE Waldo Road

Gainesville, FL 32641

July 2022

TABLE OF CONTENTS

1.0 General Description of the Solid Waste Complex 1

2.0 Safety 4

2.1 Emergency Contacts and Reporting 4

2.2 Operator and Hauler Requirements 4

2.3 Training, Equipment, and Materials 4

3.0 Organization 6

4.0 Scalehouse Operations 7

4.1 Load Screening 7

4.2 Prohibited Wastes 8

4.3 Waste Categories 8

4.4 Data Recording and Reporting 10

5.0 Landfill Operator and Spotter Training Plan 11

5.1 Operators 11

5.2 Spotters 11

6.0 Ash Monofill Operations 12

6.1 Current Filling Sequence of A-4 12

6.1.1 Phase I - Filling in Subcell 1 13

6.1.2 Phase II - Filling in Subcell 2 13

6.1.3 Phase III - Filling in Subcell 3 13

6.1.4 Phase IV - Filling in Subcell 4 14

6.1.5 Phase V - Filling in Subcell 5 14

6.1.6 Phase VI - Filling in Subcell 6 14

6.2 Valley Filling and Vertical Expansion 14

6.2.1 Valley Fill Between Cell A-1/A-2 14

6.2.2 Valley Fill Between Cell A-2/A-3 15

6.2.3 Filling in Valley Within Cell A-4 15

6.2.4 Valley Fill Between Cell A-3/A-4 15

6.2.5 Final Buildout of Cells A-1, A-2, A-3, and A-4 to Elevation 122 ft NAVD 15

6.3 Ash Monofill Waste Inspection 15

6.4 Ash Monofill Hauler Queuing 15

6.5 Waste Compaction and Application of Cover 16

6.6 Engineered Aggregate Processing 24

7.0 Municipal Solid Waste Landfill Operations (SW-1 and SW-2) 25

7.1 Valley Fill Cells SW-1 and SW-2 Fill Sequence 25
7.1.1 Lifts 1 and 2, Valley Fill, Part 1 25
7.1.2 Lifts 3 and 4 26
7.1.3 Lift 5 26
7.1.4 Lift 6 26
7.1.5 Lift 7 30
7.2 Solid Waste Inspection 30
7.3 Hauler Queuing 31
7.4 Waste Placement and Compaction 31
7.5 Cover Materials and Methods 32
7.5.1 Initial Daily Cover 32
7.5.2 Intermediate Cover/Temporary Cover 32
7.5.3 Final Cover 32
7.6 Special Waste Recovery 32
7.7 Litter Control 33
8.0 Special Waste Management 35
8.1 Household Hazardous Waste 35
8.2 Unknown and Unmarked Wastes 35
8.3 Used Oil 36
8.4 Latex Paints 36
8.5 Oil Based Paints 36
8.6 Poisons 36
8.7 Lead Acid Batteries 37
8.8 Electronics Recycling 37
8.9 Contaminated Soils 37
8.10 Biological Wastes 37
8.11 Tires 38
8.12 White Goods 38
8.13 Mercury-containing Lamps and Devices 38
9.0 Leachate Management 39
9.1 Leachate Reduction 39
9.1.1 Rain Covers 39
9.1.2 Stabilized Sideslopes 39
9.1.3 Closing 39

9.2 Leachate Collection 41
9.2.1 Ash Monofill Cell A-1 41
9.2.2 Ash Monofill Cell A-2 41
9.2.3 Ash Monofill Cell A-3 41
9.2.4 Ash Monofill Cell A-4 42
9.2.5 Solid Waste Cell SW-1 42
9.2.6 Solid Waste Cell SW-2 43
9.3 Ash Leachate Storage Tank 43
9.3.1 Tank Inspections 43
9.3.2 Secondary Containment System 44
9.4 Ash Leachate Disposal 44
9.5 Solid Waste Leachate Disposal 45
9.6 Leachate Monitoring, Data Collection, and Reporting 45
9.7 Leachate System Maintenance 45
9.8 Leachate Contingency Plan 46
9.8.1 Leachate Pumps, Hauling, and Flow Meters 46
9.8.2 Electrical Power Failure 46
9.8.3 Leachate Treatment Contingency 46
10.0 Surface Water Management 48
10.1 Stormwater System Maintenance 48
11.0 Landfill Gas Management 50
11.1 Landfill Gas Monitoring Program 50
12.0 Site Contingency Plan 52
12.1 Landfill Fire 52
13.0 Recordkeeping 53
14.0 Off-Site Beneficial Ash Reuse 54
15.0 Ash Monofill Ferrous and Non-Ferrous Metals Processing 55

Figures

Figure 1-1 Site Plan 3
Figure 3-1 Organizational Chart 6
Figure 6-1 Generalized Layout 23
Figure 6-2 Segregated Aggregate Pile 24
Figure 7 Stormwater Interceptor Control 27
Figure 7-1 Phasing Plan 28
Figure 7-2 Cells SW-1 and SW-2 Filling Sequence 29

Figure 9-1 Leachate Collection System 40
Figure 10-1 Stormwater Management Ponds 49
Figure 11-1 Gas Monitoring Locations 51
Figure 15-1 Proposed Pasco Mobile NFE/FE Plant 56
Figure 15-2 Proposed Pasco Mobile NFE/FE Plant 57

Tables

Table 4-1 PC Scales Waste Category Codes and Disposal Area 9

Attachments

Attachment 1 Attachment E Part 6 of the Conditions of Certification

1.0 GENERAL DESCRIPTION OF THE SOLID WASTE COMPLEX

The West Pasco County Class I Landfill (WPCL) (for which this Operation Plan has been prepared) is an integral component of the larger West Pasco Solid Waste Complex. The overall 800-acre Complex is comprised of the following components:

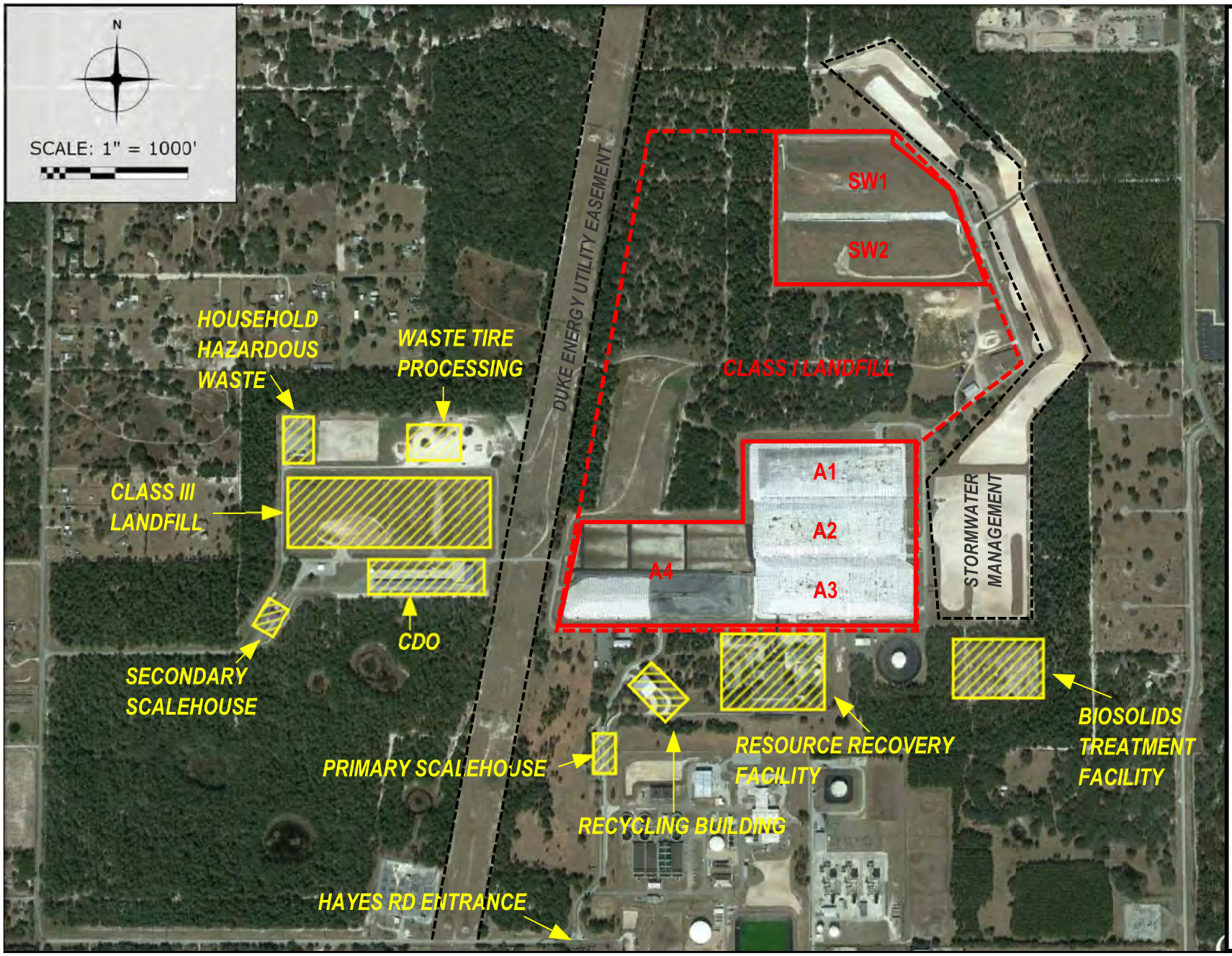
- The Pasco County Resource Recovery Facility;
- The West Pasco Class I Landfill (the component addressed by this Operation Plan);
- The West Pasco Class III Landfill;
- The West Pasco Materials Recovery Facility;
- Citizen's Drop Off Facility;
- The Pasco County Biosolids Treatment Plant, and;
- Various support structures, including two scalehouses, vehicle maintenance buildings, etc.

The main entrance of the West Pasco Solid Waste Complex is at 14230 Hays Road in Spring Hill and is depicted on **Figure 1-1**. The majority of the complex is permitted under the Florida Electrical Power Plant Siting Act through Conditions of Certification No. PA 87-23G; however, the Class III Landfill and the Biosolids Treatment Plant are permitted through individual permits outside of PA 87-23G. The following solid waste management activities occur at the Complex:

- Scalehouse operations.
- Solid Waste combustion at the Resource Recovery Facility.
- Metals recovery in the Ash Storage Building of the Resource Recovery Facility.
- Ash disposal in the Ash Monofill (currently Cell A-4).
- Engineered Aggregate processing within the Ash Monofill (currently limited to Cell A-4).
- Maintenance of temporary cover on the inactive cells of Ash Monofill (Cells A-1, A-2, and A-3).
- Solid Waste Disposal in the Solid Waste Landfill (currently Cell SW-2).
- Maintenance of temporary cover on the inactive cell of the Solid Waste Landfill (Cell SW-1).
- Construction and demolition (C&D) disposal within the Class III Landfill.

- Yard waste processing.
- White goods collection and recycling.
- Household hazardous waste (HHW) collection.
- Recycled materials processing.
- Stormwater collection and treatment.
- Landfill gas monitoring.
- Groundwater monitoring.
- Landfill leachate collection and transport.
- Heavy equipment and vehicle maintenance.
- Waste tire collection and processing.

The entire 800-acre site is enclosed by a chain link fence or barbed wired fence to limit access. Public access is limited to two gates, both of which are monitored by Pasco County staff in the scalehouses adjacent to the gates. After-hours access to the primary entrance gate off Hays Road is monitored and controlled by the control room operator at the Resource Recovery Facility.



Site Plan

West Pasco Solid Waste Facility

Figure 1-1

2.0 SAFETY

2.1 EMERGENCY CONTACTS AND REPORTING

Dr. Justin Roessler, PhD, PE	Office	(727) 856-0119
Solid Waste Director	Cell	(352) 270-1454
Mr. Tim Treshler	Office	(727) 856-0119
Sr. Program Manager	Cell	(727) 992-0032

The emergency contact individuals are subject to change. The Operation Plan will be updated if any changes occur. All accidents should be immediately reported to the Solid Waste Director. After immediately reacting to the accident (first aid or equipment repair), the Solid Waste Director or others designated by the Solid Waste Director will investigate the cause of the accident. A full accident report will be drafted and submitted to Director. The accident report will include all facts involved in the incident as applicable including, but not limited to, date, time of day, weather conditions, hauler vehicle traffic conditions, location on the landfill, equipment and personnel involved, circumstances leading to cause, and response. Photographs will be attached when applicable.

2.2 OPERATOR AND HAULER REQUIREMENTS

Smoking is prohibited on and near the landfill cells and the working face. A spark from a lighter, cigarette, cigar, or pipe could ignite landfill gas (LFG). A sign at the scalehouse notifies anyone entering the landfill of the No-Smoking Policy. All Pasco County employees will enforce this policy in the field. "No Smoking" signs are posted at all entrances, roadways, and active areas.

Welding and oxy-acetylene cutting are prohibited near the landfill or working face. If a vehicle requires this type of maintenance, it shall be towed to an area away from LFG venting. If this is not possible, an employee trained in using a combustible gas meter will take a reading around the area to determine whether methane/combustible gases are absent and their concentrations if they are present.

2.3 TRAINING, EQUIPMENT, AND MATERIALS

Safety materials and equipment include fire extinguishers at landfill sites and first aid kits that are easily accessible for field use. Other equipment provided by the County may include various types of Personal Protective Equipment (PPE) and protective disposable coveralls. Landfill field employees are required to wear appropriate clothing on the work site, such as steel-toed boots, long pants, and a shirt.

Pasco County Public Infrastructure maintains a pro-active approach to training by requiring key operating personnel attend the University of Florida's Training, Research, and Education of Environmental Operations (TREEO) certification courses. All Operators and Spotters must attend and pass the Initial Training for Operators of Landfills and Waste Processing Facilities

course. Within three years of passing the initial training course and every three years thereafter, each operator must complete an additional 16-hour refresher course. Additionally, all spotters must attend and pass the Initial Training Course for Spotters at Landfills, C&D Sites, and Transfer Stations. Within three years of passing the initial training course and every three years thereafter, each spotter must complete an additional 8-hour refresher course.

Copies of course completion certificates are kept on file within the Administration offices. The landfill has at least one trained operator on site during all times when the landfill receives waste. At least one trained spotter is at each working face at all times to detect unauthorized wastes when the landfill receives waste other than ash.

3.0 ORGANIZATION

Pasco County Solid Waste is organized as follows:

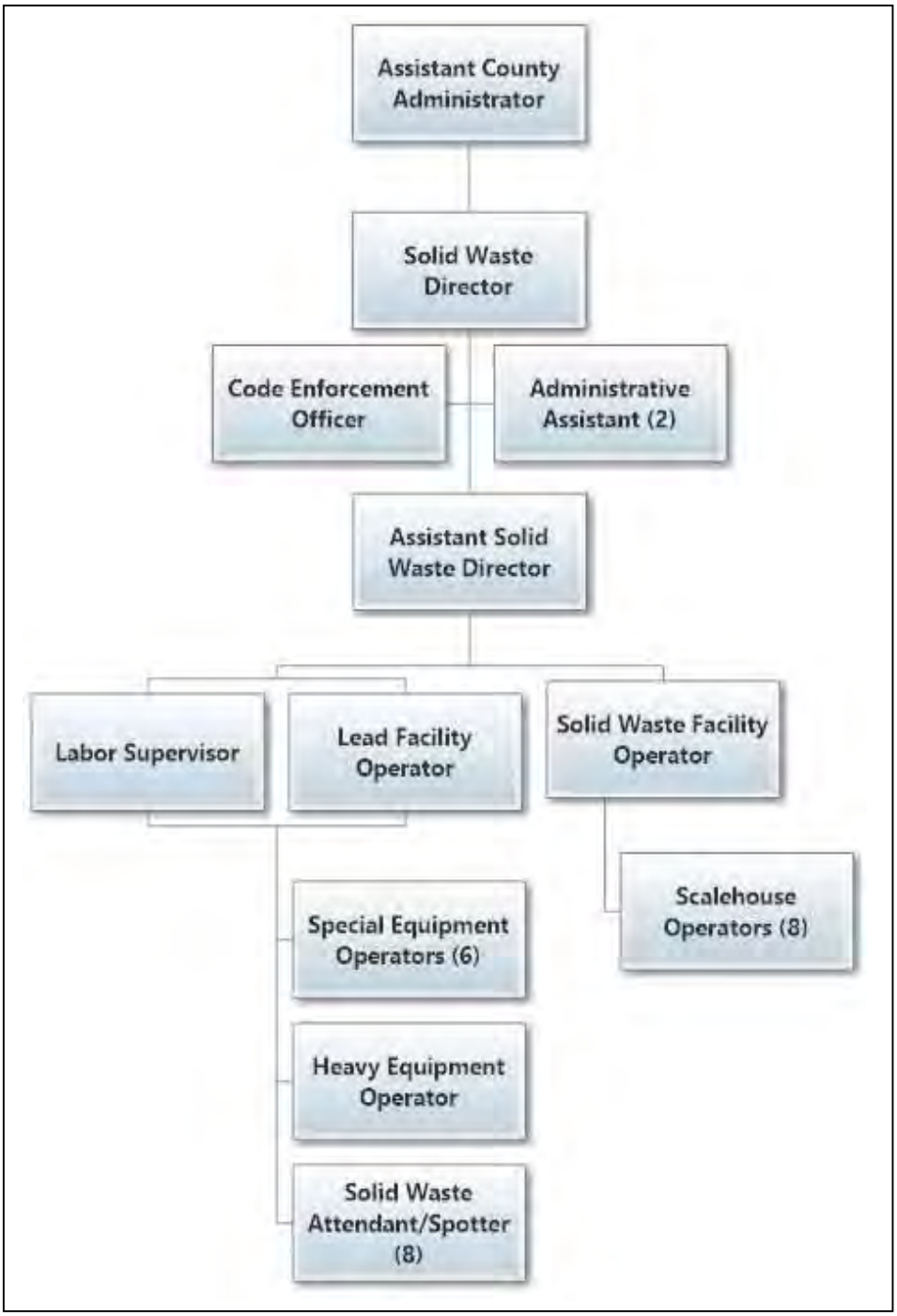


Figure 3-1
Organizational Chart

4.0 SCALEHOUSE OPERATIONS

The scale operation is critical to the efficiency of the landfill facility. This operation serves several important functions including security, initial load checking, waste identification and segregation, traffic control, waste quantity recording, and financial documentation.

The primary scalehouse is approximately 1,000 feet from the entrance gate on the main facility access road. The scale facility has a scalehouse, two inbound scales, two outbound scales, one inbound bypass lane, one outbound bypass lane, and a video surveillance system. Monitoring the movement of haul trucks and other vehicles is part of the duties of the Scalehouse Attendant. All traffic entering the facility must check in with the Scalehouse Attendant. Waste delivery vehicles are required to weigh in, and all visitors must first report in and state the purpose of their visit. A Scalehouse Attendant is maintained on duty during all periods when the facility is open.

A secondary scalehouse, constructed in 2011, is utilized primarily for citizens that choose to self-haul to the Citizens' Drop-Off facility. The secondary scalehouse has a scalehouse, one inbound scale, one outbound scale, one inbound bypass lane, one outbound bypass lane, and a video surveillance system.

Administration maintains communication with landfill staff via hand-held radios and cell phones. A sign at both entrances to the facility identifies the operating authority, hours and days of operation, waste disposal restrictions, and other information. Speed limit signs are posted along the main road leading to the active filling areas. Signs identifying roads leading to the Class I filling area are posted at the intersection of each road. Other miscellaneous signs direct customers to the other public facilities, including recycling drop-off containers, mulch, and tire disposal area.

4.1 LOAD SCREENING

The Scalehouse Attendant screens all loads as they are received at the scale facility. The Scalehouse Attendant performs two types of inspections on incoming waste loads per transaction: hauler interview, and visual inspections when visible from inside the scale facility.

The initial inspection of the incoming waste is conducted by the Scalehouse Attendant. This inspection includes identification from the driver of the type of waste and random visual inspections of the vehicle. The random visual inspections include looking for suspicious containers that may contain prohibited wastes and smoke rising from the payload area of the vehicle.

The types of businesses in the area that may generate prohibited wastes include automotive repair, painting, dry cleaning, fiberglass fabrication, and marine service. All incoming loads of waste should be checked for visual and olfactory indications. Indications of suspicious loads include the following:

- Hazardous placards or markings.
- Drums.
- Containerized liquids.
- Powders or dusts.
- Sludges.
- Bright or unusual colors.
- Broken or intact mercury-containing lamps or devices.
- Chemical odors.

4.2 Prohibited Wastes

The Scalehouse Attendant should also scan incoming loads for components that contain prohibited materials and interview the driver of the hauler vehicle whether the incoming load contains such materials. Waste materials prohibited from disposal at the West Pasco Facility are listed below. Refer to Section 7.6 for handling and removal of prohibited wastes from the waste stream. References to sections where disposal is addressed are shown parenthetically. Please note that waste tires, white goods, yard waste, and other selected items are accepted at the Complex but are diverted from either the Class I cell or the Waste-to-Energy Facility.

- Lead Acid Batteries (8.7).
- Paint (8.4 and 8.5).
- Biomedical wastes (8.10).
- Whole tires (8.11).
- Used motor oil and oil filters (8.3).
- White goods (8.12).
- Household Hazardous Waste (8.1).
- Unknown Wastes (8.2).
- Septic/sewage/sludge except that bound for the Biosolids Processing Facility or meeting the definition of a solid waste in accordance with 62-701(107) and not prohibited by Rule 62-701.300, FAC (8.10).
- Segregated Electronics (8.8).
- Contaminated Soils (8.9).
- Mercury-Containing Lamps and Devices (8.13).

4.3 Waste Categories

Pasco County utilizes defined categories of types of waste received at the scalehouse. These categories of waste are designed to provide required reporting to FDEP as well as to properly manage the incoming waste. Each waste category is managed at a specific area of the Complex. The Scalehouse Attendant is responsible for directing the driver of the haul vehicle to the proper location in the landfill for unloading.

Table 4-1 lists all waste categories received at the Complex and the location for unloading within the Complex.

The tonnage of all waste categories is compiled monthly. The waste quantity reports are submitted annually to FDEP.

Table 4-1
PC Scales Waste Category Codes and Disposal Area

Code	Description	Disposal Area
AC	Air Conditioner	HHW
AR	Adopt a Road	RRF, Class I, Class III, Waste Tire
CCT	Coastal Cleanup	RRF, Class I, Class III, Waste Tire
CD	Construction Debris	Class III
CEE	Commercial Electronic Equipment	HHW
CM	Computer Monitor	HHW
COM	Computer without Monitor	HHW
EE	Electronic Equipment	HHW
FCY	Fuel Cylinder	HHW
HEL	Helium Tank	HHW
MET	Metal	Class III
MSW	Municipal Solid Waste – Residential	RRF, Class I
MSWC	Municipal Solid Waste – Commercial	RRF, Class I
OXY	Oxygen Tank	HHW
PT20	Propane Tank up to 20 gallons	HHW, Class III
PT50	Propane Tank up to 50 gallons	HHW, Class III
REF	Refrigeration	HHW

RIMS	Outbound Tire Rims	N/A
TC	Tire Chips	Waste Tire
TCOTR	Off road Tire Chips	Waste Tire
TLT	Toilet Recycling Program	Class III
TR	Tires	Waste Tire
TRE1	Tires (each) car or pickup	Waste Tire
TRE2	Tires (each) large truck or semi	Waste Tire
TVP	TV Projection and Console	HHW
TV1	TV up to 36" screen	HHW
WC	Wood Chips	RRF, Class I, Class III
WG	Outbound metal and white goods	N/A
YWC	Yard Waste Commercial	Yard Waste
YWR	Yard Waste Residential	Yard Waste

4.4 Data Recording and Reporting

Vehicles are first weighed at the scale with the gross weight of the vehicle recorded. Pasco County utilizes the software PC Scale to categorize and track inbound and outbounds loads. Following assignment of the appropriate commodity code into the PC Scale program, the Scalehouse Attendant then directs the vehicle to the appropriate area of the Complex to unload. The vehicle returns to the scale where the tare weight is recorded to determine the net weight of the material. Materials such as white goods, tires, and bulk yard waste are dropped off at the designated areas as shown on **Figure 1-1**. These areas are clearly indicated by signs.

5.0 LANDFILL OPERATOR AND SPOTTER TRAINING PLAN

Landfill Operator and Spotter training will comply with Rule 62-701.320(15), FAC.

Training courses, whether public or in-house, meet the requirements of Rule 62-701.320(15), FAC and shall be certified by the FDEP Solid Waste Management Training Committee (SWMTC). This training plan, along with documents that record training plan implementation, are kept on site and will be made available to FDEP's inspection staff upon request. Training records are also be kept by University of Florida Center for Training, Research, and Education for Environmental Occupations (TREEO).

5.1 OPERATORS

New Supervisors hired by Pasco County Solid Waste will participate in 24 hours of initial training provided by an entity that has been pre-approved by the Department pursuant to Section 403.716, Florida Statutes. Within 3 years after passing the exam and every 3 years thereafter, Supervisors will participate in continuing education courses totaling 16 hours conducted by an approved provider.

5.2 SPOTTERS

New spotters will participate in 8 hours of initial training provided by entities meeting the requirements of Rule 62-701.320(15), FAC. Every 3 years after initial training, landfill Spotters will participate in continuing education courses provided by approved entities totaling 4 hours.

6.0 ASH MONOFILL OPERATIONS

The Ash Monofill portion of the Class I Landfill receives only combustion residue (ash) from the Pasco County Resource Recovery Facility. Ash that is generated from the combustion process is directed to the dedicated Ash Storage Building at the Resource Recovery Facility, where it is periodically loaded within the building by a front-end loader into top loading trucks. The loaded trucks travel to the active ash disposal cell, where they are off-loaded. Ash hauling operations occur between 7 AM and 6 PM, Monday through Friday, or more frequently as needed.

The liner and leachate collection system have been constructed, one disposal unit at a time (A-1, A-2, A-3, A-4) with temporary roads and swales for access and surface-water management. The phasing plan for the currently active ash disposal cell (A-4) is depicted in the drawing set dated July 2008 by CDM sheets C-6 through C-11. The proposed modifications to the side slopes and vertical expansion of Cells A-1, A-2, and A-3 to a final buildout elevation of 122 feet North American Vertical Datum of 1988 (ft NAVD) requires an update to the preexisting phasing plan. As of June 2021, Cell A-4 is the active disposal cell for the Resource Recovery Facility's ash; however, activities such as advanced metals recovery exercises by Covanta and periodical ash-derived aggregate processing partially occupy the available disposal area, encouraging the County to explore revised phasing plans to increase operational flexibility.

In general, waste filling is done in conjunction with using a rain tarp as intermediate cover to reduce leachate generation. As of May 2021, Cells A-1, A-2, and A-3 are covered by such intermediate cover. The rain tarp is a 20-mil geomembrane that serves as intermediate cover for areas that are not expected to be used for disposal within 180 days. All precipitation on the landfill that comes in contact with the rain tarp (and not in contact with ash) is managed as non-contact stormwater.

Cell A-4 is divided into six subcells. The subcells are numbered from one to six, starting at the southwest corner of the overall cell progressing eastward (subcells 1, 2, and 3), then from the northwest corner progressing eastward (subcells 4, 5, and 6). The sequence of filling is depicted on drawings dated July 2008 by CDM, sheets C-6 through C-11.

The general filling sequence is accomplished by filling in each subcell to an approximate elevation of 85 feet, with a side-slope of 3:1. A secondary berm (inside the subcell divider berms) around the Phase I fill area has been constructed to divert contaminated stormwater (leachate) to low areas as shown on sheet C-6. This overall plan is accompanied by a modified phasing plan for the entire ash monofill, which accounts for the vertical expansion and valley fills between Cells A-1/A-2, Cells A-2/A-3, and Cells A-3/A-4. Unless otherwise noted, all ash beneficial reuse activities (described in detail in Section 6.6) shall be relocated or ceased as necessary as this phasing plan proceeds.

6.1 CURRENT FILLING SEQUENCE OF A-4

This section describes the current filling sequence for Cell A-4 starting with the individual subcells, after which the modified filling sequence will be discussed.

6.1.1 Phase I - Filling in Subcell 1

1. Flag the edge of the liner at the top of the berm or mark with traffic cones. Ash will not be placed within 2 feet of the flagged or marked line.

2. Close the ball valves in subcells 2 and 4. All other ball valves will be in open position. Install stormwater pumps in subcells 2 and 4. Stormwater from all subcells except subcell 1 will be pumped to the surface drainage swales.

3. Place a berm/swale around the active phase of the cell area. All waste and water in contact with waste will be contained within the bermed area. (See sheet C-6.)

4. Ash will be unloaded from the entrance ramp to the cell and spread over the 2 feet of protective sand cover, constructing a platform. A minimum of 5 feet of initial lift will be placed and rolled to cover subcell 1. The ash for the initial lift will be free from large, sharp objects that may damage the liner system.

5. Continue normal filling operation, maintaining the perimeter berm/ swale around the sub-cell 1. Filling the sub-cell 1 will be accomplished by constructing approximately 10-foot lifts, working in a general direction from south to north, and from west to east.

6. As the filling operation progresses, construct an access road using ash from the west of subcell 1 as shown in sheet C-6, and provide drainage berms/swales on both sides of the access road and around the perimeter of the subcell 1 area. Only the portion of the access road within the landfill footprint shall be constructed of ash.

7. Continue the operation until the elevation of 85 feet is achieved as indicated in sheet C-6.

6.1.2 Phase II - Filling in Subcell 2

1. Close the ball valves in subcells 3 and 4. All other ball valves will be in open position. Remove stormwater pumps for subcell 2 and install them in subcell 3. Stormwater from all subcells except subcells 1 and 2 will be pumped to the surface drainage swales.

2. Begin the filling operation in the Phase II area in a similar manner as in Phase I. Please see sheet C-7 for additional details.

6.1.3 Phase III - Filling in Subcell 3

1. Close the ball valves in subcell 4. All other ball valves will be in open position. Remove stormwater pumps for subcell 3. Stormwater from all sub-cells except subcells 1, 2, and 3 will be pumped to the surface drainage swales.

2. Begin the filling operation in the Phase III area in a similar manner as in Phases I and II. Please see sheet C-8 for additional details.

6.1.4 Phase IV - Filling in Subcell 4

1. Close the ball valves in subcell 5. All other ball valves will be in open position. Remove stormwater pumps for subcell 4 and install them in subcell 5. Stormwater from all subcells except subcells 1, 2, 3, and 4 will be pumped to the surface drainage swales.

2. Begin the filling operation in the Phase IV area in a similar manner as in Phases I, II, and III. Please see sheet C-9 for additional details.

6.1.5 Phase V - Filling in Subcell 5

1. Close the ball valves in subcell 6. All other ball valves will be in open position. Remove stormwater pumps for subcell 5 and install them in subcell 6. Stormwater from subcell 6 will be pumped to the surface drainage swales.

2. Begin the filling operation in the Phase V area in a similar manner as in Phases I, II, III, and IV. Please see sheet C-10 for additional details.

3. The Aggregate Processing Operation described in Section 6.5 will take place within subcell 5. Once the subcell has been floored with ash, equipment will be placed in the approximate configuration shown on **Figure 6-1**. Please refer to Section 6.5 of this Operation Plan for a description of the Aggregate Processing operation.

6.1.6 Phase VI - Filling in Subcell 6

1. All ball valves will be in open position. Remove stormwater pumps for subcell 6.

2. Begin the filling operation in the subcell 6 area in a similar manner as in Phases I, II, III, IV, and V. Please see sheet C-11 for additional details.

6.2 Valley Filling and Vertical Expansion

This section discusses the valley fills proposed between Cells A-1, A-2, A-3, and A-4, as well as the vertical expansion for filling all four cells to a final elevation of 122 ft NAVD. Filling in the existing valleys between Cells A-1/A-2, A-2/A-3, A-3/A-4, and within A-4 may occur after filling in the remainder of area in Cell A-4 or upon completion of the current phase in A-4.

6.2.1 Valley Fill Between Cell A-1/A-2

1. The temporary rain cover should be removed within the valley starting west to east. The valley should be filled in progressing west to east by constructing approximately 10-foot lifts. Before filling in the valley area, the existing ash surface shall be prepared to limit the potential for surface water short-circuiting between the "aged" and "fresh" ash contact surface. Continue the filling operation until approximate elevation of 85 ft NAVD.

2. Leachate collection system cleanout points exist at several points in this valley. To accommodate valley filling, these existing cleanouts will be extended/abandoned as necessary.

6.2.2 Valley Fill Between Cell A-2/A-3

1. The temporary rain cover should be removed within the valley starting west to east. The valley should be filled in progressing west to east by constructing approximately 10-foot lifts. Continue the filling operation until approximate elevation of 85 ft NAVD. Leachate collection system cleanout points exist at several points in this valley. To accommodate valley filling, these existing cleanouts will be extended/abandoned as necessary.

6.2.3 Filling in Valley Within Cell A-4

1. Begin filling the valley area between subcells from east to west. Fill the area by constructing approximately 10-foot lifts working in the general direction from south to north and toward the west. Continue the filling operation until approximate elevation of 85 ft NAVD.

6.2.4 Valley Fill Between Cell A-3/A-4

1. Begin filling the valley area between cells from east to west. Fill the area by constructing approximately 10-foot lifts working in the general direction from south to north and toward the west.

6.2.5 Final Buildout of Cells A-1, A-2, A-3, and A-4 to Elevation 122 ft NAVD

1. These lifts will be an area fill over Cells A-1, A-2, A-3, and A-4 to the final elevation of 122 ft NAVD. Slopes will be maintained to meet the modified 3H:1V. These lifts will be approximately 10 feet thick.

6.3 Ash Monofill Waste Inspection

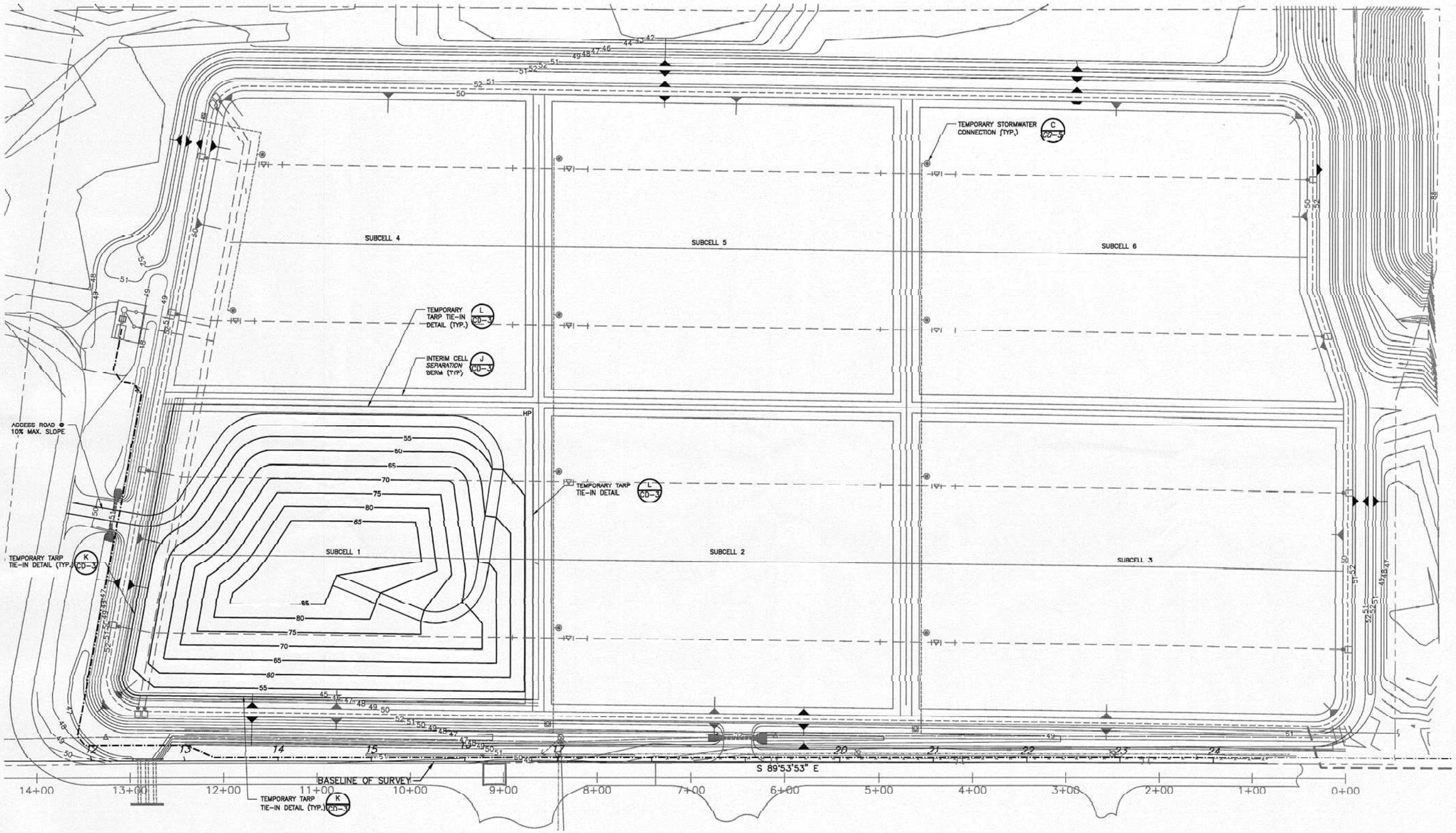
Because the ash monofill receives only combustion residue (ash) from the Resource Recovery Facility, there is no need to deploy spotters to the working face. All Operators working within the ash monofill are trained to identify materials that may have inadvertently been loaded into the ash transport trucks and to segregate such materials if necessary. Such materials could be oversized material (such as white goods) that were segregated at the tipping floor of the Resource Recovery Facility. If such non-ash materials are identified at the monofill, they will be segregated and taken to the appropriate location within the larger Solid Waste Complex.

6.4 Ash Monofill Hauler Queuing

Private haulers are not authorized to utilize the ash monofill. All hauling of ash residue from the Ash Storage Building to the active cell is accomplished by a single contractor employed by the Resource Recovery Facility Operator (Covanta Pasco, Inc.). Hauling takes place Monday through Friday, or more frequently if needed. The Ash Storage Building is sufficiently sized to store several day's worth of ash.

6.5 Waste Compaction and Application of Cover

The ash is spread and compacted as necessary by a front-end loader. Because it contains no putrescible material, daily cover is not applied. On areas where no activity is expected for 180 days or more, a 20-mil geomembrane rain tarp may be installed to minimize leachate generation.



NOTE:

1. TEMPORARY TARP DETAIL WILL BE AS DETAILS K & L, SHEET CD-3, TO BE USED AS NECESSARY.
2. SEE LANDFILL OPERATIONS PLAN 3.6.1, PHASE 1.

FLORIDA STATEWIDE ENGINEERING AUTHORIZATION DEC 10 2008 SOUTHWEST DISTRICT TAMPA

DATE:
AAMOD S. SONAWANE
P.E NO. 62526

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. SONAWANE
DRAWN BY: P. ANDUZE
SHEET CHK'D BY: J. LADNER
CROSS CHK'D BY: M. SINUSHKUR
APPROVED BY: A. SONAWANE
DATE: NOVEMBER 2008

CDM
Camp Dresser & McKee, Inc.
1715 North Westshore Blvd Suite 875
Tampa, FL 33607
Tel: (813) 281-2900
FL COA No. EB-0000020
consulting • engineering • construction • operations

PASCO COUNTY, UTILITIES SERVICES BRANCH
PASCO COUNTY FLORIDA

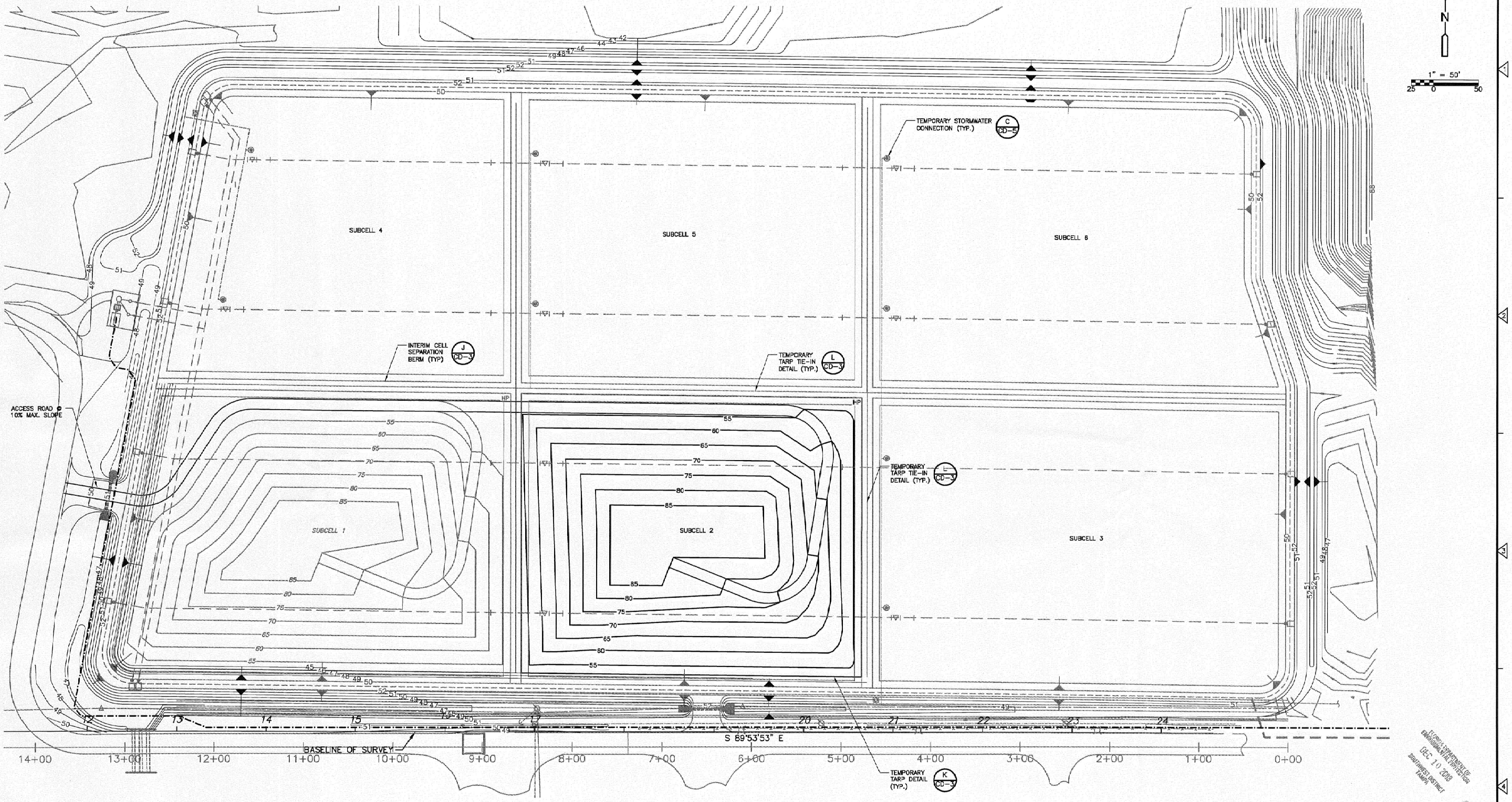
WEST PASCO CLASS I LANDFILL
CELL A-4 CONSTRUCTION

PHASE 1 PLAN FOR
CELL A-4

PROJECT NO. 6104-46136
FILE NAME: C006STPL

SHEET NO.
C-6

Xref's: [CBASE MODEL, C-BASE, CEBASE-MOD 10-3-08, CONTOURS, LEACHATE, CONTOURS-2,] Images: [
Filename: L:\6104\46136\bd\CIVIL\C006STPL.dwg Last saved By: MOHLEDP Time: 10/27/2008 7:52:34 AM



NOTE:

1. TEMPORARY TARP DETAIL WILL BE AS DETAILS K & L, SHEET CD-3, TO BE USED AS NECESSARY.
2. SEE LANDFILL OPERATIONS PLAN 3.6.1, PHASE 2.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DEC 10 2008 SOUTHWEST DISTRICT TAMPA

DATE:
AAMOD S. SONAWANE
P.E NO. 62526

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. SONAWANE
DRAWN BY: P. ANDUZE
SHEET CHK'D BY: J. LADNER
CROSS CHK'D BY: STROBRIDGE
APPROVED BY: A. SONAWANE
DATE: NOVEMBER 2008

CDM
Camp Dresser & McKee, Inc.
1715 North Westshore Blvd Suite 575
Tampa, FL 33607
Tel: (813) 281-2900
FL COA No. EB-0000029
consulting • engineering • construction • operations

PASCO COUNTY, UTILITIES SERVICES BRANCH
PASCO COUNTY FLORIDA

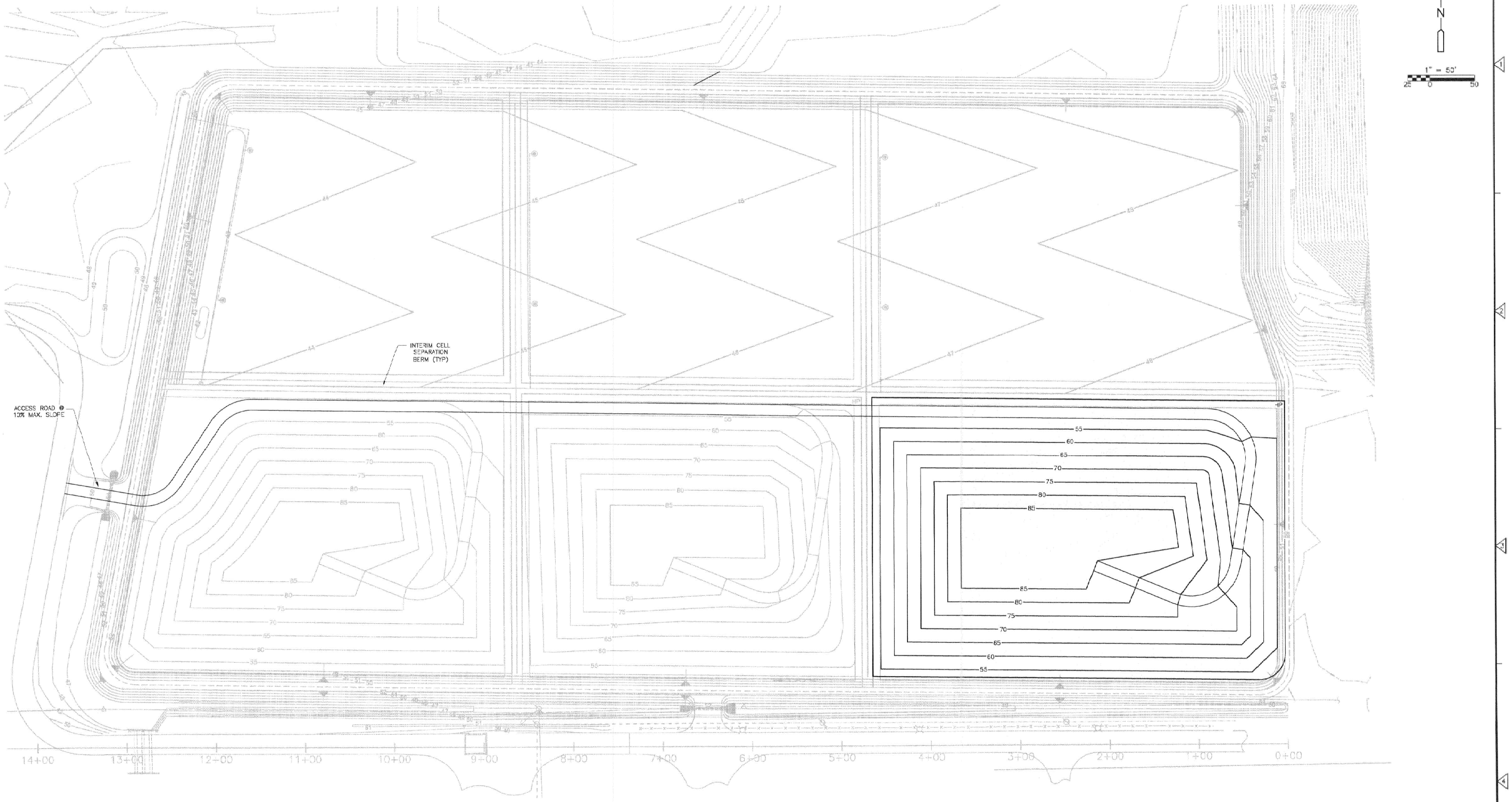
WEST PASCO CLASS I LANDFILL
CELL A-4 CONSTRUCTION

PHASE 2 PLAN FOR
CELL A-4

PROJECT NO. 5104-46136
FILE NAME: CC07STPL

SHEET NO.
C-7

Xref's: [CBASE MODEL, C-BASE, CLEASE-MOD 10-6-08, CONTOURS, LEACHATE, CONTOURS-2_]
Filename: L:\5104\46136\pd\civil\cc07stpl.dwg Last saved by: MOHLEDP Time: 10/27/2008 8:11:13 AM
Images: []



NOTE:
1. TEMPORARY TARP DETAIL WILL BE AS DETAIL K, SHEET CC-3, TO BE USED AS NECESSARY.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JUL 28 2008
SOUTHWEST DISTRICT TAMPA

DATE:
AAMOD S. SONAWANE
P.E NO. 62526

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. SONAWANE
DRAWN BY: P. ANDUZE
SHEET CHK'D BY: J. ADNER
CROSS CHK'D BY: P. STROBRIDGE
APPROVED BY: A. SONAWANE
DATE: JULY 2008

CDM
Camp Dresser & McKee
8008 Baypine Road, Suite 200
Jacksonville, FL 32256
Tel: (904) 731-7109
FL COA No: EB 0003020
consulting • engineering • construction • operations

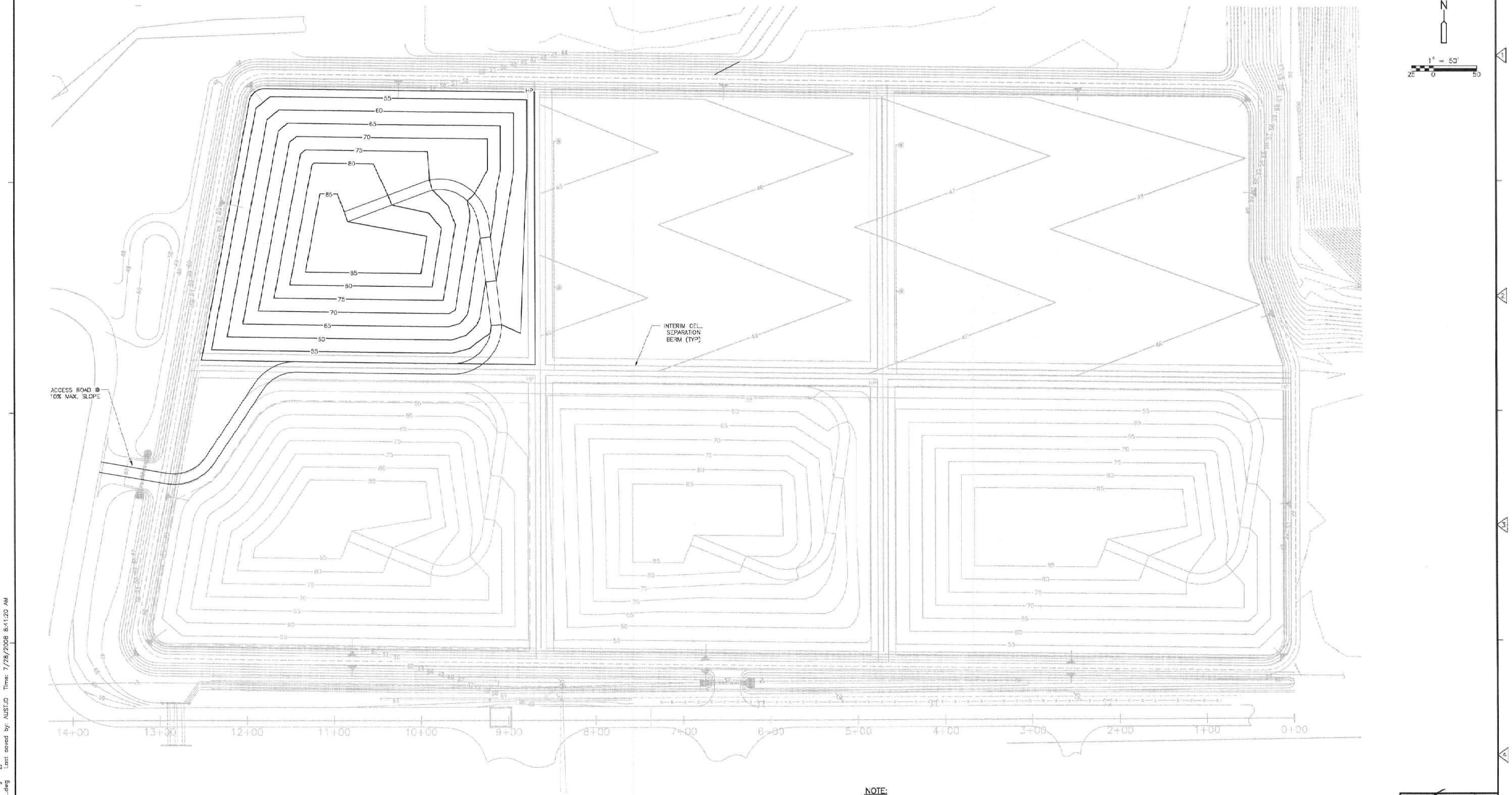
PASCO COUNTY, UTILITIES SERVICES BRANCH
PASCO COUNTY FLORIDA

WEST PASCO COUNTY LANDFILL
EXPANSION CELL A-4

PHASE 3 PLAN FOR
CELL A-4

PROJECT NO. 6104-46136
FILE NAME: C008STPL
SHEET NO.
C-8

Xref's: [CDM_2436, CBASE, MODEL, C-BASE,] Images: [] Filename: L:\6104\46136\Permit2\CIVIL\C008STPL.dwg Last saved by: AUSIJO Time: 7/29/2008 8:11:38 AM



NOTE:
1. TEMPORARY TARP DETAIL WILL BE AS DETAIL K, SHEET CD-3, TO BE USED AS NECESSARY.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JUL 28 2008
SOUTHWEST DISTRICT TAMPA

DATE:
AAMOD S. SONAWANE
P.E NO. 62526

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. SONAWANE
DRAWN BY: P. ANDUZE
SHEET CHK'D BY: J. LADNER
CROSS CHK'D BY: R. STROBRIDGE
APPROVED BY: A. SONAWANE
DATE: JULY 2008

CDM
Camp Dresser & McKee,
8659 Baypine Road, Suite 200
Jacksonville, FL 32256
Tel: (904) 731-7100
FL COA No. EB 0000020
consulting • engineering • construction • operations

PASCO COUNTY, UTILITIES SERVICES BRANCH
PASCO COUNTY FLORIDA

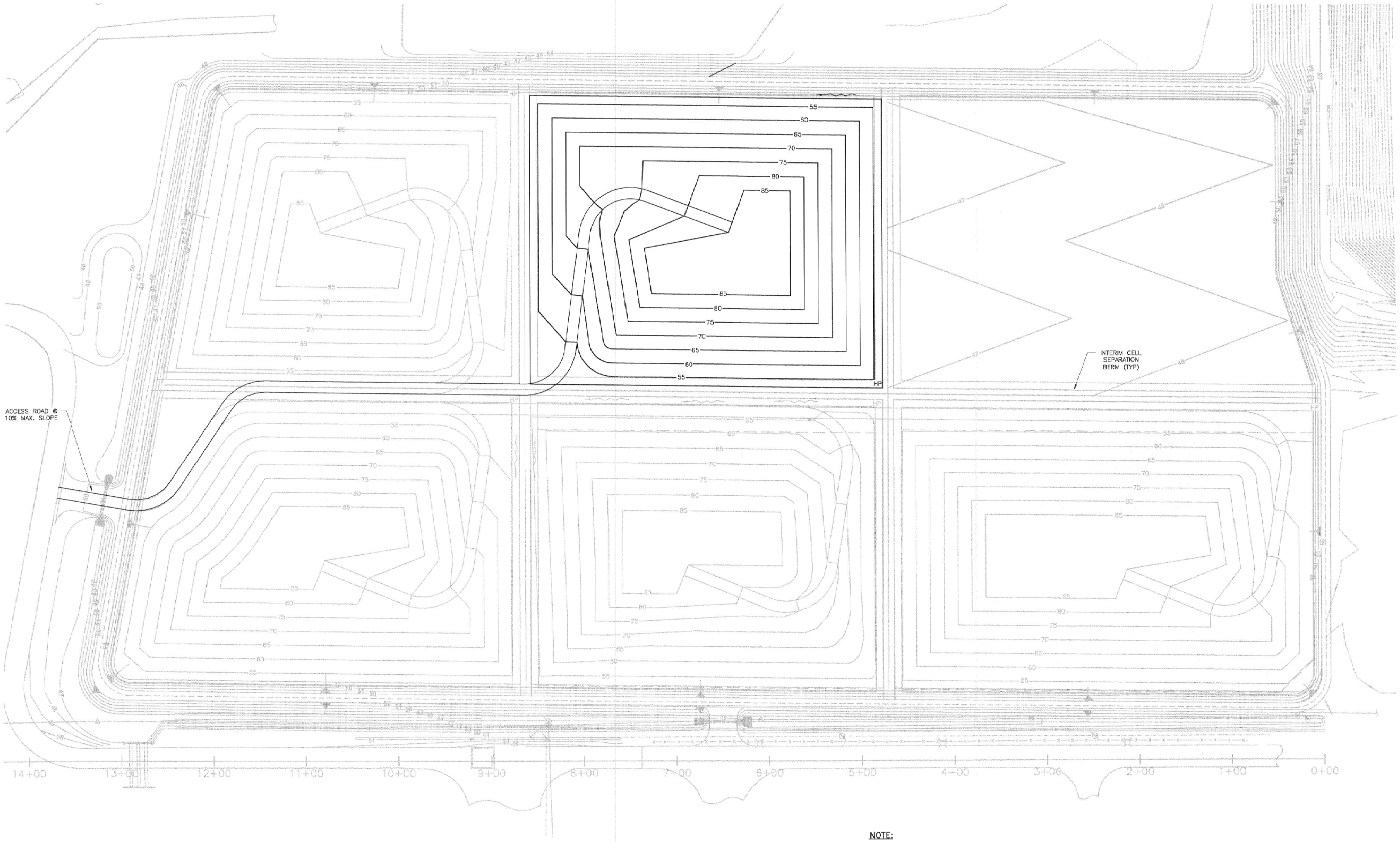
WEST PASCO COUNTY LANDFILL
EXPANSION CELL A-4

PHASE 4 PLAN FOR
CELL A-4

PROJECT NO. 6104-46136
FILE NAME: C009STPL

SHEET NO.
C-9

Xref's: |CDM_24136_CBASE_MOD|L-BASE_| Images: |
Filename: I:\FL104\48136\Permit\Civil\C009STPL.dwg Last saved by: AUST.ID Time: 7/28/2008 8:41:20 AM



NOTE:
1. TEMPORARY TARP DETAIL WILL BE AS DETAIL K, SHEET CD-3, TO BE USED AS NECESSARY.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JUL 25 2008
SOUTHWEST DISTRICT TAMPA

AAMOD S. SONAWANE
STATE OF FLORIDA
DATE:
AAMOD S. SONAWANE
P.E NO. 62526

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. SONAWANE
DRAWN BY: P. ANDUZE
SHEET CHK'D BY: J. LADNER
CROSS CHK'D BY: A. STROBRIDGE
APPROVED BY: A. SONAWANE
DATE: JULY 2308

CDM
Camp Dresser & McKee
6659 Baymeadows Road, Suite 200
Jacksonville, FL 32256
Tel: (904) 731-7109
FL COA No. EB-0000020
consulting • engineering • construction • operations

PASCO COUNTY, UTILITIES SERVICES BRANCH
PASCO COUNTY FLORIDA

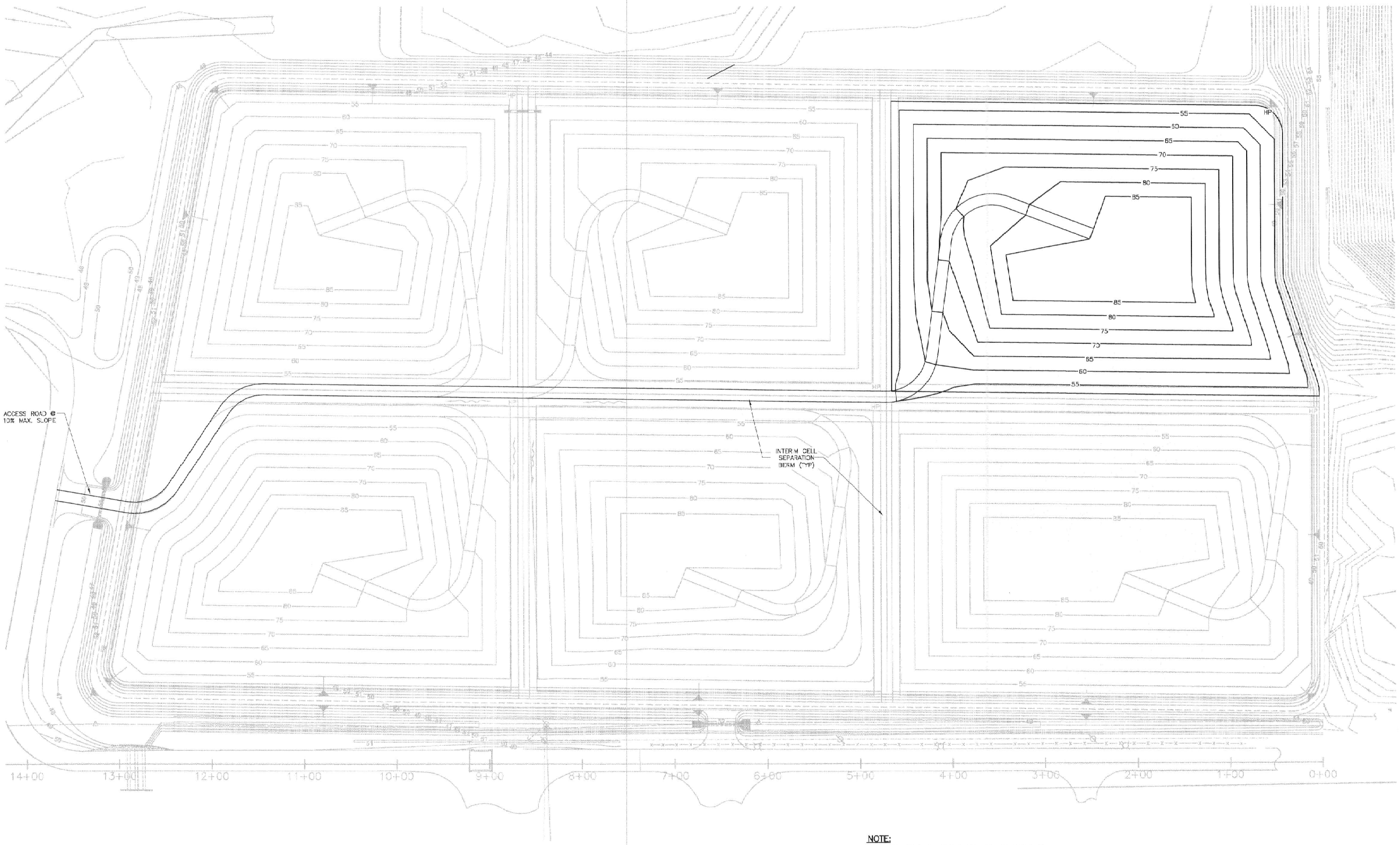
WEST PASCO COUNTY LANDFILL
EXPANSION CELL A-4

PHASE 5 PLAN FOR
CELL A-4

PROJECT NO. 6104-48136
FILE NAME: C010STPL

SHEET NO.
C-10

Xrefs: [CDM_2436_CBASE MODEL, C-BASE,] Images: []
Filename: L:\610\A\48136\Permit2\CIVIL\C010STPL.dwg Last saved by: AUSTJD Time: 7/28/2008 8:52:19 AM



NOTE:

1. TEMPORARY TARP DETAIL WILL BE AS DETAIL K, SHEET CD-3, TO BE USED AS NECESSARY.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JUL 29 2008
SOUTHWEST DISTRICT TAMPA

DATE:
AAMOD S. SONAWANE
P.E NO. 62526

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. SONAWANE
DRAWN BY: P. ANDUZE
SHEET CHKD BY: J. LADNER
CROSS CHKD BY: D. STROBRIDGE
APPROVED BY: A. SONAWANE
DATE: JULY 2008

CDM
Camp Dresser & McKee,
8659 Baypine Road, Suite 200
Jacksonville, FL 32256
Tel: (904) 731-7109
FL COA No. EB-0000020
consulting • engineering • construction • operations

PASCO COUNTY, UTILITIES SERVICES BRANCH
PASCO COUNTY FLORIDA

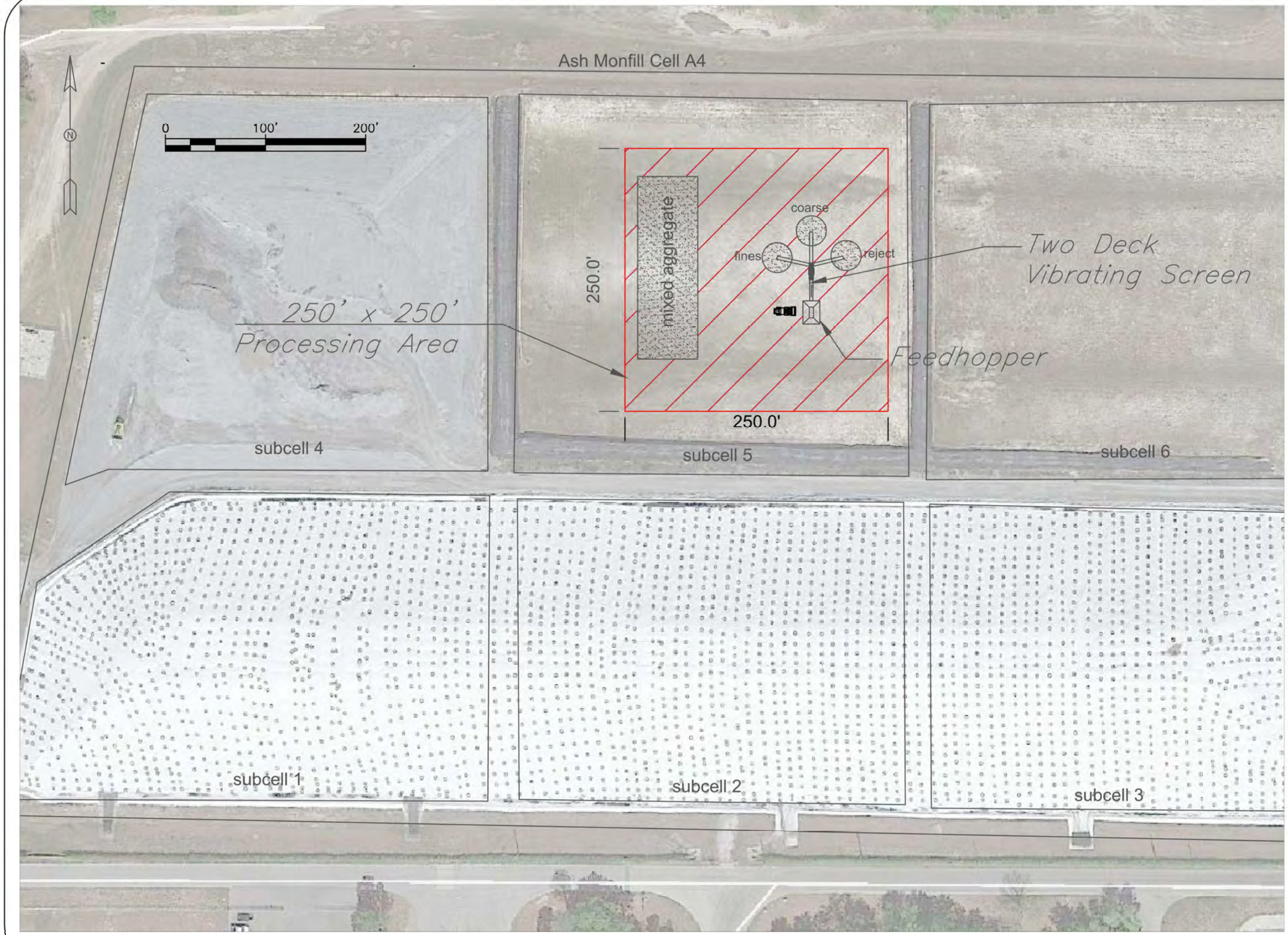
WEST PASCO COUNTY LANDFILL
EXPANSION CELL A-4

PHASE 6 PLAN FOR
CELL A-4

PROJECT NO. 6104-46136
FILE NAME: C011STPL

SHEET NO.
C-11

Xref's: [CDM_2436_CBASE_MODEL C-BASE,]
Filename: L:\2104\46136\Permit2\CIVIL\C011STPL.dwg Last saved by: AUSVD Time: 7/28/2008 8:59:07 AM



Generalized Layout
Ash Processing Equipment

JMG ENGINEERING

Project Name and Address

Pasco County Class I Landfill
14230 Hays Rd
Spring Hill, FL

Project	Sheet
Date 12/18/2018	6-1
Scale 1" = 100'	

C:\Users\jason\OD\Pasco\Update Ops Plan (TO 5-18)\Generalized Equip Config2.dwg, 12/18/2018 1:50:16 PM, AutoCAD PDF (High Quality Print).pc3

6.6 ENGINEERED AGGREGATE PROCESSING

In 2019, the Pasco County Resource Recovery Facility's Conditions of Certification (PA 87-23D) were updated to include beneficial ash reuse. These are codified in Attachment E Part 6 of the Conditions of Certification – Solid Waste Construction and Operation Requirements. This allows for the use of processed bottom ash as an engineered aggregate in certain roadway and building construction applications. A copy of the relevant section of the conditions of certification is included as **Attachment 1**. To enhance the properties of the bottom ash for use as a construction material, it is necessary to process the bottom ash to achieve a specified gradation. To accomplish this, a two-deck vibrating screen will periodically be leased and positioned on subcell 5 of A-4 as shown on **Figure 6-1**. The frequency of the screening operation is dependent upon the need for engineered aggregate destined for beneficial reuse. The screen will segregate raw bottom ash into three size fractions: > 1 1/4", 3/8" – 1 1/4", and < 3/8". The screening operation will occupy an approximate 250' x 250' area within the cell.

Raw bottom ash will be placed in the screening equipment feedhopper and processed into separate piles of the size fractions discussed above. Processing will continue until each pile is approximately 20-feet high as depicted on **Figure 6-2**. The material greater than 1 1/4" is unsuitable for beneficial reuse and will remain as waste in the ash cell. Depending upon the specified use, the two remaining piles (referred to as the coarse fraction and the fine fraction) will either be used "as-is" or blended together to achieve the desired gradation. In addition to screening of ash, the processing area in A-4 may also be utilized to remove residual ash from ferrous and non-ferrous metals *(additional information on this process is presented in Section 15).*



Figure 6-2
Segregated Aggregate Piles

7.0 MUNICIPAL SOLID WASTE LANDFILL OPERATIONS (SW-1 AND SW-2)

The Solid Waste Landfill portion of the Class I Landfill receives municipal solid waste delivered to the Complex that is unable to be processed by the Resource Recovery Facility because the Facility is either at capacity or is unavailable during maintenance periods. The Resource Recovery Facility is the primary disposal option for all of the municipal solid waste generated within the County, however, it becomes necessary from time to time to divert MSW from the RRF. The diverted waste is directed to disposal cells SW-1 and SW-2. Diversion periods typically last for up to one month before all maintenance at the Resource Recovery Facility is completed and all waste once again is processed at the Resource Recovery Facility.

Following is a detailed description of the fill sequence for the Solid Waste cells (SW-1 and SW-2)

7.1 VALLEY FILL CELLS SW-1 AND SW-2 FILL SEQUENCE

The Class I Landfill at the West Pasco Landfill and Resource Recovery Facility consists of two 10-acre cells – SW-1 and SW-2. Cell SW-1 is nearly at capacity and Cell SW-2 is the active cell. Cell SW-2 was designed with features and filled in such a manner to reduce leachate generation from stormwater. The filling of SW-1 and SW-2 to-date has been conducted as two separate cells, which resulted in a valley between the two cells. The general filling sequence will be accomplished by filling the valley between the cells and then area-filling SW-2 until the final build-out grades are achieved. Before valley filling begins, the temporary rain tarp will be removed, and protective cover soil will be placed in preparation for accepting waste. The filling sequence is as follows:

7.1.1 LIFTS 1 AND 2, VALLEY FILL, PART 1

The following liner preparations and valley filling may be progressed all at one time or in three or more phases depending upon site conditions and operational needs. Work will progress within the valley from west to east.

Liner Preparation

1. Remove temporary rain tarp and stormwater interceptor berm from side slope of SW-1 exposing geocomposite (geonet and geotextile), as shown in **Figure 7**, Stormwater Interceptor Control. Inspect geocomposite for damage. Geocomposite should not be exposed to sunlight for more than 21 days.

2. Install 2 feet of sand protective cover on the geocomposite side slope where the rain tarp has been removed. Verify sand depths on a 50-foot grid by potholing taking care not to damage the geocomposite or geomembrane.

Filling Lifts 1 and 2

3. Selected waste filling - Selected solid waste will be unloaded and spread over the two feet of protective sand cover. The waste will be inspected for large objects that shall be removed so there is no damage to the liner system. The initial selected waste lift shall be a minimum of 4 feet thick.

4. Fill Lift 1 of the Phase IV valley area between SW-1 and SW-2 from west to east. Fill the area by constructing approximately 10-foot lifts working in the general direction from south to north and west to east. Lift 1 may be progressed across the entire width of the cell or lifts may be placed in phases depending upon site conditions and operational needs. Continue the filling operation until the solid waste match waste elevation in Cell SW-2 as shown in **Figure 7-1** and **Figure 7-2**.

7.1.2 LIFTS 3 AND 4

1. Lifts 3 and 4 will be area fills over the SW-2 cell and the previous valley fill. Filling will generally begin in the northwest and will proceed from north to south in rows such that the lift is filled to the outer buildout grades. Once a row is complete, additional rows will be filled moving from west to east.

2. Lifts 3 and 4 are approximately 10 feet thick and will fill up to elevation 95 feet. Slopes will be modified to meet the final build out criterial of 3H:1V.

7.1.3 LIFT 5

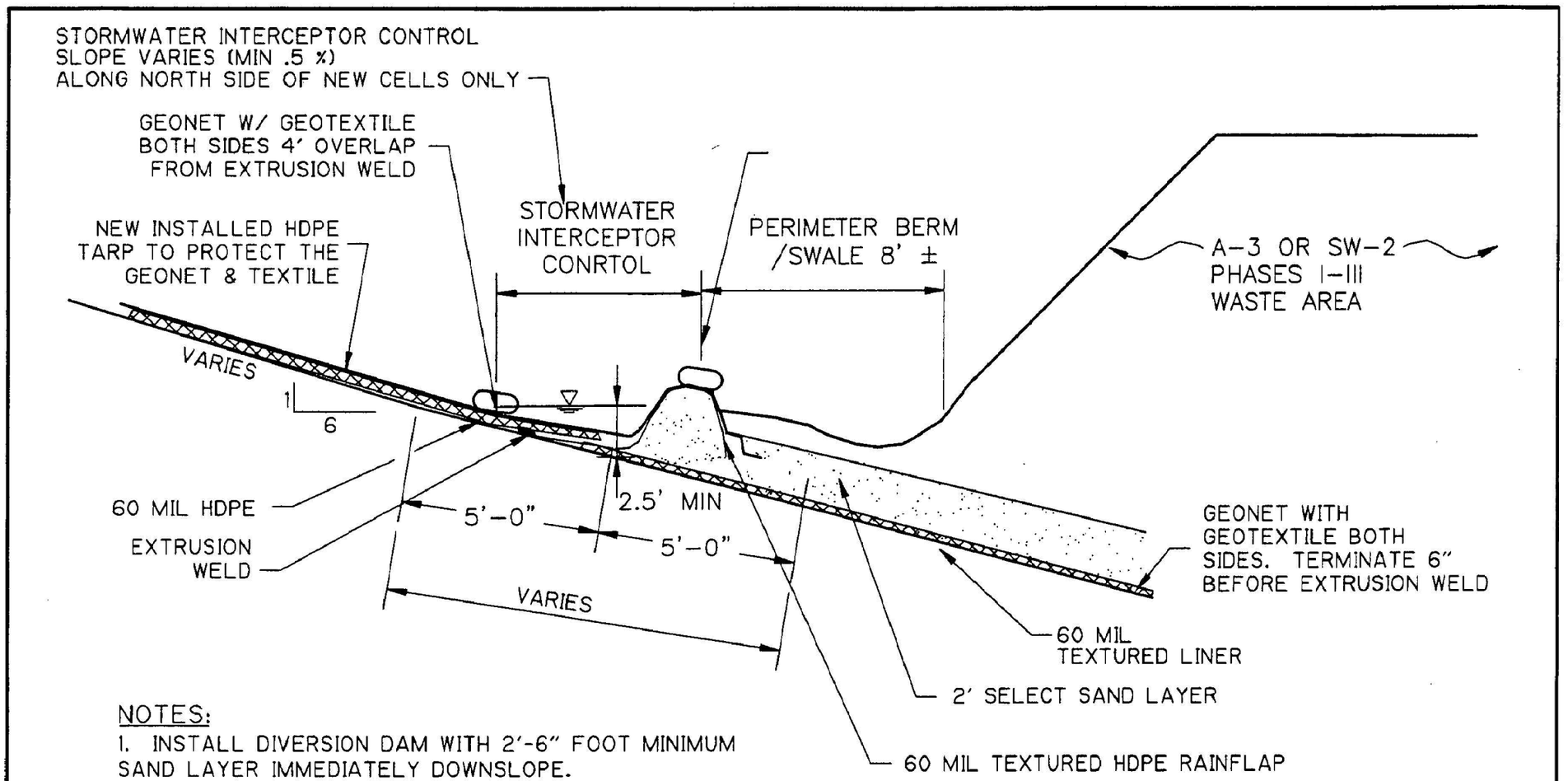
1. Lift 5 will be an area fill over the SW-1 and SW-2 cells. Lift 5 varies in thickness and may be up to 15 feet thick. Filling will generally begin in the northwest and will proceed from north to south in rows such that the lift is filled to the outer buildout grades. Once a row is complete, additional rows will be filled moving from west to east.

2. Lift 5 will be filled so that the outer slopes are at build out grades of 3H:1V.

7.1.4 LIFT 6

1. Lift 6 will be an area fill over the SW-1 and SW-2 cells. Filling will generally begin in the northwest and will proceed from north to south in rows such that the lift is filled to the outer buildout grades. Once a row is complete, additional rows will be filled moving from west to east.

2. Lift 6 is approximately 10 feet thick and will fill up to elevation 111 feet. Slopes will be modified to meet the final buildout criteria of 3H:1V.



NOTES:

1. INSTALL DIVERSION DAM WITH 2'-6" FOOT MINIMUM SAND LAYER IMMEDIATELY DOWNSLOPE.

2. PRIOR TO FILLING IN PHASES, IV, V, AND VI, THE RAINFLAP SHALL BE CUT AWAY, AND THE GEONET W/ GEOTEXTILE TO BE OVERLAPED BY 12" MIN ON TOP OF THE EXISTING GEONET W/ GEOTEXTILE.

3. CONTINUE 2' SAND LAYER ON SIDE SLOPE BEFORE FILLING WASTE/ASH

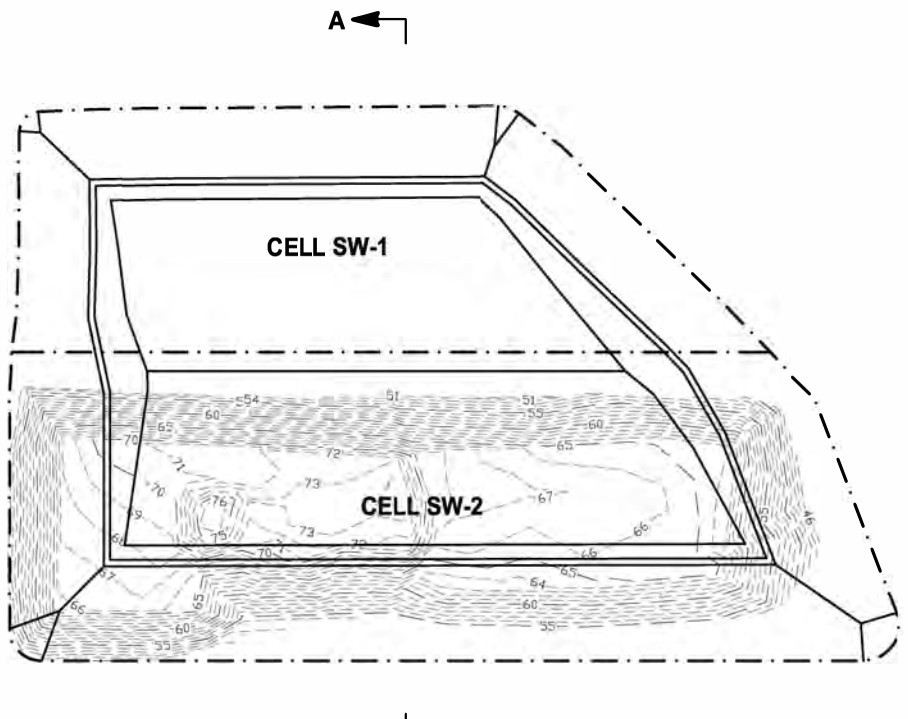
SCALE: NTS

Figure No. 7
Stormwater Interceptor Control

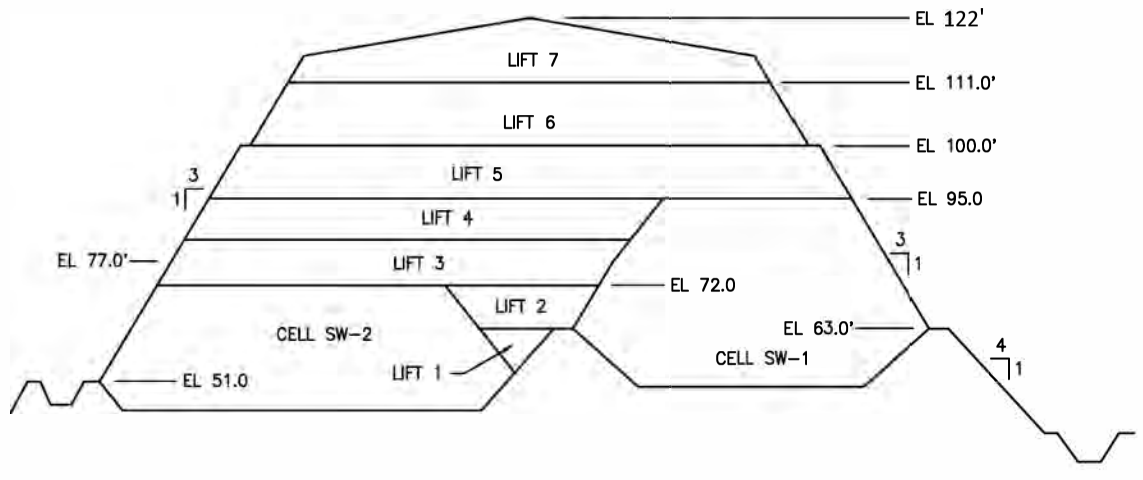
CDM

NOV - 8 2002

© Jones Edmunds 2134



PLAN
NTS

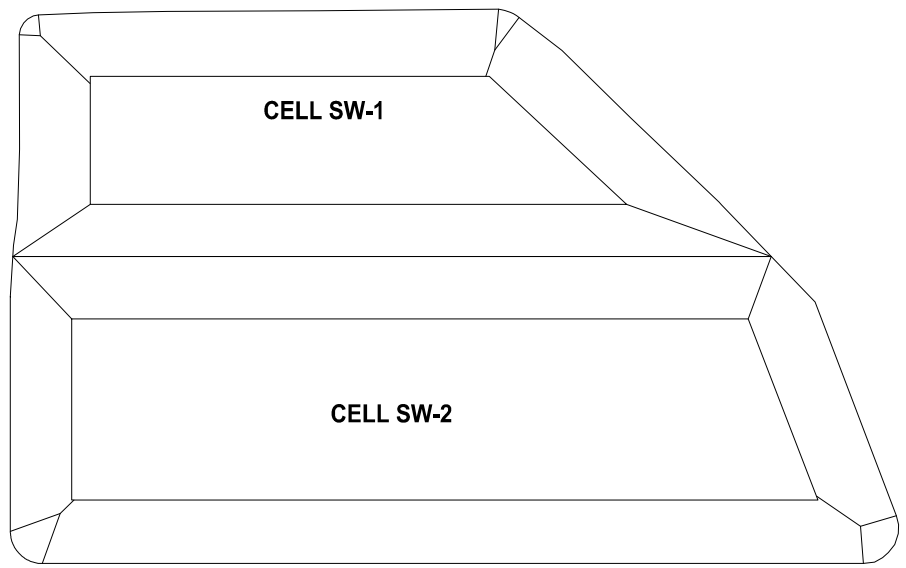


SECTION A-A
NTS

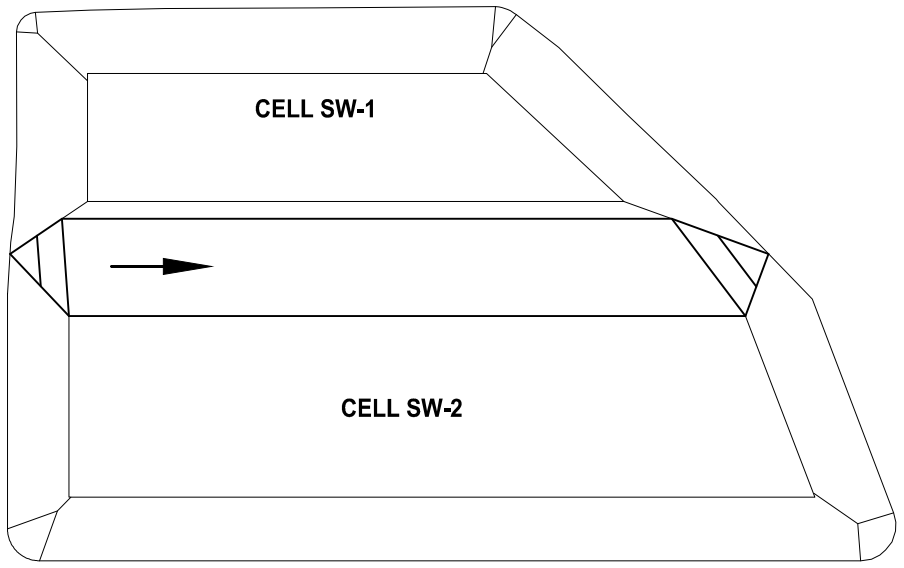
FIGURE 7-1 PHASING PLAN
WEST PASCO LANDFILL AND
RESOURCE RECOVERY FACILITY
PASCO COUNTY, FLORIDA

8/9/2019 4:27 PM BY: PUPSTILL PATH= Y:\16002-PASCOCOUNTY\PROJECTS\002-01-CLASSISLOPEMOD\CAD\FIGURES PERMIT\OPS\16002002-FIG-7-1-OPS.DWG 8/12/2019 08:42 AM BY: PAUL UPSTILL

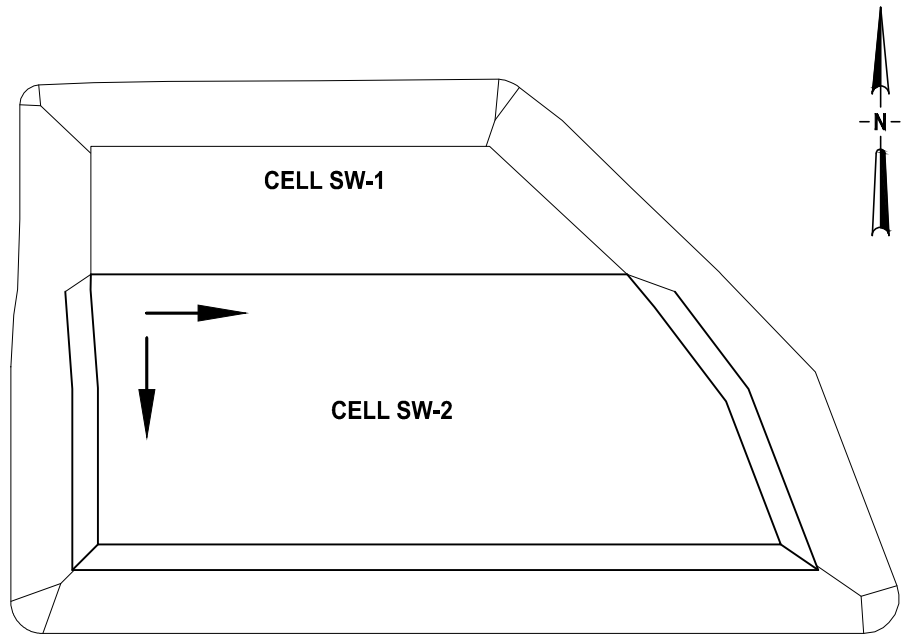
© Jones Edmunds 2234



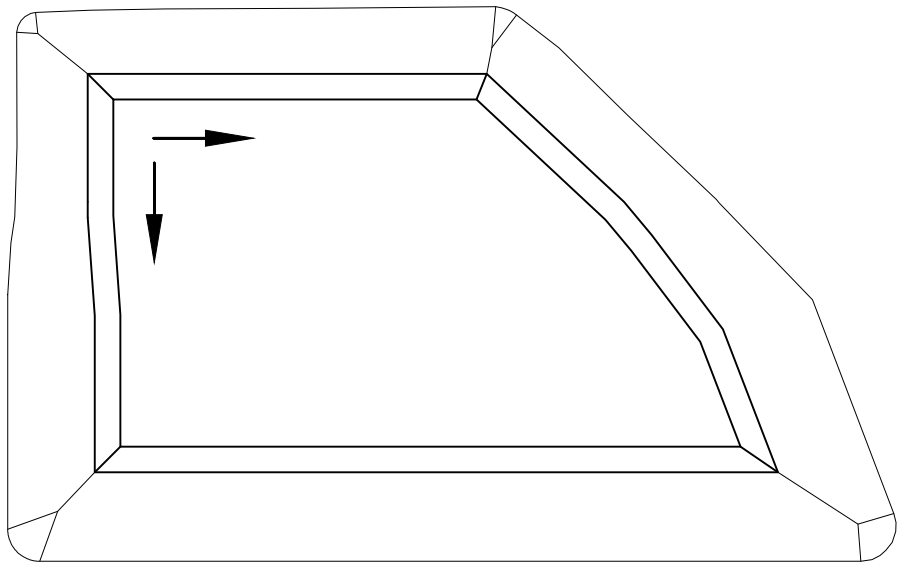
EXISTING CONDITIONS
NTS



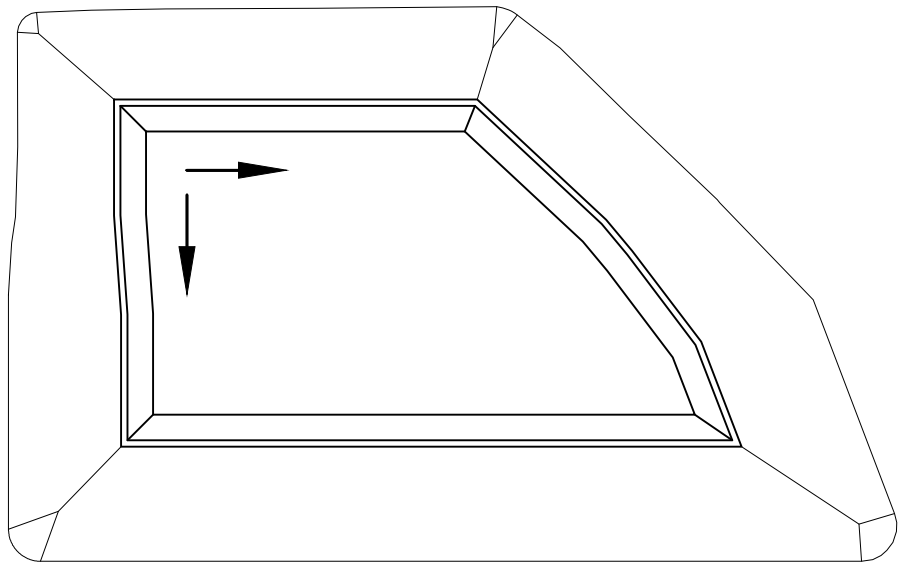
LIFTS 1 AND 2
NTS



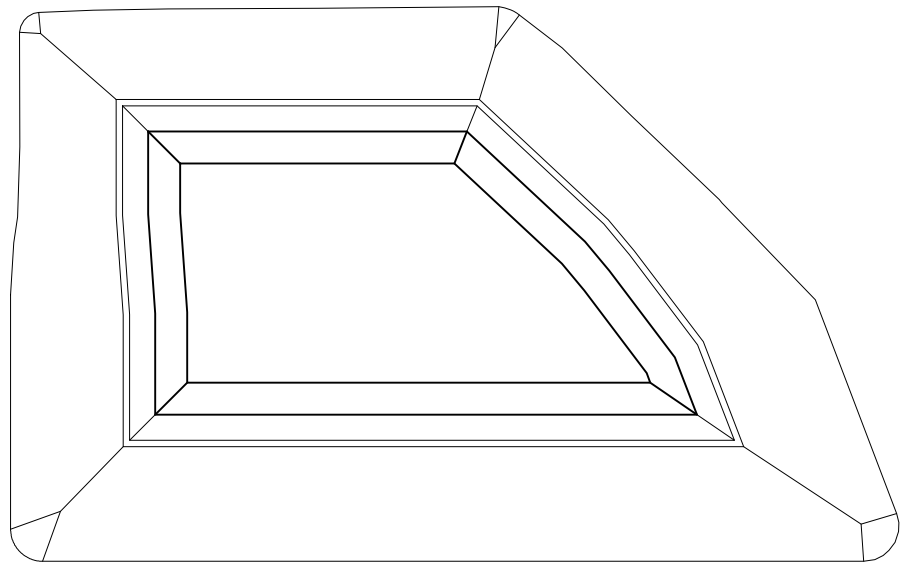
LIFTS 3 AND 4
NTS



LIFT 5
NTS



LIFT 6
NTS



LIFT 7
NTS

FIGURE 7-2
CELLS SW-1 AND SW-2 FILLING SEQUENCE
WEST PASCO LANDFILL AND
RESOURCE RECOVERY FACILITY
PASCO COUNTY, FLORIDA

8/12/2019 8:42 AM BY: PUPSTILL PATH= Y:\16002-PASCOCOUNTY\PROJECTS\002-01-CLASSIS\LOPEMOD\CAD\FIGURES PERMIT\OPS\16002002-FIG-7-2-OPS.DWG 8/13/2019 07:52 AM BY: PAUL UPSTILL

JonesEdmunds

7.1.5 LIFT 7

1. Lift 7 will be an area fill over the SW-1 and SW-2 cells. Filling will generally begin in the northwest and will proceed from north to south in rows such that the lift is filled to the outer buildout grades. Once a row is complete, additional rows will be filled moving from west to east.

2. Lift 7 is approximately 10 feet thick and will be fill up to an elevation of 118 feet to account for the 3 feet of soil cover resulting in the final elevation of 122 feet.

7.2 SOLID WASTE INSPECTION

All Operators and Spotters are trained according to the requirements of Section 5.0. Pasco County Solid Waste maintains at a minimum one trained Spotter at the active working face during waste disposal operations. The Spotter (trained) is stationed where they can inspect each shipment of waste for unauthorized/prohibited waste before being compacted. The Spotter (trained) will be located on heavy equipment spreading the waste at the working face. Although this section is written to generally address Spotters on heavy equipment, Spotters trained on the ground may be used periodically if Equipment Operators are used that are not trained Spotters. Additionally, trained Operators may also serve as Spotters. Generally, two Operators are onsite available to assist at the active working face.

A Pasco County employee will direct incoming traffic to the appropriate area at the working face. If the Equipment Operator identifies unauthorized/prohibited materials, they will do one of the following as allowed by the Florida Administrative Code:

- Move the unauthorized waste away from the active area for later removal and proper management. These wastes will be moved to temporary storage points as addressed below as soon as ground labor is available (same day).

- Stop operation and notify another person on the ground or on other equipment who will come to the active area and remove the unauthorized waste before operations are resumed.

A Spotter or Operator is inspecting waste at all times when a waste-hauling vehicle is unloading. Waste materials such as white goods, and tires are pulled from the working face and placed in pick-up trucks or to the side away from traffic if the pickup truck is not close to the Spotter. To ensure the health and safety of the spotters, if tires are observed in the waste while the waste is being pushed, the tires will be staged at the end of the slope and picked up at the end of the day. Other landfill staff have been trained to be aware of materials that are prohibited from disposal in a Class I Landfill and to help identify and remove these materials as required.

If suspicious wastes are identified, the waste load is cordoned off and the Landfill Operations Supervisor is contacted. They will examine the suspicious waste and determine whether to accept or reject the load. Loads are rejected if they contain hazardous waste or prohibited material that cannot feasibly be separated from the rest of the load or when

separation would cause possible contamination such as the presence of liquids or powders that cannot be removed from the landfill once the load is dumped. If the waste material is determined to be an unacceptable waste, the hauler is contacted and asked to remove the waste themselves from the waste stream. All incidents of attempted unauthorized waste disposal will be documented and maintained in the Administration Office.

Scavenging and salvaging by the employees or the public are strictly forbidden at the landfill for the safety of everyone at the landfill. Employees have been informed of this prohibition.

7.3 HAULER QUEUING

The Pasco County employees (who may be trained Spotters) at each working area shall control the number of vehicles allowed at that working face to afford comfortable maneuverability. Additional vehicles will be held at a distance from the working face to allow existing vehicles sufficient room to maneuver and unload.

Unloading vehicles should be spaced adequately to allow the crews sufficient space to work safely. For their own safety, vehicle crews are not permitted to wander from their vehicle for any reason. As vehicles leave the working face, the next vehicle is directed to a vacant unloading area. Pasco County employees move traffic into and out of the working face as quickly as possible while maintaining safe working conditions.

The trained Landfill Equipment Operators or Spotters inspect all loads discharged from the unloading vehicles, remove all unacceptable wastes, and spread the waste as soon as the vehicle moves. Another vehicle is permitted to unload its waste load in an area only after the previous waste load has been inspected, the prohibited wastes have been removed, and the load has been moved to the working face for compaction.

7.4 WASTE PLACEMENT AND COMPACTION

The active face width will be kept as small as practical to accommodate waste delivery vehicles. The actual working face width may vary depending on the daily vehicle traffic volume. The maximum width of the active face will be maintained at approximately 250 feet. Landfill Management may consider expanding the size of the working face if the backup of waste vehicles become too large.

For health and safety reasons and due to weather, fill-sequencing two working faces may be necessary to accommodate traffic in some situations. This second working face will be bermed and use the same traffic area. This area will be in the immediate vicinity of the Primary Active Area. Given the limited use of the Solid Waste cells, the use of two working faces is unlikely.

Solid waste shall be formed into horizontal lifts to construct cells. The working face of the cell and side grades above land surface shall be at a slope no greater than 3 feet horizontal to 1 foot vertical rise (3H:1V). Normal lift depths should not exceed 20 feet of compacted

solid waste. However, during initial filling of the bottom lift of waste or when completing the last lifts in a phase, larger depths may be necessary.

7.5 Cover Materials and Methods

All soil used for daily, intermediate, and final cover over the required impervious cover or synthetic liner required for closure consists of material excavated from the landfill property, other County-owned lands, or purchased from offsite sources.

7.5.1 Initial Daily Cover

At the end of each working day, a compacted 6-inch layer of soil (daily cover) shall be placed over the working face to control odor, litter, fires, and vector control. Pasco County will use Alternative Daily Cover (ADC) in place of soil for daily cover, such as plastic tarps, Posi-Shell or other FDEP-approved materials, to extend the life of onsite soil sources. This includes a 50% soil and mulch mixture. Posi-Shell or mulch may also be utilized to stabilize erosion of covered side slopes as necessary.

Daily cover material is applied in a manner that prevents wasting material or exposing wastes. In areas where the initial waste layer is being installed or the lift is near the side slope, daily cover shall be applied from the top down the face of the fill cell. Inner slopes or plateaus are covered from the top or bottom depending on working conditions.

Throughout the day, cover soil and mulch may be delivered to the active area and spread when possible to reduce the area needing cover at the end of the working day. Additional landfill equipment is used to transport cover soil to the working face area. A dozer is used to spread the cover soil and compact it over the working face. Pasco County maintains excavating equipment and off-road dump trucks to perform this work.

7.5.2 Intermediate Cover/Temporary Cover

Intermediate cover consisting of 12 inches of soil will be placed on areas that are not expected to receive additional wastes within 180 days. This intermediate cover is in addition to the 6-inch initial cover required. When an ADC is used in lieu of the 6-inch initial soil cover, the intermediate cover shall be 18 inches thick. Before additional wastes are placed in areas previously covered with intermediate cover, the intermediate cover will be removed and stockpiled adjacent to the active face to use as daily cover.

7.5.3 Final Cover

Cell closure will begin immediately after final receipt of waste, when all grades have reached their final elevations. Final cover and seeding or planting of vegetative cover will be fully described in a separate Application for Landfill Closure Permit.

7.6 Special Waste Recovery

Special wastes prohibited from disposal in the Class I Landfill are addressed in Section 4.2. Small amounts of special and hazardous wastes may be contained within a load of refuse

unloaded from a vehicle. While spreading the wastes onto the working face from a discharged load, the Spotters/Equipment Operators will be looking for special and hazardous wastes, which will be removed from the discharged load before being compacted into the landfilled waste. These prohibited waste materials will be placed to the side of the working face, in pick-up trucks, or 20-yard bins that are away from vehicle traffic. The materials collected in the bins and pick-up trucks will be removed from the site daily. Spotters/Equipment Operators will remove items such as white goods and tires more frequently throughout the day if a stockpile accumulates. These materials are taken to the white goods and tire storage areas within the Solid Waste Complex.

Operators are to be aware of containers that could contain prohibited hazardous wastes. These containers include the following:

- 55-gallon drums.
- 5-gallon chemical drums or paint containers.
- Marked medical wastes.
- Small containers of paints or pesticides and other HHWs.

As discussed in Section 4.2, these non-allowed wastes are isolated and the Landfill Operations Supervisor will be contacted for closer inspection. The vehicle will be detained until the material is identified for proper disposal. If the material is identified as a hazardous waste, it is loaded back into the hauler vehicle for proper disposal, if practical. Otherwise, the area should be cordoned off to prevent other loads from being dumped in the vicinity. The Solid Waste Director will contact a contracted hazardous waste hauler. The identified hazardous waste will be loaded onto this vehicle as soon as it arrives at the landfill. All identified hazardous wastes must be removed the same day they are identified or stored in the Household Hazardous Waste Area if transportation cannot occur until the next working day.

7.7 Litter Control

Litter fences will typically be used near the active cells and working face to collect and prevent the spread of litter. Due to the shifting waste operations, fences may periodically not be in place. Litter that escapes the landfill working area shall be picked up by the end of the working day but no later than the next working day. The Landfill Operations Manager or Landfill Construction/Lead Operator inspects the normal traffic areas surrounding SW-2 daily when the cell is in use. The operational boundaries of the entire Solid Waste Complex are inspected weekly.

Pasco County staff will collect litter continually on windy days. Temporary labor may be used as needed to support County staff for litter control if the volume of litter becomes too much for existing staff. The use of trustees and community service workers is also available as needed.

All open vehicles delivering waste to the Pasco County Solid Waste Complex must have a tarp or some type of enclosure to prevent litter on the site as well as all roads within the

County, as required by Florida law. All open-top vehicles entering the Complex without a tarp or enclosure will be informed by the Scalehouse Attendant that a tarp or enclosure is required to transport solid waste within the County.

8.0 SPECIAL WASTE MANAGEMENT

8.1 HOUSEHOLD HAZARDOUS WASTE

Household hazardous waste (HHW) is accepted for disposal at the HHWCF north of the Class III Landfill (see **Figure 1-1**). This facility is operated for Pasco County residents Monday through Saturday, 7:00 A.M. to 5:00 P.M.

The personnel at the facility manage a diverse range of HHWs according to the characteristics of each waste. All personnel at the HHW are 40-hour HAZWOPER-certified and receive 8-hour refresher courses annually. The facility is capable of accepting and managing nearly any waste produced in a household including oils, paints, solvents, fertilizers, pesticides, herbicides, fluorescent tubes, oxidizers, and propane. However, explosive, radioactive, and bio-hazardous materials like hypodermic needles, lancets, and wound dressings are not accepted for disposal at the HHW.

At the HHW, personnel only accept materials for disposal from households within Pasco County. Wastes from Conditionally Exempt Small Quantity Generators (CESQGs) may be accepted under specific circumstances, such as a special business waste collection event. However, if a customer has an especially large amount of waste, if they have numerous containers of a particular brand of product, or if the waste they have brought for disposal is typically produced by a business, the customer will be asked additional questions. These questions may include, but are not limited to, what the product was used for.

Once collected, wastes are disposed of using a hazardous waste transporter and delivery to treatment, storage, and disposal facilities (TSDFs) operating under a permit issued pursuant to Subtitle C of the Federal Resource Conservation and Recovery Act (RCRA) and issued by the U.S. Environmental Protection Agency (USEPA) or an authorized state.

All packaged materials are shipped by a licensed hazardous waste transporter every 60 days to a fully permitted TSDF as defined in 40 CFR 264. No waste remains at the HHWCF for more than 120 days.

8.2 UNKNOWN AND UNMARKED WASTES

If containers accepted for disposal are unmarked, have illegible labels, or have contents that do not resemble their labels, the customer is questioned about the purchase and use of the material to determine its waste characteristics (i.e., flammability, reactivity [oxidizers], toxicity, or corrosivity). Many household products have uniquely shaped containers to help determine their use and waste characteristic. Materials are further grouped according to physical appearance (e.g., solid, liquid, color, viscosity etc.). The unknown material is then stored in chemical storage lockers with blast-proof doors. Ultimately, Pasco County uses their Hazardous Waste Contractor to identify waste types before bulking or lab packing the material for disposal.

Liquids suspected of being acidic or basic are tested using pH paper. Smelling a container to determine its contents is forbidden at the HHW. However, most poisons, petroleum products, and some cleaners have strong, distinct aromas that are detectable simply by opening their container. Any HHWs that are found to be potentially reactive by these tests are stored separately from antagonistic chemicals (e.g., acids are stored in the locker marked "Corrosive"). The caustic materials are stored in the "Corrosive" locker. Flammable liquids must be kept away from oxidizers, so they are stored in the "Flammable" locker while the oxidizers are stored in the "Corrosive" locker. Regardless of the results of these tests, all collected materials are stored at the HHW until they have been prepared for reuse or disposal. Any material determined to be reactive is stored in a locker with fire suppression and blast-proof doors. If material in unlabeled drums can be identified, it will be bulked with compatible material.

8.3 Used Oil

Used motor oils, hydraulic fluids, transmission fluids, and similar petroleum lubricants are consolidated into 55-gallon drums. The Used Oil Contractor is responsible for testing for the halogen content in these materials when they are collected. The drums are removed by a contracted Used Oil Contractor. Used oil is not permitted to be disposed of in the Class I Landfill.

8.4 Latex Paints

The HHW uses a wire rack to store 1- and 5-gallon paint cans. These racks are typically capable of holding about 60 cans of paint. Approximately two-thirds of the paint that arrives at the HHW is latex-based. Useable latex paint is opened and consolidated into 5-gallon buckets. This paint is given to citizens of Pasco County.

Paint that is not suitable for give-away is combusted at the Resource Recovery Facility.

8.5 Oil Based Paints

The HHW uses wire racks to store 1- and 5-gallon paint cans. These racks are typically capable of holding about 60 cans of paint. Approximately one-third of the paint that arrives at the HHWCF is oil-based. Useable oil-based paint is consolidated into 5-gallon buckets. This paint is given to citizens of Pasco County. Paint that is unusable is bulked into 55-gallon drums for disposal. A hazardous waste transporter moves the filled drums to a fully permitted TSDF for proper disposal.

8.6 Poisons

Herbicides and pesticides are the largest group of poisons that are accepted at the HHW. They are prepared as "combination packages" or "lab packs" for disposal by the Hazardous Waste Contractor. Small individual containers are placed with similar wastes into a larger container (5-gallon bucket or 55-gallon drum) with Vermiculite to provide shock absorption and hold any liquids that may escape during shipment. The material is moved by a hazardous waste transporter to a fully permitted TSDF for proper disposal. A few specialized

wastes such as pentachlorophenol and arsenic compounds are packed by and managed separately by the Hazardous Waste Contractor. These specialized wastes are shipped by a hazardous waste transporter to a fully permitted TSDF in the same way that the lab packs are. However, they are subject to different treatment standards.

8.7 Lead Acid Batteries

Lead-acid batteries are stacked on wooden pallets. The stacked batteries are then shrink wrapped onto the pallets and stored on a large containment pallet inside the HHW. The containment pallet has enough room to store three wooden pallets and have room for other products. The wooden pallets are picked up by a Lead-Acid Battery Contractor for recycling.

8.8 Electronics Recycling

Electronics waste, including televisions, VCRs, computer towers, monitors, digital cameras, and PDAs are collected and stored at the HHW for recycling. Electronics wastes are stored and managed in a manner that prevents breakage. The e-waste is stored in enclosed roll-off containers and transported to an electronics recycler.

8.9 Contaminated Soils

Pasco County will accept minor amounts of contaminated soils for disposal in SW-2. Soil that has been contaminated with petroleum products or any other materials that are not hazardous wastes may be disposed of in permitted Class I landfills. Petroleum-contaminated soil that has been treated pursuant to Chapter 62-713, FAC may be disposed of at permitted disposal facilities and may, if it meets the criteria of Rules 62-701.200 (53) and (55), FAC, be used as initial or intermediate cover material at solid waste disposal facilities. Contaminated soil that has the potential to leach constituents in excess of FDEP groundwater standards or criteria may be used only at Class I landfills and only in those areas of the landfill where runoff or infiltration is captured by the leachate collection system.

8.10 Biological Wastes

Bodies of captive wildlife, as well as bodies of domestic animals that have not died due to disease, may be disposed of in the SW cells of the Class I Landfill.

Disposal of bodies of domestic animals, after death due to natural or accidental causes or euthanasia, shall be accomplished according to Section 823.041(1), FS. This statute requires the disposal of the bodies of domestic animals by burning or burying at least 2 feet below the ground surface. This provision does not prohibit the disposal of such animals in Class I landfills.

Disposal of dead poultry and hatchery residue shall be accomplished according to Section 583.181(2), FS, which provides for disposal of dead poultry and hatchery residue by every poultry producer, egg producer, and poultry hatchery in Florida. The statute includes disposal of the dead poultry and hatchery residue in a sanitary landfill as an acceptable

method of disposal. Furthermore, the transporter of the poultry or hatchery residue will transport the material in containers that are sufficiently sealed to prevent spillage.

Treated biomedical waste (i.e. autoclaved waste) is not accepted at the Class I landfill but is accepted at the Resource Recovery Facility. Biomedical waste that has been treated may be disposed of as solid waste that is not biomedical. Such treated waste must be in containers clearly labeled with the phrase "Treated Biomedical Waste." The local governments that are responsible for solid waste collection and disposal shall be notified that treated biomedical waste will be disposed of in their facility before such disposal. All transport vehicles transporting treated biomedical waste to a solid waste facility for disposal shall be fully enclosed and secured when unattended. Treated biomedical waste shall be disposed of only at permitted Class I landfills or incinerators used to combust solid waste.

8.11 Tires

Segregated tires that are brought to the Facility are stored and processed in a Waste Tire Processing Area just north of the Class III Landfill. A chipping contractor is brought in approximately every six months to process the tires, which are then hauled to a permitted off-site disposal facility.

8.12 White Goods

White goods are removed from the site at least every 3 months. White goods containing chlorofluorocarbons (CFCs, such as Freon) are stored upright and managed carefully so that CFCs are not discharged to the atmosphere. White goods with the refrigerant removed are marked as such. Because Freon is extracted from all units, the compressors are not removed. Other scrap metals, such as lawnmowers, are processed (by removing tires, oil, and gasoline, as needed) and compacted with the white goods into 40-cubic-yard containers.

8.13 Mercury-containing Lamps and Devices

Fluorescent and Mercury-Containing Lamps are collected and packaged into cardboard boxes designed to prevent breakage. These boxes are stacked into wooden pallets, secured with shrink-wrap for storage at the HHW. Mercury-Containing Devices are collected and deposited into air-tight 5-gallon HDPE containers to prevent breakage and the release of mercury vapors and stored inside the HHW.

Both Mercury-Containing Lamps and Mercury-Containing Devices containing elemental mercury are picked up for recycling and/or disposal by a Universal Waste Contractor fully permitted to transport and dispose of universal wastes.

9.0 LEACHATE MANAGEMENT

As defined in Rule 62-701.200 (59), FAC, leachate is liquid that has passed through or emerged from solid waste and may contain dissolved, suspended, or mixed materials. Leachate must be contained and kept separate from any groundwater or surface waters. This section will provide Pasco County Solid Waste employees with a general understanding of the requirements for managing the leachate generated from the Class I (Ash and Solid Waste) Landfill operations. **Figure 9-1** identifies all locations for the leachate collection system. Rule 62-701.500(8) FAC establishes requirements for leachate management and provides the criteria for this section.

9.1 LEACHATE REDUCTION

Leachate is generated from rainfall that is absorbed into the landfill and water within the waste at the time of disposal. The leachate is collected by the Class I Landfill bottom liner system and treated as wastewater. One of the goals of the landfill design and daily operation is to minimize leachate production from the landfill to reduce the cost associated with leachate treatment and to minimize the potential environmental contamination risks. The methods described in this section can be used separately or simultaneously to achieve leachate reduction.

9.1.1 RAIN COVERS

In addition to the leachate/stormwater separation intrinsic to the design of the A-4 and SW-2 cells, Pasco County may use rain covers (or tarpaulins) to minimize leachate generation. Areas of the landfill that will not be utilized for at least 180 days may be covered with a 20-mil geomembrane and anchored using tires. Stormwater that collects on the rain cover in areas utilizing this technique is managed as non-contact stormwater, which discharges to the perimeter stormwater ditch.

9.1.2 STABILIZED SIDESLOPES

As filling progresses, side slopes that will not receive solid waste for 2 months or more will be stabilized with sod, seed and mulch, or rain covers. Exterior side slopes that are up to design grade and interior side slopes that will not be filled again for longer than 180 days will be covered with either intermediate cover and sod or a rain cover.

9.1.3 CLOSING

Pasco County Solid Waste plans to achieve an effective runoff factor of at least 30% and will work toward a goal of 50% or more upon final closure in the Class I Landfill. The methods described above represent the present plan; however, as operations continue, they may be modified if alternate methods prove more efficient or allow a higher percentage of stormwater runoff resulting in greater leachate minimization.



Note: THIS FIGURE IS NOT TO SCALE AND THE LOCATIONS OF SOME ITEMS HAVE BEEN EXAGGERATED FOR CLARITY

JMG ENGINEERING INC

LEACHATE COLLECTION SYSTEM
WEST PASCO CLASS I LANDFILL

FIGURE
9-1

9.2 LEACHATE COLLECTION

The leachate collection system encompasses the Ash Monofill (Cells A-1, A-2, A-3, and A-4) and the Solid Waste Landfill (Cells SW-1 and SW-2). Monitoring the collection, pumping and storage components occurs daily, Monday through Friday. All of these phases have been included in this Operation Plan.

9.2.1 ASH MONOFILL CELL A-1

Cell A-1 of the Ash Monofill is the original cell of the landfill constructed in 1990. It is approximately 10 acres in size and received ash between approximately 1990 and 1995. The cell was constructed with a double liner system, with intrinsic leachate removal systems for both liners (primary and secondary).

Leachate in the cell is collected by perforated laterals running north-south which drain to a 12-inch PVC leachate header pipe that runs (east to west) on the southern perimeter of the cell. The leachate collection pipes (primary and secondary) penetrate the liner(s) and discharges into one of two leachate manholes on the east side of the cell, one for the primary leachate collection system and one for the secondary leachate collection system. Leachate from the secondary liner is allowed to accumulate in the metering manhole and is periodically pumped (and metered) into the primary manhole. Leachate drains from the metering manholes by gravity to a pump station adjacent to the metering manholes. From the pump station, leachate is pumped to a 2,000,000-gallon concrete storage tank for eventual disposal off-site.

9.2.2 ASH MONOFILL CELL A-2

Cell A-2 was constructed circa 1995 and is of a similar configuration to that of Cell A-1. The leachate collection system for Cell A-2 was modified circa 2000 from its original design by converting the leachate evacuation method from a pumped principle to a gravity principle. The original design and construction of the cell directed leachate from the primary liner system and the secondary liner system to headers running east-west along the northern perimeter of the cell. The headers discharged into a sump in the northeast corner of the cell, and the accumulated leachate was pumped through a side-slope riser pipe to the pump station located adjacent to cell A-1. In 2000, the side slope riser pumping system was abandoned, and new gravity pipes with liner penetrations (one for leachate collected by the primary liner and one for leachate collected by the secondary liner) were installed and directed to new leachate metering manholes. As with Cell A-1, leachate flows by gravity from the metering manholes to the master pump station adjacent to A-1. From the pump station, leachate is combined with the leachate from Cell A-1 and pumped to a 2,000,000-concrete storage tank for eventual disposal off-site.

9.2.3 ASH MONOFILL CELL A-3

Cell A-3 was constructed circa 2003 and is of a similar configuration to cell A-1. It is approximately 10 acres in size and received ash between approximately 2003 and 2008.

The cell was constructed with a double liner system, with intrinsic leachate removal systems for both liners (primary and secondary).

Leachate in the cell is collected by perforated 8-inch PVC leachate header pipes that run (east to west) on the interior of the cell. The leachate collection pipes (primary and secondary) penetrate the liner(s) and discharges into one of two leachate manholes on the east side of the cell, one for the primary leachate collection system and one for the secondary leachate collection system. Leachate from the secondary liner is allowed to accumulate in the metering manhole and is periodically pumped (and metered) into the primary manhole. Leachate drains from the metering manholes by gravity to a pump station adjacent to cell A-1. From the pump station, leachate is combined with the leachate from Cells A-1 and A-2 and pumped to a 2,000,000-gallon concrete storage tank for eventual disposal off-site.

9.2.4 Ash Monofill Cell A-4

Cell A-4 was constructed circa 2008 and currently serves as the active ash disposal cell for the landfill. It is approximately 20 acres in size and has been receiving ash since 2009. The cell was constructed with a double liner system, with intrinsic leachate removal systems for both liners (primary and secondary).

Leachate in the cell is collected by perforated laterals running north-south which drain to four 12-inch PVC leachate header pipes that run (east to west) on in the interior of the cell. The leachate collection pipes (primary and secondary) penetrate the liner(s) and discharges into one of two leachate holding tanks on the west side of the cell, one for the primary leachate collection system and one for the secondary leachate collection system. Leachate drains from the holding tanks by gravity to a pump station adjacent to the holding tanks. From the pump station, leachate is pumped to a 2,000,000-gallon concrete storage tank for eventual disposal off-site.

9.2.5 Solid Waste Cell SW-1

Cell SW-1 of the Solid Waste Landfill is the original cell of the landfill constructed in 1990. It is approximately 10 acres in size and received waste between approximately 1990 and 1998. The cell was constructed with a double liner system, with intrinsic leachate removal systems for both liners (primary and secondary).

Leachate in the cell is collected by perforated laterals running north-south which drain to an 8-inch PVC leachate header pipe that runs (east to west) on the southern perimeter of the cell. The leachate collection pipes (primary and secondary) penetrate the liner(s) and discharges into one of two leachate manholes on the east side of the cell, one for the primary leachate collection system and one for the secondary leachate collection system. Leachate from the secondary liner is allowed to accumulate in the metering manhole and is periodically pumped (and metered) into the primary manhole. Leachate drains from the metering manholes by gravity to a pump station adjacent to the metering manholes. From the pump station, leachate is pumped directly to the adjacent Shady Hills Wastewater Treatment Facility.

9.2.6 Solid Waste Cell SW-2

Cell SW-2 of the Solid Waste Landfill was constructed circa 2001. It is approximately 10 acres in size and has been receiving waste since 2002. The cell was constructed with a double liner system, with intrinsic leachate removal systems for both liners (primary and secondary).

Leachate in the cell is collected by perforated laterals running north-south which drain to an 8-inch PVC leachate header pipe that runs (east to west) on the southern perimeter of the cell. The leachate collection pipes (primary and secondary) penetrate the liner(s) and discharges into one of two leachate manholes on the east side of the cell, one for the primary leachate collection system and one for the secondary leachate collection system. Leachate from the secondary liner is allowed to accumulate in the metering manhole and is periodically pumped (and metered) into the primary manhole. Leachate drains from the metering manholes by gravity to a pump station adjacent to the metering manholes. From the pump station, leachate is pumped directly to the adjacent Shady Hills Wastewater Treatment Facility.

9.3 Ash Leachate Storage Tank

As described above, leachate that is collected in the ash disposal cells is pumped to a 2-million gallon concrete storage tank located to the south of cell A-3. From the pump station, the leachate flows through a 6” PVC forcemain, through a totalizing meter, and into the storage tank. The tank has a 100-foot interior diameter and is 34 feet tall (excluding the domed roof). Each foot of depth in the tank holds approximately 60,000 gallons.

9.3.1 Tank Inspections

Pasco County staff visually inspect the exterior of the tank weekly. The inspector will look for any structural damage to the tank, damage to the coating system, loose connections, visible leaks, and maintenance deficiencies. The inspector also looks for any structural damage to the secondary containment system (described below) and visible leaks.

The interior of the tank is inspected at least once every 3 years. During an interior inspection, the inspector looks for any damage to the interior two-part epoxy coating system, structural damage or cracking of the tank, and/or visible leaks.

If inspections reveal any deficiencies with the interior and/or exterior of the tanks that could result in the system failing to contain leachate, Pasco County will take immediate action to remediate the situation. The tank manufacturer (Crom Corporation), coordinating with Pasco County, will handle failures or damage to the tank. Pasco County will immediately notify the manufacturer of the situation; the tank manufacturer will perform a detailed damage assessment report and remediation of the tank. FDEP will be immediately notified in writing by Pasco County of the situation and of the proposed corrective action for significant deficiencies that require more than 48 hours to repair.

9.3.2 Secondary Containment System

The secondary containment design includes a bermed area lined with 60-mil HDPE geomembrane. This area is designed to provide 2,200,000 gallons of storage capacity or 110 percent of the tank volume. Two feet of freeboard is provided at the maximum design capacity. The containment area liner material is high density polyethylene (HDPE), which is compatible with the leachate. The liner is continuous under the storage tank slab, separated by a soil drainage layer for protection of the liner.

The secondary containment area is designed with a 12-inch drain line which discharges to a stormwater swale leading to stormwater retention pond No. 1. The 12-inch discharge line is designed to discharge up to 5.4 cubic feet per second (cfs). This rate is equal to the accumulation rate of a 25-year/24-hour storm event at the point in time when 10 percent of the secondary containment volume has accumulated.

A valve is also provided on the gravity discharge line for the secondary containment system. The valve will normally remain closed. Within 24 hours of any significant rainfall accumulation, Stormwater collected in secondary containment will be visually inspected to determine if the stormwater has been contaminated. Signs of contamination include the following:

- An oily sheen on the surface of the liquid.
- A dark or nontransparent appearance of the liquid.
- An excess of suspended solids in the liquid.
- An odor coming from the liquid.

If no contamination is noted, the valve will be opened to discharge the accumulated stormwater. Once the stormwater is drained from the secondary containment area, the valve will be closed by the operator. If it is contaminated, the stormwater will be treated as leachate and pumped to the storage tank.

9.4 Ash Leachate Disposal

Once produced, leachate must be disposed of. Disposal of leachate generated by the ash disposal cells is achieved by loading leachate onto tanker trucks and hauling it to a WWTP for treatment. Leachate is normally loaded into tanker trucks from a dedicated pump station located adjacent to the 2-million-gallon storage tank, but can also be loaded from different areas (such as the metering manholes or the pump station sump) as needed based on the conditions at the site. The primary disposal mechanism for leachate generated from the ash monofill is the City of Tampa's Howard F. Curren Wastewater Treatment Facility. Pasco County maintains a contract with the City of Tampa for leachate disposal rights at the wastewater treatment plant. If changes in the facility receiving leachate occur, FDEP will be notified.

In 2019, Pasco County initiated construction of a Class V exploratory well to investigate the feasibility of leachate disposal by way of underground injection. The Class V well will be converted to a Class I well upon completion in August 2022 and will be capable of disposing

approximately 1 million gallons per day (MGD) of leachate from the ash cells. Prior to underground injection, the leachate will be treated by pH adjustment and filtration then pumped through a 6" HDPE forcemain from the storage tank to the well. During periods when the well is unavailable for disposal (such as periodic capacity testing), the leachate will be hauled to the Howard F. Curren Facility.

9.5 Solid Waste Leachate Disposal

Leachate collected by the leachate collection systems serving Cells SW-1 and SW-2 is pumped directly to the adjacent Shady Hills Wastewater Treatment Plant, owned by Pasco County, for disposal. An intra-Department account has been established to charge Solid Waste for the amount of leachate delivered to the wastewater plant.

9.6 Leachate Monitoring, Data Collection, and Reporting

Rule 62-701.500(8)(f), F.A.C. requires that the quantity of leachate collected by the leachate collection and removal system be recorded in gallons per day before on-site treatment and transport off-site. To accurately record the amount of leachate collected, Pasco County utilizes in-line magnetic flow meters on the discharge side of the three pump stations (the first serving A-1, A-2, and A-3; the second serving A-4; and the third serving SW-1 and SW-2). Each of the flow meters totalizes the volume of leachate (in gallons) passing through the respective leachate transmission pipeline. On a daily basis (Monday through Friday), an Operator records the totalized value and the time of day that the reading was recorded. The records are compiled on monthly basis into a spreadsheet and submitted semi-annually to the FDEP.

Separate from the flow measuring requirements of 62-701.500(8)(f) is an obligation to monitor the effectiveness of the liner systems serving each of the individual cells. Pasco County accomplishes this by separately collecting leachate generated off of the secondary liner system(s). Anything but a trivial amount of leachate collected off of a secondary liner system could indicate a possible breach (or other problem) of the primary liner. On a daily basis, Pasco County operators inspect the metering manholes for all of the secondary liner systems. Anything more than a small amount of leachate collected in a secondary liner metering manhole is immediately reported to the Solid Waste Manager.

9.7 Leachate System Maintenance

Leachate flow rates from the pump stations are observed at least weekly. An extremely low (or high) flow rate, when compared to recent flow rates, may indicate a problem with the leachate-collection system. This problem could be a malfunction with pumps or its instrumentation controls. The problem could also be a blockage in or a collapse of the leachate-collection pipe. If a block is suspected, Pasco County will hire the services of a jet-cleaning and video-inspection company. An emergency purchase order for jet-cleaning and/or video-inspection of the leachate collection lines can be prepared as soon as an inspection is determined to be required. Pasco County expects that an emergency purchase order can be approved and a contractor can be hired within a maximum of 1 month. The jet-cleaning and video-inspection company will first jet-clean the pipes from the clean-outs

and then video-inspect the pipes from the same clean outs. If major problems within the system are found, Pasco County will propose a remedial action plan and submit it to FDEP for approval before beginning the remedial work.

In accordance with 62-701.500(8)(h), FAC water pressure cleaning or video recording inspection is conducted at least once every five years.

9.8 Leachate Contingency Plan

9.8.1 Leachate Pumps, Hauling, and Flow Meters

If all pumps (onboard vehicle pump, storage tank transfer pumps, and leachate wet well pumps) fail, portable pumps are available from other County Departments. In addition, a rental transfer pump can be obtained from a local rental source.

If the sewer discharge pipeline is not functioning (for the Solid Waste cells) and the existing hauling contractor is unable to transport the leachate offsite (for the Ash Cells), an emergency can be declared to select another hauler so that unnecessary delays caused by bidding and selection can be prevented.

If the primary flow meter (the compliance meter) ceases to operate for either the Solid Waste cells or the Ash cells, contracted maintenance personnel will remove the instrument and insert a spare flow meter supplied by Pasco County Water & Wastewater. The faulty instrument will be shipped to the service representative or manufacturer to repair or replace.

9.8.2 Electrical Power Failure

The leachate collection and leak detection metering manholes that receive leachate from all primary and secondary leachate collection systems are all gravity based and do not require electrical power. However, the pump stations that evacuate the manholes require electrical power. In the event of a prolonged electrical outage, back-up generators will be brought in to operate the leachate collection pump stations.

If electrical power is not available at the ash monofill tanker loadout station, leachate can be pumped from the Crom tank directly into tankers using the onboard vehicle pumps or a portable 3-inch pump or an electrical generator can be provided to supply backup power to the pump station. Backup generators are available from Pasco County Public Infrastructure.

9.8.3 Leachate Treatment Contingency

If the primary disposal facilities (City of Tampa for ash leachate and Shady Hills for solid waste leachate) are unable to accept the leachate, Pasco County will implement a contingency plan consisting of hauling the leachate to an industrial disposal facility or another treatment facility for disposal. Pasco County retains one or more vendors who can haul leachate off-site for disposal. If leachate is determined to be hazardous, it will be

managed in accordance with the requirements of Rule 62-730, FAC, for hazardous waste generators and transporters.

10.0 SURFACE WATER MANAGEMENT

The Class I Landfill utilizes two surface water drainage areas as shown on **Figure 10-1**. The ponds have been sized to accommodate surface water runoff from the entire landfill at buildout and are at this time largely over-sized. Surface water flowing from the landfill drains to perimeter swales that discharge to the large retention ponds east of the landfill. Stormwater modeling indicates that any runoff that will overflow the ponds will travel essentially along the natural drainage paths that existed pre-development to undeveloped depressional areas west of the power line easement. However, because the retention pond capacity is largely underutilized at this time, overflow from the ponds is not expected to occur.

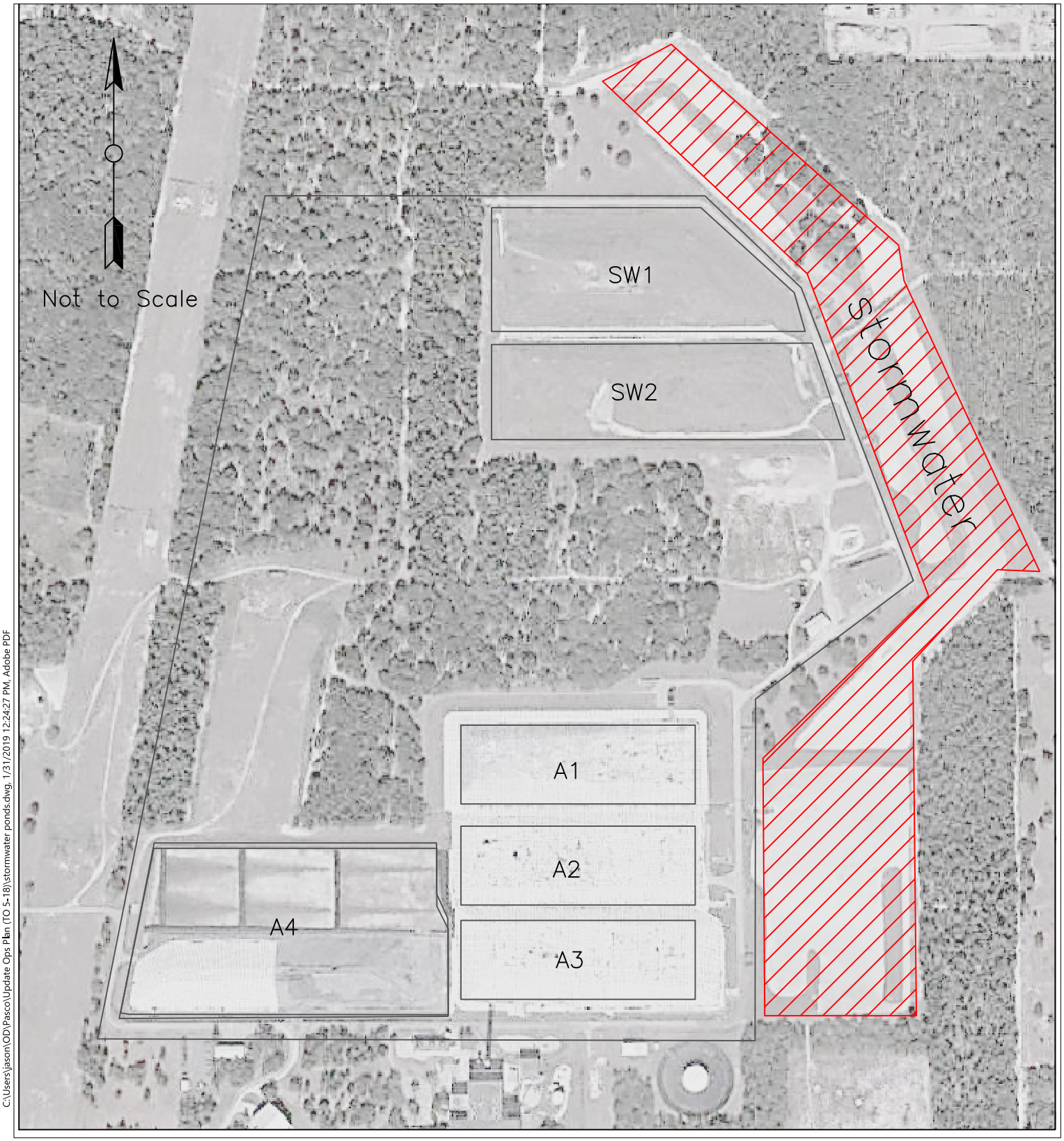
Drainage ditches have been constructed adjacent to the operating landfill cells and the closed landfill areas. These drainage ditches lead to the surface water ponds described above. These ditches are designed to receive the stormwater runoff from the landfill cells, paved areas and roads for collection and infiltration (and/or evapotranspiration) in the ponds.

10.1 STORMWATER SYSTEM MAINTENANCE

The following maintenance activities are performed as needed on an appropriate frequency to ensure the proper collection, conveyance, and disposition of surface waters associated with the Class I Landfill:

- All conveyance swales and ditches on the project site will be kept cleared of dense vegetation, debris, and trash that would impede the flow of stormwater runoff.
- All disturbed areas, swales, and basin side slopes that do not have living grass to prevent erosion will be sodded or seeded and mulched.
- All culverts that are damaged thereby inhibiting design flow rates will be cleaned, repaired, or replaced.
- The ditches, side slopes, and stormwater pond side slopes and berms will be mowed and kept clear of vegetation that would impede the discharge or receiving of stormwater.

In accordance with Rule 62-701.500(7)(k), F.A.C., the landfill will repair within 3 days erosion that causes waste to be exposed or the stormwater management system to malfunction. If the major erosion cannot be repaired within 7 days, the Pasco County will notify FDEP and propose an erosion correction schedule for the repairs.



C:\Users\jason\OD\Pasco\Update Ops Plan (TO 5-18)\stormwater ponds.dwg, 1/31/2019 12:24:27 PM, Adobe PDF

Note: THIS FIGURE IS NOT TO SCALE AND THE LOCATIONS OF SOME ITEMS HAVE BEEN EXAGGERATED FOR CLARITY

JMG ENGINEERING INC

STORMWATER MANAGEMENT PONDS
WEST PASCO CLASS I LANDFILL

FIGURE
10-1

11.0 LANDFILL GAS MANAGEMENT

Because the solid waste disposal cells SW-1 and SW-2 are relatively small and are intended to be utilized infrequently, there is no active landfill gas management associated with them. In addition to a series of passive vents, Pasco County maintains a robust landfill gas monitoring program to ensure that landfill gas does not migrate laterally. The monitoring program is described below.

11.1 LANDFILL GAS MONITORING PROGRAM

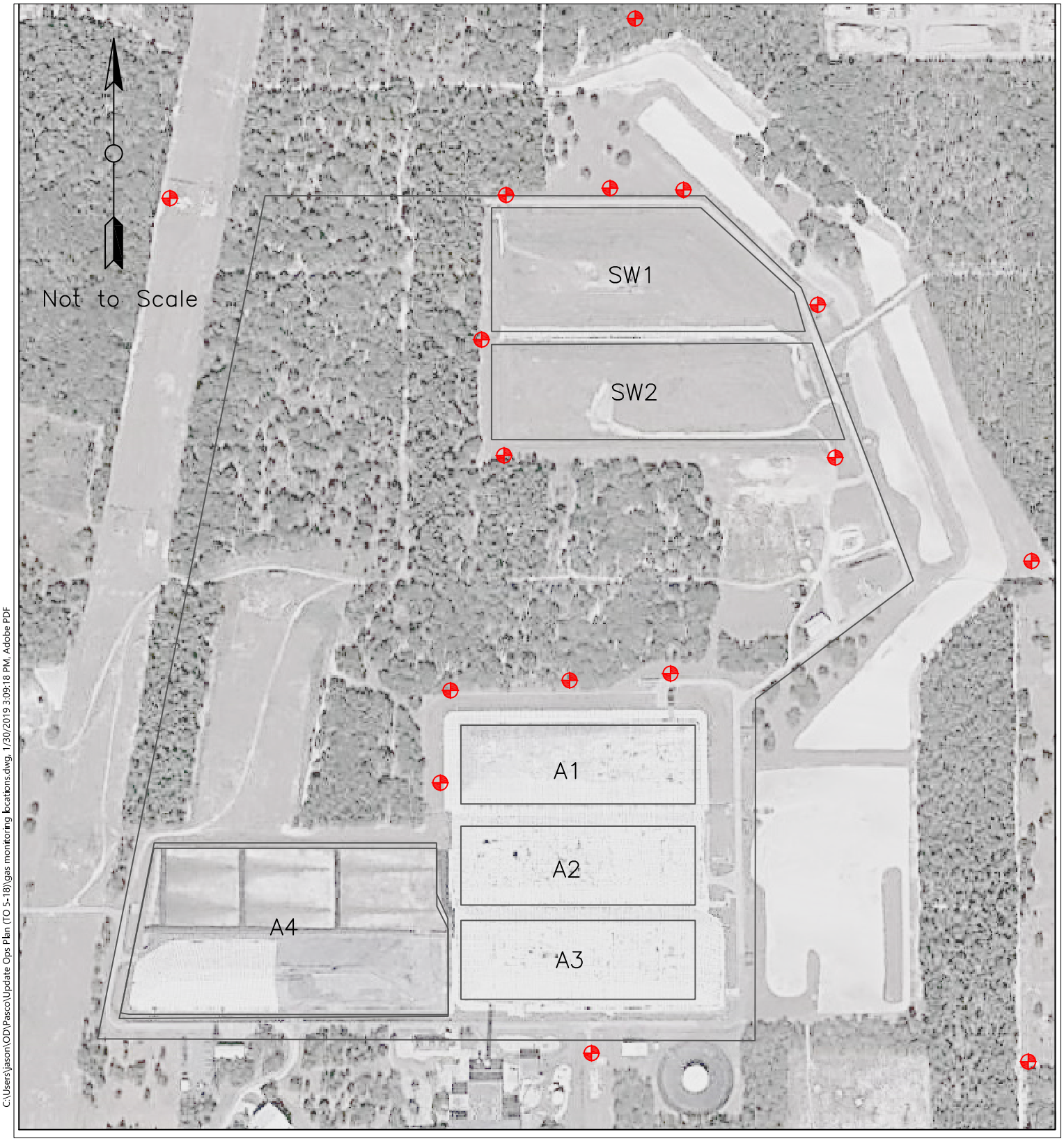
Pasco County Environmental Services is responsible for implementing the Gas Monitoring Program at the landfill. The LFG monitoring program consists of quarterly monitoring of six LFG monitoring wells, in addition to monitoring gas levels in nineteen groundwater monitoring wells. Gas monitoring is also conducted within the enclosed structures at the Class III scalehouse and the Class III Operations Building. **Figure 11-1** depicts the location of each of the gas monitoring locations. Gas monitoring is conducted in accordance with Rule 62-701.530(2)(c), F.A.C.

A portable landfill gas analyzer is used to measure the levels of combustible gases (primarily methane) at each of the monitoring locations. Part of the monitoring program is inspection of the monitoring wells for any symptoms of LFG leakage such as dead grass in the vicinity of the monitoring well or other locations. All field measurement data and observations are provided to FDEP no later than 15 days after the end of the quarter in which the monitoring occurred.

If results indicate that gas is present in excess of the 25% of the lower explosive limit (LEL) in a structure or 100% of the LEL at or beyond the landfill property boundary, a Gas Remediation Plan will be prepared in accordance with Rule 62-701.530(3)(a), F.A.C., and Pasco County Public Infrastructure will:

- Immediately take all necessary steps to ensure protection of human health and notify FDEP.

- Within 7 days of detection, submit to FDEP for approval a remediation plan for the methane gas releases. The plan shall describe the nature and extent of the problem and the proposed remedy.



C:\Users\jason\OD\Pasco\Update Ops Plan (TO 5-18)\gas monitoring locations.dwg, 1/30/2019 3:09:18 PM, Adobe PDF

Note: THIS FIGURE IS NOT TO SCALE AND THE LOCATIONS OF SOME ITEMS HAVE BEEN EXAGGERATED FOR CLARITY

JMG ENGINEERING INC

GAS MONITORING LOCATIONS
WEST PASCO CLASS I LANDFILL

FIGURE
11-1

12.0 SITE CONTINGENCY PLAN

Emergency conditions that may constitute a special waste-handling event at the Solid Waste Complex may be created by a natural disaster (i.e., hurricane, tornado, and/or flooding), explosion, or fire. The Landfill Operations Manager is responsible for implementing the contingency operations.

12.1 LANDFILL FIRE

A fire extinguisher is maintained in all Pasco County landfill equipment. The quantity, type, and location of fire extinguishers located throughout the site is subject to change as conditions change on the site. Landfill fires can be very dangerous with the presence of LFG, which includes methane. Fire-fighting should only be attempted if the fire is relatively small and controllable. The area should be immediately evacuated of operating staff and outside personnel if a fire is ignited that cannot be easily and quickly controlled. The Solid Waste Manager should be contacted, and the fire should be reported to the Administration Office via field communications. The Administration office will immediately call the fire department. During a fire, incoming trucks will be prevented from using the landfill.

Once the fire is extinguished, appropriate cover will be applied to the waste and operations will continue at the original active face. If the fire is extensive and a temporary active face cannot be established, incoming trucks will be redirected to another landfill.

Landfill fires can be ignited from several sources or causes. These causes include the following:

- A gas pocket ignited from a spark generated from smoking.
- Sparks generated from pushing metal wastes.
- Chemical reactions.
- Sparks from operating equipment.
- Introduction of smoldering waste into the working face.

Onsite materials and equipment of fire protection consist of soil stockpiles near the working face, fire extinguishers carried on landfill equipment, and onsite water trucks.

The daily cover used in the landfill operation provides an effective firewall. Instructions in firefighting procedures will be routinely provided to site personnel through the prescribed TREEO training. If a fire occurs within the waste pile at the landfill, the fire department will be immediately notified, and additional soil cover will be applied to cut off the flow of oxygen to the burning area. If the fire cannot be extinguished or controlled within 1 hour, the landfill shall cease accepting waste for disposal in those areas of the facility impacted by the fire. The local fire department will again be notified via 911 of the conditions at the site and may be requested to assist site personnel and provide additional equipment, if necessary. Pasco County officials and FDEP will also be notified of conditions at the site and of the fire control plan belong implemented.

Collection vehicles entering the landfill with smoldering loads shall be directed to the Hot Load area at the Resource Recovery Facility. The truck should remain closed to minimize the amount of oxygen available to feed the fire. The local fire department shall be notified by dialing 911; Pasco County HHW staff shall be notified as well as landfill operations.

13.0 RECORDKEEPING

In addition to records and reporting required by other sections of this operation plan, Pasco County Solid Waste will maintain the following the following:

- Keep records of all information used to develop or support the permit applications and any supplemental information submitted to comply with FDEP requirements pertaining to the construction of the landfill throughout the design period. Records pertaining to the operation of the landfill, except for weigh tickets, shall be kept for the design period of the landfill. Weigh tickets shall be kept for a minimum of 5 years.

- Retain records of all monitoring information, including calibration and maintenance records and copies of all reports required by permit, for at least ten years. Background water quality records shall be kept for the design period of the landfill.

- Maintain an annual estimate of the remaining life and capacity in cubic yards of each active disposal facility for the Class I landfill. The annual estimate shall be based on a summary of the heights, lengths, and widths of the solid waste disposal units. The estimate shall be made and reported annually to FDEP.

All records 5 years or older may be archived offsite given that the records can be retrieved within 7 days for inspection.

14.0 OFF-SITE BENEFICIAL ASH REUSE

Section 403.7045(5) of the Florida Statutes authorizes the Department to allow beneficial reuse of ash residue when an applicant demonstrates that "no significant threat to public health will result and that applicable Department standards and criteria will not be violated." Beginning in 2012, Pasco County began working with the FDEP to investigate the recycling of bottom ash for beneficial reuse as a building construction material. A series of roadway test strips and associated groundwater monitoring wells were constructed under an FDEP research and development project (Permit No. 26254-004-SO-21). Through the research and development process, the County demonstrated that the requirements of Chapter 403.7045(5), F.S., could be achieved and the Department issued a Standing Authorization specifying the conditions under which bottom ash could be beneficially utilized within the County's geographic boundaries. In 2019, the Pasco County Resource Recovery Facility's Condition of Certification (PA 87-23D) was updated to include beneficial ash reuse. These are codified in Attachment E Part 6 of the Conditions of Certification – Solid Waste Construction and Operation Requirements. A copy of the relevant section of the conditions of certification is included as Attachment 1.

To render the bottom ash usable for targeted recycling projects, the County follows the procedures described in Section 6.6 of this Operation Plan. Following processing, the engineered material is beneficially reused consistent with the requirements in the attached conditions of certification.

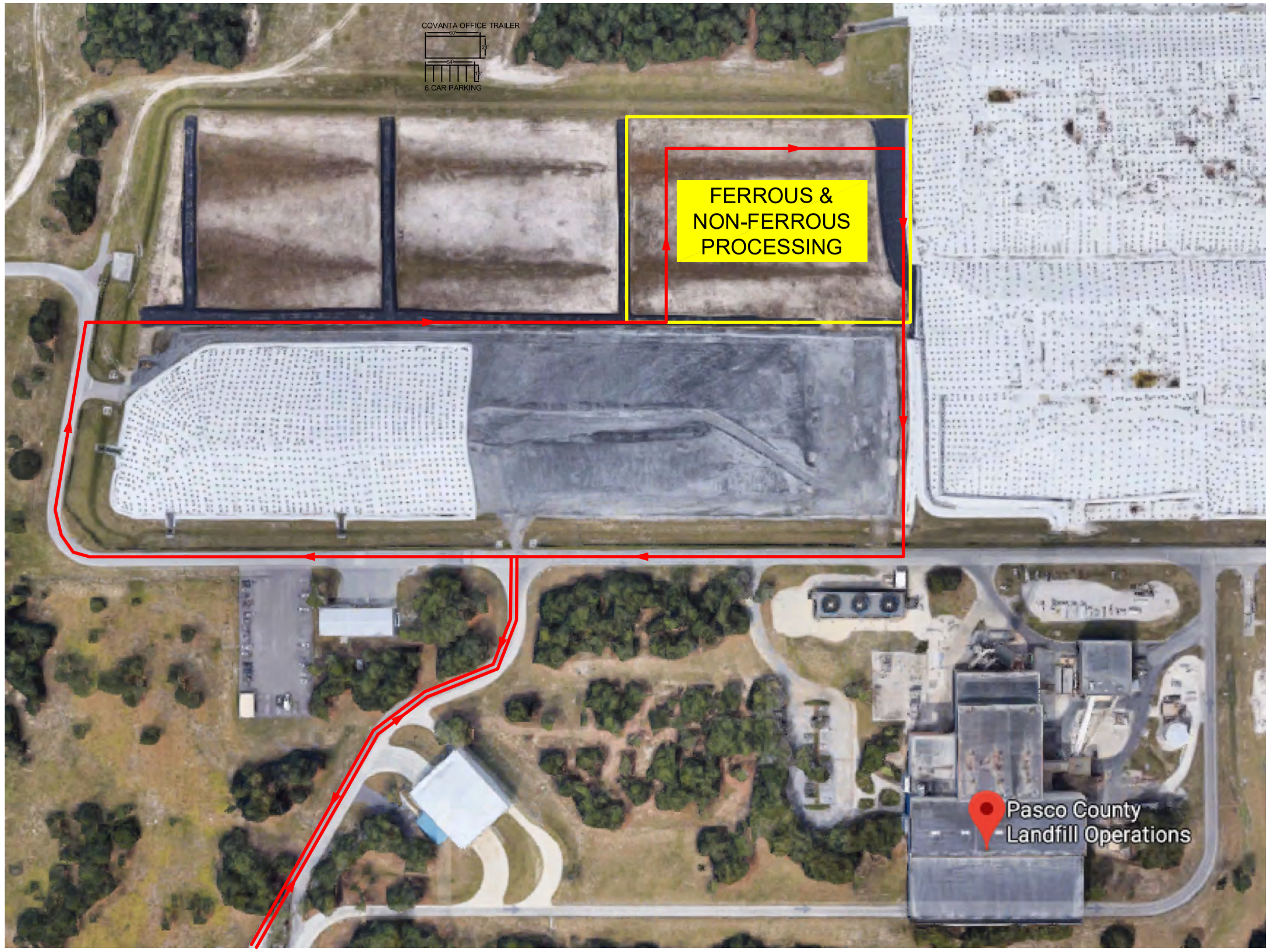
15.0 ASH MONOFILL FERROUS AND NON-FERROUS METALS PROCESSING

The 6th subcell of ash cell A-4 will be temporarily used to process ferrous and non-ferrous metal to remove residual ash prior to transport to a third-party recycling facility. This will include metal generated at the Pasco County Resource Recovery Facility as well as metal from other waste-to-energy (WTE) facilities within the state. Metal from all facilities will be brought over the County's scales and weighed. This metal will be stored in discrete storage bunkers and then processed through a series of screens and magnets to remove the residual ash. Following processing, the ash and metal will be loaded into separate bunkers. All ash not generated from Pasco County will be returned to the facility of origin. The mass of outgoing metal and ash for all facilities be weighed and recorded.

Figure 15-1 outlines the location of the processing area and a traffic pattern for the transfer truck operations. **Figure 15-2** provides an illustration of the equipment and storage bunkers which will be located within the ash cell. The processing area (Cell A-4 – subcell 6) will be floored with 4 feet of select waste (ash) before the processing equipment is brought on site. All equipment will be placed on top of the floored ash and will not be anchored into the ash or underlying leachate collection system in any way. The metals processing system is designed as a mobile operation.

To prevent the mixing of leachate and stormwater, the cell will be floored such that all rainwater that contacts the area will be introduced into the leachate collection and removal system. This will be accomplished by establishing a floored area no less than 10 feet inward from the extent of the liner. The aerial displayed in **Figure 15-1** is several years old; to reduce leachate generation the entire south 10 acres of the cell have been covered with a temporary rain cap and the metals processing area in operation in the north 10 acres of the cell will be open. Consistent with practices previously described in the Operation Plan, fugitive dust emissions within the processing area will be controlled by wetting on an as-needed basis.

Figure 15-1



NOTES:

1. ALL TRUCK MUST CHECK IN AND OUT AT THE SCALE HOUSE LOCATED AT THE ENTRANCE TO THE PASCO FACILITY.

COMPANY CONFIDENTIAL

THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF COVANTA ENGINEERING SERVICES, INC. AND IT'S AFFILIATES OF ANY TIER AND ARE NOT TO BE USED EXCEPT AS EXPRESSLY AUTHORIZED IN WRITING BY THE COMPANY.

PROPOSED PASCO MOBILE NFE/FE PLANT

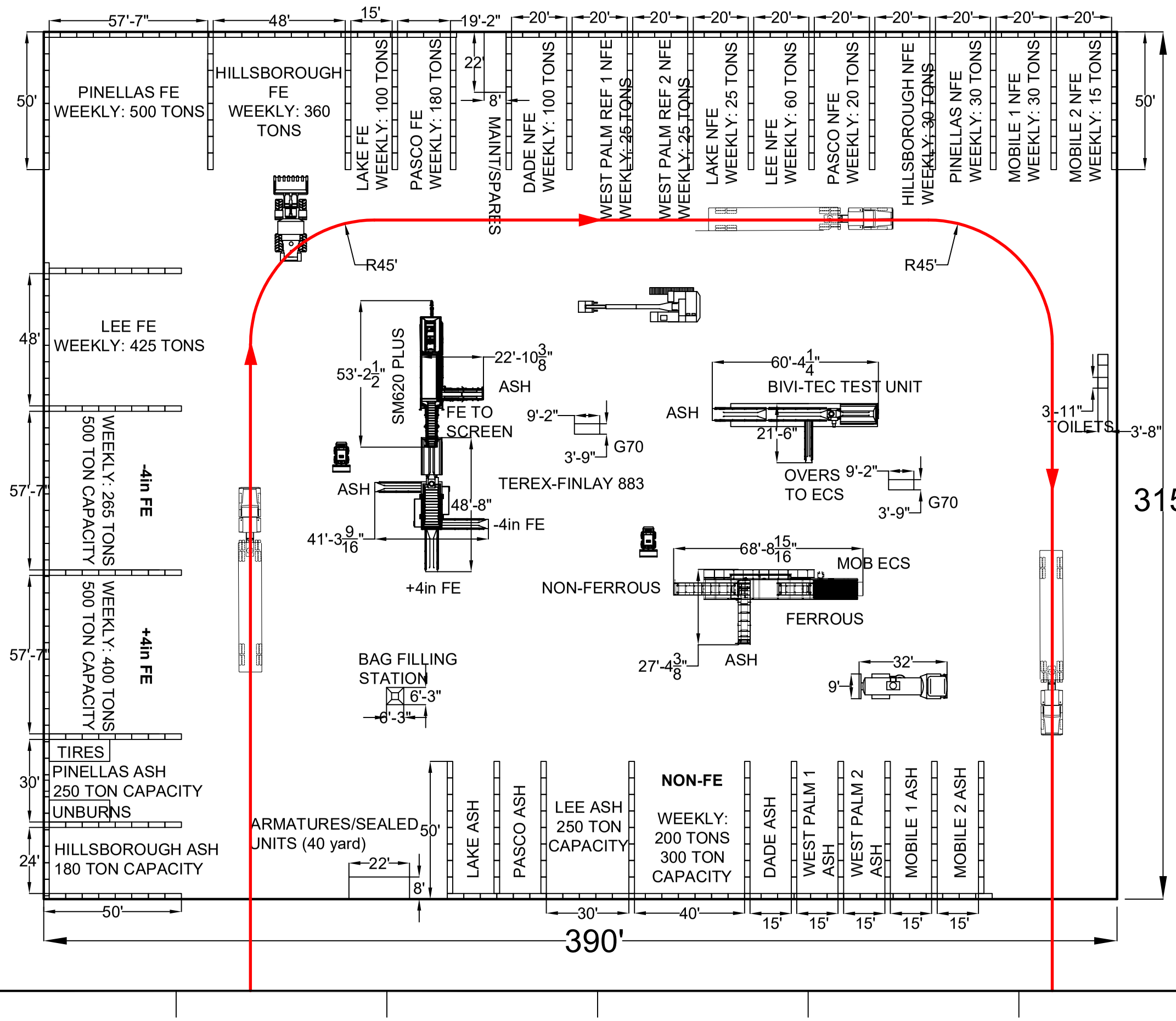
COVANTA

COVANTA ENGINEERING SERVICES, INC.
445 SOUTH STREET
MORRISTOWN, NEW JERSEY 07960

APPROVED	DATE	DRAWING NO.	SHT. NO.	REV.
	10/01/19	PASCO-1	1 OF 2	1

PASCO-1 10/01/19 PF: 1=1 "ANSI B"

Figure 15-2



NOTES:

1. ALL NFE BUNKERS HAVE 150 TON CAPACITY, CAN BE INCREASED IF NECESSARY.
2. ALL ASH BUNKERS HAVE 100 TON CAPACITY UNLESS OTHERWISE SPECIFIED.
3. ARMATURES/SEALED UNITS TO BE PICKED OUT AND STORED IN ROLL–OFF 40 YARD CONTAINER 8'X22'.
4. PINELLAS ASH: TIRES AND UNBURNS TO BE SEPARATED INTO TWO ROLL–OFF CONTAINERS 8'X22'.
5. TWO (2) G70 GENERATORS WILL BE USED TO POWER THE MOBILE PROCESSING EQUIPMENT. 9'–2" BY 3'–9".
6. SIX (6) PARKING SPOTS AVAILABLE FOR EMPLOYEES.
7. TWO (2) PORTABLE TOILETS AVAILABLE FOR EMPLOYEES IN ADDITION TO FACILITIES IN COVANTA OFFICE TRAILER.

COMPANY CONFIDENTIAL

THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF COVANTA ENGINEERING SERVICES, INC. AND IT'S AFFILIATES OF ANY TIER AND ARE NOT TO BE USED EXCEPT AS EXPRESSLY AUTHORIZED IN WRITING BY THE COMPANY.

PROPOSED PASCO MOBILE NFE/FE PLANT

COVANTA

COVANTA ENGINEERING SERVICES, INC.
445 SOUTH STREET
MORRISTOWN, NEW JERSEY 07960

APPROVED	DATE	DRAWING NO.	SHT. NO.	REV.
	10/22/19	PASCO–2	2 OF 2	1

PASCO–2 10/22/19 PF: 1=1 "ANSI B"

3. PROCEDURES FOR RECEIVING, HANDLING, AND FEEDING MSW

3.1 PROCEDURES FOR RECEIVING MSW

3.1.1 RULES AND REGULATIONS FOR WASTE DELIVERY HAULERS

3.1.1.1 FACILITY OPERATION

1. The facility will open to receive waste at the following times:

   Monday - Saturday 7:00 a.m. - 5:00 p.m.

   The facility is closed on Thanksgiving, Christmas Day, and New Years Day.

3. The speed limit at the facility is fifteen (15) MPH, unless otherwise posted. The speed limit will be strictly enforced.

4. Haulers shall proceed through the main entrance and form lines at the weight scale. The Scalehouse attendant will direct the drivers to the appropriate scale.

5. Upon exiting the scale, trucks shall enter the enclosed tipping floor area through the door at the southwest corner of the tipping floor area and position for an available bay to unload. Upon unloading, the driver, before exiting the facility, shall make sure all refuse is off all external parts of the vehicle. Any personnel outside of the delivery vehicle must remain at least 6 feet away from the edge of the storage pit.

6. Haulers shall exit the tipping floor in single file through the door at the southeast corner of the tipping floor area.

3.1.1.2 HAULER IDENTIFICATION

1. Each waste hauler shall properly display and comply with their respective jurisdiction rules regarding truck and equipment identification and permitting. Vehicle and container identification shall be made visible to the tipping floor Equipment Operator by placing permit identification on both sides of the vehicle.

3.1.1.3 TIPPING FLOOR INSPECTIONS

1. Upon request of the tipping floor Equipment Operator, or Pasco County Representative, trucks may be directed to a specific area on the floor for examination of the waste being delivered. This inspection can occur due to a suspected problem or on a random basis as part of the facility's inspection program. The inspection may result in some materials being rejected. Haulers shall follow the instructions below

if unacceptable waste is detected:

a. For Prohibited Waste (as defined in Exhibit A) which is not Hazardous Waste, the Hauler may be required to reload such materials for disposal at another location.

b. For Hazardous Waste (as defined by Federal, State, and Local law, haulers shall remain at the facility until appropriate facility management representative(s) arrive. A decision will be reached at that time as to the most appropriate disposal option.

c. Waste coming to the facility from areas other then Pasco County without prior approval will be directed to the appropriate disposal site.

2. The truck shall not leave the facility until released by the Equipment Operator, Covanta Pasco Management or Pasco County Representative. At the time of release, the Hauler may be given a Notice of Inspection or Infraction.

3.1.1.4 BREAKDOWNS/EMERGENCIES/DAMAGES

1. Trucks with mechanical problems shall exit the facility, or, if disabled, request immediate towing at the Hauler's expense. Should the vehicle have to stay on site for a short period of time, Haulers should attempt to "park" the vehicle outside of the main traffic flow.

2. Trucks with hydraulic leaks will be allowed to unload but not permitted further use of the facility until the leak is repaired. Vehicles with repeated mechanical problems will be referred to the proper county authority for appropriate action.

3. Haulers who discover a fire in their truck (hot load) shall be directed to a designated area outside to unload. Under no circumstances are these loads to be unloaded into the refuse storage pit. Covanta Pasco employees and/or Pasco County Fire Department personnel shall use available equipment to extinguish all fires.

3.1.1.5 DRIVER REGULATIONS

1. Obey all posted traffic control signs.

2. Obey the instructions of the Scalehouse Operator and the Equipment Operator.

3. No external cleaning of vehicles or vehicle maintenance may be performed at the facility site.

4. No firearms, explosives or other weapons are permitted on the facility site.

5. No smoking at any time, anywhere.

6. Open-topped containers must be cleaned of all debris and paper or recovered after unloading to minimize litter at the facility site.

7. All hauler personnel using the facility will be informed of the facility's Hazardous and Unacceptable Waste Screening Program.

8. Foul language and inappropriate behavior are not permitted on the facility site.

9. Consumption of alcoholic beverages or controlled substances (drugs) is not allowed on facility site at any time.

3.1.1.6 TIPPING FLOOR / REFUSE PIT FUEL MANAGEMENT

Covanta Standard Tipping Floor/Refuse Pit Fuel Management Procedure #2

Purpose:

The purpose this procedure is to establish a safe, effective fuel management on the tipping floor and refuse pit at our operating facilities, with the expressed goal of mitigating any associated potential negative events or consequences to facility personnel, equipment, structures, or to the surrounding environment. This fuel management approach is intended to slow the progression of a fire until it can be controlled by automatic sprinkler protection and manual firefighting response.

Facility management is directed to review and revise their current facility Fuel Management procedures using this standard as a guideline.

It is recognized that each Covanta facility is different and present challenges to fuel management on the Tipping Floor and Refuse Pit. The facilities are encouraged to contact Covanta's fire protection group for assistance in the implementation of this operating procedure.

Definition:

Fire Watch: The assignment of a person or persons to an area for the express purpose of notifying the fire department, the building occupants, or both of an emergency; preventing a fire from occurring; extinguishing small fires; or protecting the public from fire or life safety dangers.

- The fire watch shall be trained to understand the inherent hazards of the work site.
- The fire watch shall be familiar with the facilities and procedures for sounding an alarm in the event of a fire.
- The fire watch shall have fire-extinguishing equipment readily available and shall be trained in its use.
- The fire watch shall watch for fires in all exposed areas and try to extinguish them only when the fires are obviously within the capacity of the equipment available. If the fire watch determines that the fire is not within the capacity of the equipment, the fire watch shall sound the alarm immediately.
- The fire watch shall be permitted to perform additional tasks, but those tasks shall not distract him or her from his or her fire watch responsibilities.

Fuel: For this document is defined as MSW based on a composition of 34% paper, 17% food waste, 8% plastic and rubber, 10% glass, 11% metal and 14% leaves and grass. (*NFPA 850 Recommended Practice for Electric Generating Plant and High Voltage Direct Current Converter Stations, Section A.9.3.3.1*).

Fuel Storage: For this document Fuel Storage is defined as fuel storage on the Tipping Hall floor for a period of 24 hours or longer.

Temporary Fuel Storage: For this document Temporary Fuel Storage is defined as fuel storage on the Tipping Hall floor during non-operating hours of the Tipping Hall floor.

Preparations:

1. Each Covanta facility shall establish a "Fuel Management Procedure" for the tipping floor and refuse pit.
2. The fuel management procedures are specific to each facility and shall written instruction as to the size of the fuel pile(s) length x width x height.
3. A drawing shall be developed by the facility showing the location on the tipping floor of the fuel pile(s) and the separations from the refuse pit, side walls and access aisle between fuel pile(s). An up to date copy of the drawing shall be kept in the tipping floor supervisor's office and in the crane operator's pulpit.
4. At minimum, annually, the "Fuel Management Procedure" for the tipping floor and refuse pit shall be reviewed by the tipping floor operating personnel and crane operators.

Precautions:

1. Recommend that there be NO storage of fuel on the Tipping Floor; but there are many circumstances that may result in the need to use this area for fuel.
    - The use of the tipping floor for fuel storage shall be documented in the Fuel Management Procedures.
    - Fuel storage on the tipping floor shall not violate the operating permit(s) for the facility.
2. Inspections and prohibitions on dumping hot loads in building. Outdoors area for hot load dump/extinguishment. Refer to Hot Load Procedures SOP No. 1.
3. Prohibition on moving hot loads/fires forward
4. Loader/Machines – No low or under hung exhaust components

Tipping Hall Fuel Management:

1. Maintain a clear space of at least 10 ft. between the waste piles and all non-fire rated structural steel columns along the building's exterior walls and means of egress from the building.
    - Barriers similar to Jersey Barriers can keep piles away from the structure and means of egress.
2. Limit the potential for fire spread into the refuse bunker by maintaining an aisle/clear space of approximately 10 - 15 ft. between the waste piles and the edge of the refuse bunker.
    - *Example: When a bay is stacked out and fuel needs to be stored on the Tipping Hall floor; for a long weekend, boiler outage, etc., a clear space shall be maintained between the bay and fuel pile to help prevent a fire originating in the fuel pile propagating to the Refuse Pit.*
3. Clear spaces and aisle spaces should be immediately cleared of all combustibles (included in facility fire response procedures) upon discovery or declaration of a fire on the tipping floor, provided it is safe for equipment operator to do so.
4. All aisles and clear spaces shall be inspected and cleared of all combustibles prior to the tipping floor being shut down (during unmanned shifts)
5. Provide an aisle between refuse piles on the tipping floor of at least the operating requirements of the material handling equipment.
6. Number of refuse piles on the tipping floor to be determined by site conditions and permit limitations:
    - Maximum pile dimension 100'-0" *
    - Maximum pile height 20'-0" **
    - Maximum pile volume 200,000ft³ *

7. When storage of fuel is required on the tipping floor due to operational issues a fire watch shall be established. A fire watch shall consist of trained personnel who continuously patrol the affected area. Ready access to fire extinguishers and the ability to promptly notify facility personnel and the fire department in the event of an emergency. (NFPA 1 *Fire Code*, Section 1.7.17)

   ** International Fire Code, Chapter 32 High Pile Combustible Storage, Table 3206.2*
   ***NFPA 850 Recommended Practices for fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations, Section A.9.3.3.1*

8. Mobile Material Handling Equipment:
   - When not, in-service Material Handling Equipment should not be parked on the Tipping Floor.
   - If Material Handling Equipment must be parked on the Tipping Floor due to facility space limitations the following shall apply:
   - No combustible materials within 25'-0" of the equipment.
   - Combustible materials shall be removed from air intakes, hot surfaces and from around the exhaust.
   - Maintenance/Hot Work on Material Handling Equipment shall not be performed on the Tipping Hall floor.
     - If hot work must be performed on the Tipping Hall floor, Covanta's hot work procedures shall be followed.

Refuse Pit Fuel Management:

1. Provide Restrictions on pile heights and shape:
   a. Provide laser marking or painted lines as work aids for operator reference for pile area limitations, height, and width.
2. Manage pile shape, see Appendix B:
   a. Trough maintenance across pit opening
   b. One slope against back wall, no V-shaped piles or wing stacks

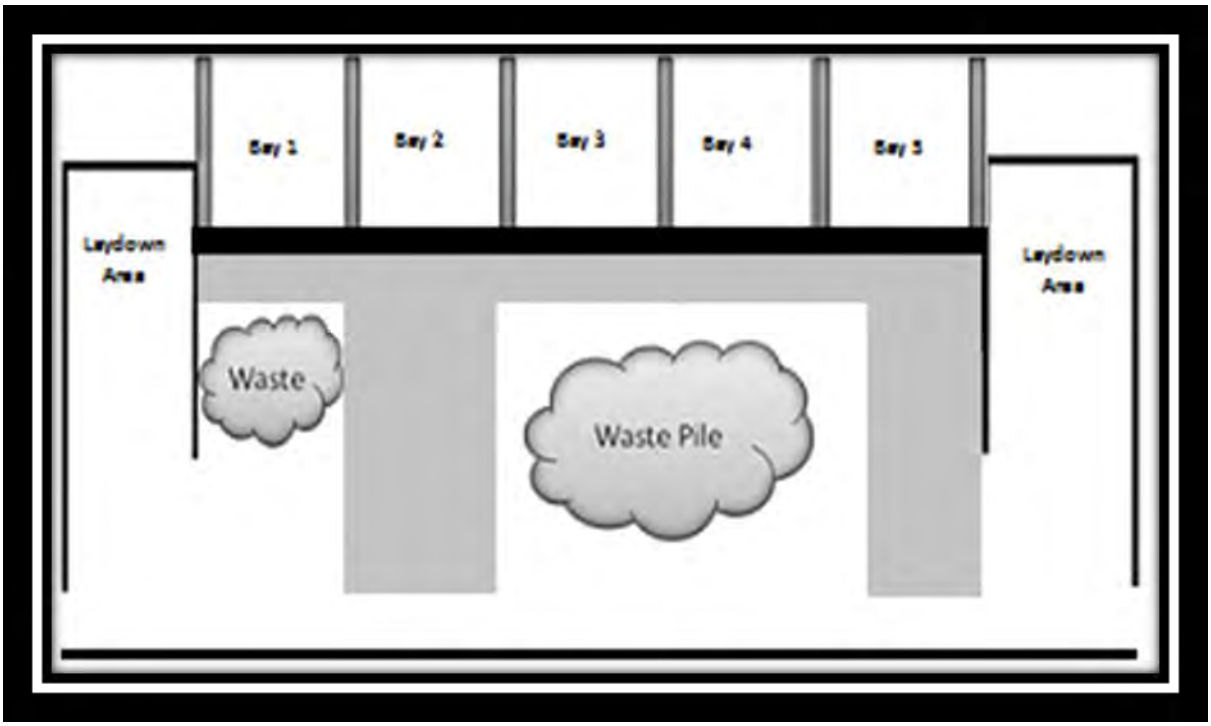
Tipping Hall Fuel Management Appendix A

Covanta Pasco Tipping Hall Fuel Management Enhancement

There are 5 tipping bays across tipping floor into the refuse bunker

In the event that waste is stored on the tipping floor, Operating procedures are in place to leave a bay open between the storage piles on the tipping floor

Operating procedures will be implemented to maintain an approximately 10 - 15 foot aisle between refuse bunker and tipping floor storage piles. An audible horn has been installed to detect any vehicle entering the tipping floor.



Refuse Pit Fuel Management Appendix B

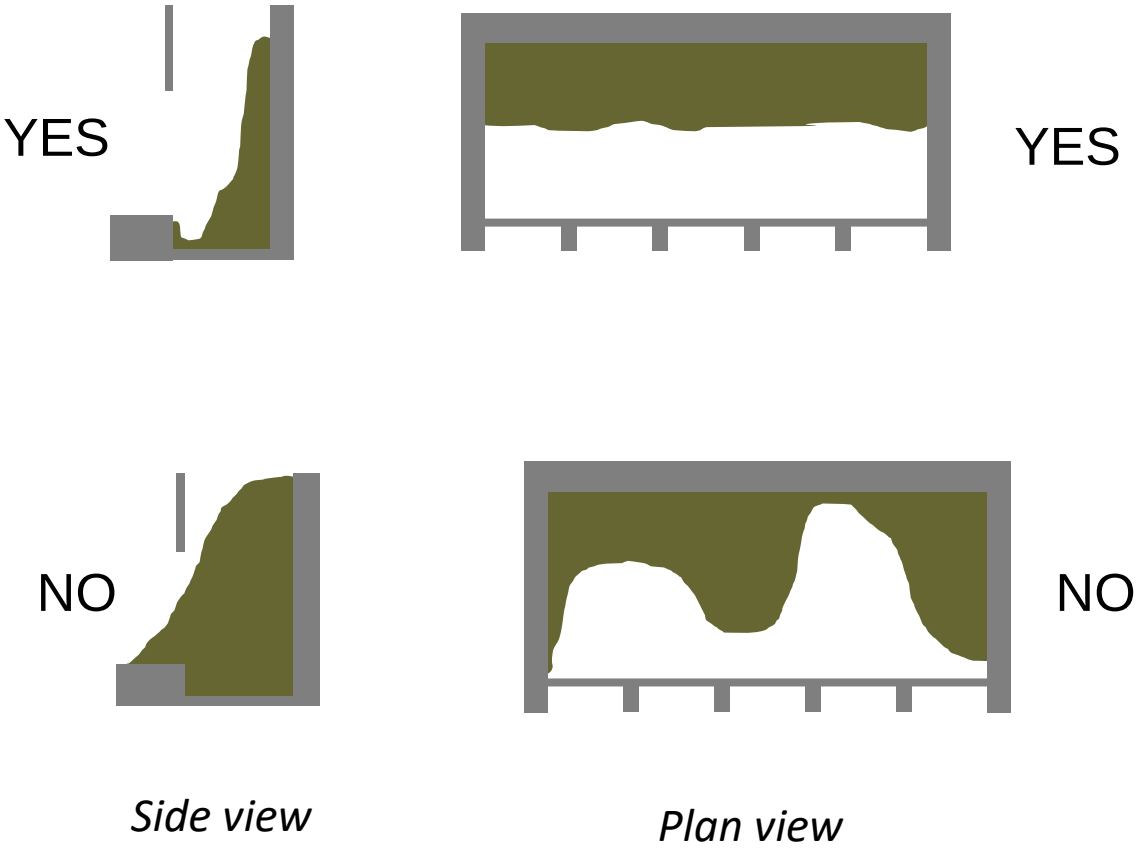


EXHIBIT A

PROHIBITED WASTE

Prohibited waste shall include the following material (A) if present in concentrations or quantities that, in the reasonable judgment of the Company, (1) would post a substantial threat to public health or safety, (2) may cause applicable air quality or water effluent standards to be violated by the normal operation of the facility, (3) are so large and bulky as to present a risk of blocking the facility's waste feed chutes (6 ft. in length and 30 inches in width), or (4) would result in ash residue from the facility being hazardous.

1. EXPLOSIVES
   Dynamite
   Hand grenades
   Blasting caps
   Shotgun shells
   Any other explosives
   Fireworks

2. LIQUID WASTE

Gasoline	Fungicides
Kerosene	Alcohol
Acids	Turpentine
Hydraulic oil	Waste oil
Petroleum	Ether
Caustics	Naphtha
Sewage or process waste waters	Acetate
Leachate	Solvents
Sewage sludge	Paints
Inflammable or volatile liquids	

3. DEMOLITION DEBRIS

Aggregate	Asbestos
Brick	Sawdust
Stone	Roofing materials
Pallets (unless halved)	Plaster
Cement	Porcelain fixtures
Gravel	Boilers
Sand	Other non-combustible demolition debris
Structural clay products	Creosote treated lumber
Soil	Dry wall
Tree stumps	Metal pipes

EXHIBIT A

PROHIBITED WASTE (CONTINUED)

4. MISCELLANEOUS MATERIALS

Offal	Radioactive materials
Tar	Ashes
Asphalt	Human remains
Sealed drums	Animal remains

Pressurized containers (over one quart in size)
Car batteries
Automobile parts

5. TIRES
   Tires or rims

6. HAZARDOUS WASTE as defined under Federal, State, and local laws and regulations.

7. SPECIAL WASTE as defined by paragraph 62-701.300(9), F.A.C., "Special wastes for waste-to-energy facilities. No person who knows or who should know of the nature of such solid waste shall dispose of lead-acid batteries, mercury-containing devices, or spent mercury-containing lamps in any waste-to-energy facility."

NOTE: Loads whose major components are acceptable non-combustible metal items must off-load to process rejects box as directed by Equipment Operator. (i.e., appliances, water heaters, metal furniture and equipment, etc.)

Haulers who transport appliances with motors that may have capacitors containing PCB may be required, at the discretion of Covanta Pasco, to certify that these capacitors have been removed before disposal.

Haulers are encouraged to transport metal goods to a scrap dealer.

EXHIBIT B

HAZARDOUS WASTE

"Hazardous Waste" means: (A) any material or substances the treatment, storage or disposal of which, because of the composition or characteristics of the material or substance, is unlawful to treat, store, or dispose of at the Facility is (i) regulated as a toxic or hazardous waste as defined under either Subtitle C or the Solid Waste Disposal Act, 42 U.S.C 69921-6939a, or section 6 (e), of the Toxic Substances Control Act, 15 U.S.C. 2605(e), as replaced, amended, expanded or supplemented, and any rules or regulations promulgated hereunder, or under the State of Florida, as replaced, amended, expanded or supplemented, and any rules or regulations promulgated hereunder, or (ii) special nuclear or by-products materials within the manning of the Atomic Energy Act of 1954; and (B) any other materials which any governmental agency or unit having appropriate jurisdiction shall lawfully determine from time to time to be ineligible for disposal through waste to energy facilities similar to the Facility because of the harmful, toxic or dangerous composition or characteristics of the material or substance.

All commercial and industrial establishments are required by federal and state law to determine whether any wastes which they generate are Hazardous Wastes, and to dispose of all Hazardous Wastes at a permitted Hazardous Waste disposal facility. You are responsible for assuring that industrial and commercial establishments from which you collect waste, have excluded all Hazardous Waste from waste which you collect for disposal at the Facility.

HAZARDOUS/NON-PROCESSABLE WASTE DOCUMENTATION

DATE _____ TIME

COMPANY NAME _____TRUCK AND/OR TRAILER NO. _____

MATERIAL NOTED_____DID MATERIAL GO INTO PIT? YES____NO___

IS MATERIAL CLASSIFIED AS HAZARDOUS? YES ____ NO_____

WAS MATERIAL REMOVED FROM PIT? YES ____ NO_____

IF NOT REMOVED, GIVE DETAILS FULLY: _____

_____

_

_____

_

_____

CHECKING OF LOADS

WHAT INSTIGATED CHECK?

_____ RANDOM CHECK

_____ SUSPICION OF HAZARDOUS OR NON-PROCESSABLE MATERIAL

IN DETAIL, DESCRIBE WHAT WAS FOUND IN LOAD

LOAD CHECK BY _____COUNTY OFFICE NOTIFIED BY _____AT _____

COVANTA PASCO, INC.

INCIDENT REPORT

DATE

TIME

TRUCK AND/OR TRAILER NO.

DUMPSTER NO.

INCIDENT

REPAIRS

SUPERVISOR'S SIGNATURE

3.1.2 UNACCEPTABLE AND HAZARDOUS WASTE PROGRAM

3.1.2.1 INTRODUCTION

Federal and State regulations require that waste-to-energy facilities establish contractual relationships or other appropriate notification or inspection procedures to ensure that hazardous wastes are not received at or burned in such a facility. The following Unacceptable and Hazardous Waste Screening Program was developed by Covanta Pasco (the "Company") in consultation with Pasco County to comply with such laws and regulations. The intent of this program is to ensure that neither Unacceptable Waste nor Hazardous Waste is received or processed at the Covanta Pasco Facility (the "Facility"). As used herein, Hazardous Waste refers to waste which by law is defined as hazardous; Unacceptable Waste is waste which the Company determines is unacceptable for processing pursuant to its contract with the County.

At the outset, it is important to keep in mind that most commercial generators of Hazardous Wastes, including those legally defined as small quantity generators, are already required to handle their Hazardous Wastes in accordance with provisions of the Resource Conservation and Recovery Act (RCRA), and to be registered with Federal and State regulatory agencies. These agencies are authorized to hold criminally liable, and to impose fines up to $27,500 per day against those who knowingly violate laws and regulations regarding Hazardous Waste management. These laws already minimize the likelihood that significant quantities of Hazardous Waste will reach the Facility. The Facility is not, and is not intended to become or be operated as, a facility to receive, store or process Hazardous Waste pursuant to RCRA.

Most of the waste handled by the Facility is delivered by haulers licensed by the County. The County will co-operate with the Company in enforcing the implementation of this Program against Licensed Haulers. The provisions of this program apply as well to other haulers who make occasional deliveries to the Facility. With respect to these other haulers, the Company may refuse entry to the Facility for any violation of the rules.

3.1.2.2 PROGRAM OPERATION

1. NOTICE TO HAULERS
   All arriving solid waste vehicles are weighed at an inbound scale. At this scale, there will be posted a clearly visible notice that Unacceptable and Hazardous Waste is prohibited, together with clear warning of potential hauler bans and other legal penalties for violators.

2. INSPECTION PRIORITIES FOR HAULERS
   Although all vehicles are subject to inspection, priority for manual screening will be given to:

- those haulers known to serve industrial areas,
- those haulers whose service areas are not well known,
- front-end loaders and roll-off drop boxes, and
- packer trucks with commercial pick ups.

3. SCREENING PROCEDURES FOR UNACCEPTABLE AND HAZARDOUS WASTE
The screening procedures to be used at the Facility will include the following activities:

- Visual inspection of trucks by Equipment Operator for unusual looking loads (e.g. smoldering, uncovered, etc.);
- Routine visual inspection by tipping floor personnel and crane operator of material in the refuse vehicles as they are unloading;
- Visual inspection by the crane operator and other Facility personnel of the materials in the refuse pit; and
- Selection of vehicles to be screened as part of the spot-check portion of the screening program outlined below will be done both on a judgmental basis using criteria in Section 2 above and on a random load basis.

a. As detailed in Section 6, all personnel directly involved in the handling of incoming refuse, (tipping floor personnel, front end loader operator and crane operator), will be trained to visually identify, and instructed on how to deal with, Unacceptable Wastes and suspected Hazardous Wastes.

Whenever Facility staff identifies a hauler with Unacceptable or suspected Hazardous Waste or screens a hauler for possible Unacceptable or Hazardous Waste, inspection reports will be completed. Notification letters will be sent, as set forth in paragraph f hereof.

b. If the tipping floor personnel discover Unacceptable or suspected Hazardous Waste in an incoming truck, either at or before the truck reaches the pit area, the driver will not be permitted to discharge his load and will be directed to leave the site. The attempt to deliver will be recorded and repeat attempts could lead to disbarment from the facilities.

c. Operations staff routinely visually screen the refuse being unloaded and in the pit, looking for Unacceptable Waste and other prohibited materials, including drums/containers possibly containing unused or waste chemicals, large numbers of filled sacks, or substantial quantities of soil or powdery debris. If suspected Hazardous Waste is discovered, the procedures in Section 4 will be applied.

If the tipping floor personnel or the crane operator (any observation by the crane

operator will be relayed by radio to the tipping floor equipment operator) observe Unacceptable or suspected Hazardous Waste being discharged into the refuse pit, that hauler will not be permitted to leave the Facility. The vehicle will be reloaded and the hauler will be required to remove the Unacceptable or suspected Hazardous Waste from the Facility site. If the waste is suspected to be Hazardous and cannot be moved safely, the procedures in Section 4 will be followed.

If the Unacceptable or suspected Hazardous Waste is observed in or going into the refuse pit, but the delivery vehicle exits the tipping floor before it can be stopped, the Scalehouse Operator will be notified and every attempt will be made to identify and halt the vehicle before it exits the Facility. The hauler will then be required to reload the Waste and remove it from the Facility site. If the hauler cannot be identified or timely stopped and the Waste is suspected to be Hazardous, the procedures in Section 4 will be followed. If the Waste is Unacceptable, it will be placed in the process rejects box on the tipping floor.

d. Loads will be selected for inspection on a random basis. Loads selected for inspection will be directed to a designated screening area where an unloading spot will be provided. At the screening area, the load will either be discharged into the pit under the scrutiny of the tipping floor personnel, or haulers will be required to spread their load on the floor by dumping it in piles. If suspect materials are spotted, but are not readily accessible, the front end loader operator will spread the refuse tipped onto the floor using the loader bucket. If Unacceptable or suspected Hazardous Waste is found, the hauler will be required to remove it from the Facility. If the waste is suspected to be Hazardous and cannot be moved safely, the procedures in Section 4 will be followed. After conclusion of screening, Acceptable Waste will be charged to the pit by the front end loader. If no unacceptable materials are located, haulers will not be required to wait more than 10 minutes after the truck is emptied before exiting the tipping floor, unless in the reasonable judgement of the Company additional screening is warranted in which case the hauler must wait until the screening is completed.

e. In order to ensure safe handling of waste during screening and inspection, appropriate personnel protective gear, fire fighting equipment, and clean up equipment will be stored near the tipping floor. Appropriate materials needed to isolate any prohibited waste (rope, pylons, etc.) will also be stored near the tipping floor.

f. Whenever a vehicle is screened, a waste screening report will be completed by the Tipping Floor Equipment Operator. Attached as Appendix A is an illustrative example of a Waste Screening Report. If there is a violation of a

Facility rule, the driver of the offending vehicle will be immediately notified orally. The Pasco County Solid Waste Department will then be notified to transmit the information on the Unacceptable Waste so that the County can follow through and minimize this type of waste delivery. When the violation is committed by a Designated Hauler, a copy of the letter will be sent to the County.

4. HANDLING SUSPECTED HAZARDOUS WASTE

a. Whenever suspected Hazardous Waste is found and the hauler can be identified and it is safely possible the hauler will be required to reload and leave the Facility site. If it is not possible to reload the vehicle safely, subject to local laws and regulations, municipal or the authorities will be requested to impound the vehicle until the hauler can arrange for and actually remove the Hazardous Waste. A Notice of Violation (Appendix B) will be sent by the Company to the owner of the vehicle; and, if the violation is committed by a Designated Hauler; a duplicate copy will be sent to the County. It is the responsibility of the hauler to arrange for removal and disposal of Hazardous Waste in compliance with the law.

b. When haulers cannot be identified and the Company is required to handle suspected Hazardous Waste that does not appear to be an immediate threat, it will be set aside, roped off and isolated, away from traffic and personnel. Danger signs and warnings will be posted. No attempt will be made to open suspect waste containers. The Company will notify appropriate government agencies, including the local Fire and Rescue Department and Police Department, for dispatch to the Facility.

c. In all cases where suspected Hazardous Waste is found and is considered to present a possible immediate threat (such as explosives or ruptured drums), no attempt will be made by Facility personnel to move it. The material will be left in place and the area roped off. Personnel and traffic will be prevented from operating in that section of the plant. The Company will notify appropriate Emergency Response Personnel (Appendix C).

d. All sampling and identification of suspected hazardous Waste will be done by specially trained and equipped members of the local Fire and Rescue Department. If it becomes necessary, an independent contractor shall determine the status of any suspect material and identify the handling to be used. If a spill of a reportable quantity of an identified hazardous waste occurs, the Facility Manager and Pasco County Representatives will be notified either by the Company or local authorities. If the waste meets any of the hazardous waste identification criteria established by the controlling regulatory agencies, it will be properly packaged, labelled and transferred by appropriate local authorities. Its

transfer from the Facility will be accomplished in as expeditious a manner as practicable, using appropriate State/Federal forms and procedures, and only by appropriately-licensed hazardous waste transporters.

5. ENFORCEMENT PROCEDURES

a. UNACCEPTABLE WASTE

Haulers will be billed by the Company for any and all costs and expenses incurred as a result of bringing prohibited waste to the Facility. In addition, a special charge will be imposed by the Company on any hauler that attempts to deliver Unacceptable Waste to the Facility or otherwise violates the Facility's rules and regulations. With respect to Designated Haulers, written notice of the special charge will be sent to the hauler within seven business days of imposition, with a copy to the County; and any Designated Hauler that fails to pay the special charge or to reimburse the Company for its reasonable expenses for removing Unacceptable Wastes from the pit and disposing of it within 30 days of receipt may be refused entry to the Facility until the charges and any late payment interest have been paid. Also, the Company will request that the County revoke or suspend a Designated Hauler's license for repeat violations of Facility rules.

b. HAZARDOUS WASTE

All of the enforcement provisions outlined above may be applied against a hauler whose load includes Hazardous Waste.

The Company will take steps necessary to ensure that any hauler who knowingly brings Hazardous Waste to the Facility is permanently barred from the Facility.

6. EDUCATION

The Company will train its operations and supervisory staff on procedures needed to operate this Unacceptable and Hazardous Waste Screening Program. Training will include actions to be taken in the event suspect or identifiable Hazardous Waste. The employee training program will be implemented in the following manner:

Prior to assignments involving the management of incoming solid wastes, employees will be given classroom training. Following initial formal classroom training, employees will be given supervised on-the-job training. No new employee will be assigned to a position involving the management of incoming solid waste without supervision by an individual already trained or without having received formal training themselves. A master file which lists completed personnel training will be maintained at the Facility. This master file will include the trainee names, dates of sessions and instructors who participated in each training session.

Aggressive implementation of the screening, enforcement, and education program outlined above should effectively ensure that neither Unacceptable Wastes nor Hazardous Wastes is received at or processed at the Facility.

COVANTA PASCO, INC

	EMERGENCY CONTACTS		TELEPHONE
1.	**Covanta Management**		
A.	**Facility Manager**	**work -**	**(727) 856-2917**
	Christopher Spence	**cell -**	**(256) 682-2225**
B.	**Operations Manager**	**work-**	**(727) 856-2917**
	Bruce Hartmier	**home-**	**(727) 858-7134**
C.	**Maintenance Supervisor**	**work -**	**(727) 856-2917**
	Terry Harrison	**cell -**	**(727) 401-2840**
D.	**Business Manager**	**work -**	**(727) 856-2917**
	Patrick Walsh	**cell -**	**(813) 399-1773**
E.	**Environmental Specialist**	**work -**	**(727) 856-2917**
	Jamie Rocco	**cell-**	**(941) 567-7472**
2.	**Pasco County Consolidated Contact Number**		
	Fire and Rescue Department (Emergency)		**"911"**
	Fire (Non-Emergency)		**(727) 847-8102**
	Ambulance (Non-Emergency)		**(727) 847-8102**
3.	**Police Department (Emergency)**		**"911"**
	Non-emergency		**(727) 847-5878**
4.	**Local Hospital**		
	Nearest: Regional Medical Center Bayonet Point		**(727) 819-2929**
	2nd Nearest: Bayfront Health Hospital		**(352) 688-8200**
5.	**Southwest Florida Department of Environmental Protection**		**(813) 470-5700**

3.2 PROCEDURES FOR HANDLING MSW

3.2.1 REFUSE PIT MANAGEMENT

3.2.1.1 INTRODUCTION

During heavy delivery hours, trucks dump more refuse to the pit than can be fed to the stokers. The crane operator must arrange, or "stack," pit refuse to allow for efficient delivery truck dumping. Basically, this means keeping space open along the pit's front (north) wall where the trucks dump, while stacking excess refuse in other parts of the pit.

3.2.1.2 DESCRIPTION

The refuse pit divides into three bays along its length running east to west. This helps organize refuse delivery by designating specific areas for truck dumping. Although the bays are not physically separated, assume that they run through the width of the pit to the rear wall. In addition, assume that the pit further divides into three equal rows across its width. These rows; front, middle, and rear, are each slightly wider than a fully opened crane grapple. (Fig. 3.2.1-1)

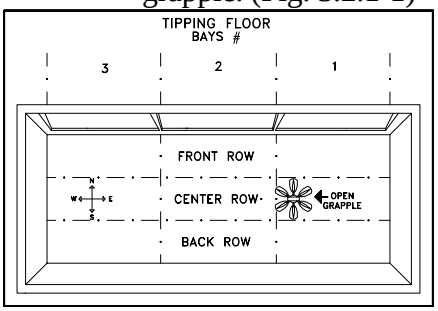


Figure 3.2.1.1: Refuse Pit

3.2.1.3 OPERATION

Proper pit management provides maximum refuse storage while keeping the front row sufficiently clear for arriving trucks to unload. The first goal is keeping the front wall dug well below tipping floor level so the trucks can dump directly to the pit. If overall refuse level is below the tipping floor, keep the rest of the refuse leveled.

When refuse deliveries exceed that fed to the stoker, stack it in the middle and rear pit rows. Use pit space effectively by building a "barrier wall" along the center row. Form this wall by moving refuse from the front row to the top of the center row. Take a grapple loaded from the front row and set it atop the center row. Let it overhang slightly toward the front row so the center row does not slope toward the front while building the wall of refuse. Open the grapple while slowly lowering atop this wall. This packs the refuse for a stable stack. Some refuse may tumble back to the front row.

Removing refuse from the front row, and stacking it along the center row, results in pit refuse as shown in Fig. 3.2.1-2. As the center wall rises, shift an occasional grab from the front row to the back row, behind the barrier wall. This quickly opens an area for arriving trucks to dump.

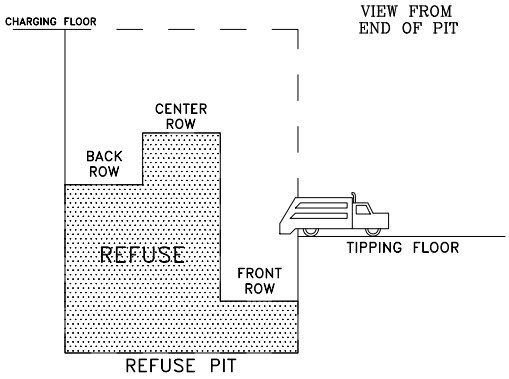


Figure 3.2.1-2: Properly Stacked Pit During Heavy Delivery Hours

The center and rear row height vary depending upon the amount of delivered refuse. However the rear row should always be six to ten feet below the center row.

It is important to form this center row barrier wall. If refuse is merely thrown back from the front row, a slope soon forms from the rear of the pit down to the front. Soon there is no way to stack refuse properly. It merely tumbles down the slope back to the truck unloading area along the front wall. (Fig. 3.2.1-3.)

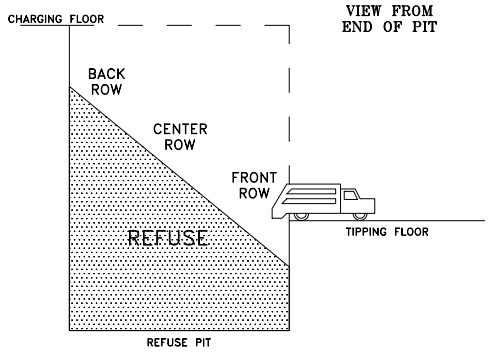


Figure 3.2.1-3 Improperly Stacked Refuse Pit

During extremely heavy delivery hours, it may be necessary to stack out entire bays. If required, begin stacking at the west end of the pit. Form a barrier wall along the centermost end of bay #3 when stacking out the west end. Build the wall as described above for the center row wall. This leaves lower areas in bay #3 for quick refuse displacement.

If refuse deliveries still exceed pit space, continue stacking from the west end of the pit toward the center. Always form the barrier walls as described above in the centermost bays for efficient use of pit space.

During non-delivery hours on weekdays, manage the pit as necessary to best prepare it for deliveries the next day. This includes digging out the front row and laying a firm foundation for the center barrier wall.

On weekends always try to empty at least one half of the pit on either end. Alternate the ends emptied every other weekend. Refuse that remains undisturbed too long begins to form a compost. This generates excessive heat and odor as well as degrading the refuse BTU value.

Close communications between the crane operator and tipping floor manager helps provide the most effective pit management. These two must always keep each other well informed as to intentions, unusual conditions, pit managing strategy as discussed above, etc. Cooperation is essential for efficient operation of the tipping floor, pit, and stoker charging. However if a conflict arises, the crane operator's instructions should be followed.

3.2.2 PREPARING FUEL WITH THE REFUSE CRANES

3.2.2.1 INTRODUCTION

Tasks discussed here prepare refuse before loading to the feedchute to provide smooth stoker combustion. They also help prevent stoker system plugs and dangerous operating conditions.

3.2.2.2 DESCRIPTION

Tasks for preparing refuse include:

1. Watch for, and reject from the fuel stream, any unacceptable waste. Unacceptable waste is:

   a). Bulky material or items that may cause stoker system plugs and cannot be broken up.

   b). Excessive amounts of incombustible material.

   c). Anything posing a threat to health or safety.

   d). Anything that may damage, or adversely affect operation of, the plant.

In general, unacceptable waste means excessive amounts of any material that is incombustible, bulky, or hazardous to process. This includes, but is not limited to; large machinery, whole or large parts of cars, trucks, or motorcycles, excessive amounts of incombustible construction or demolition debris (sheetrock, insulation, bricks, piping, etc.), metal drums, large household appliances, water heaters, large tree stumps, explosives, hazardous chemicals, animal carcasses, and large quantities of oil, paint, or other liquids, etc.

The tipping floor loader operator usually rejects unacceptable wastes. However this material is sometimes overlooked. Immediately notify the tipping floor equipment operator or the hauler not to unload a truck if you see unacceptable waste.

Still yet, unacceptable waste sometimes enters the pit. When uncovered, seize these items in the grapple. Lower to the lay down areas at the west end of the pit on the tipping floor. The crane operator cannot see the grapple during this procedure. Operate the crane according to hand signals (Fig. 3.2.2-1) given by the tipping floor equipment operator. Use these hand signals any time when coordinating crane movement with a worker remote from the crane cab.

If the crane operator or tipping floor equipment operator is busy, store these items in a

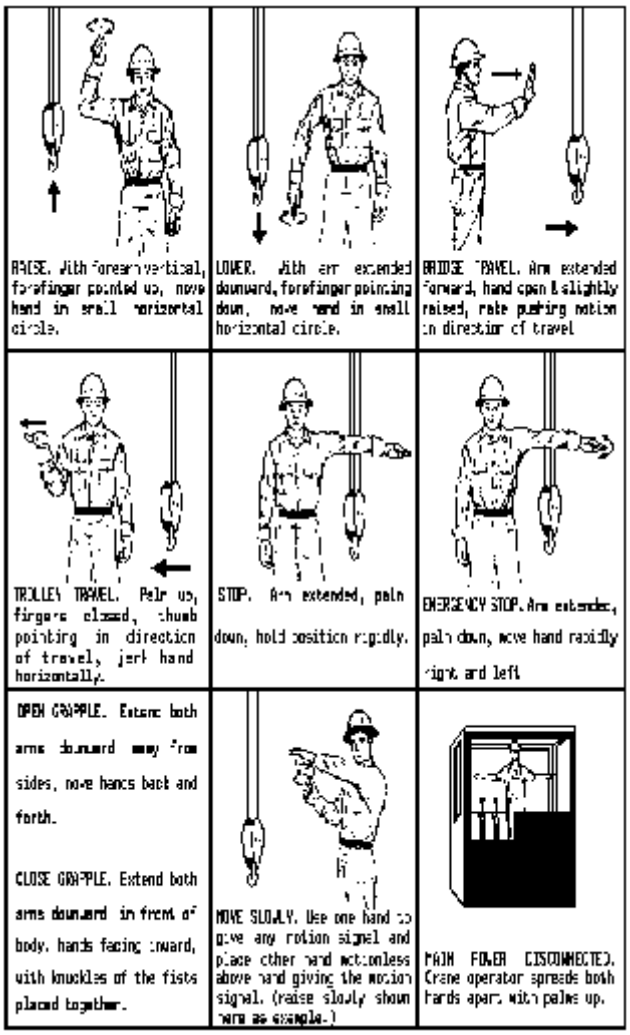


Figure 3.2.2-1: Standard Crane Operation Hand Signals

selected area of the pit, if available, until it is convenient to remove them. Once rejected from the pit, the tipping floor man transfers this material to the reject bin by the tipping floor's south wall with the front end loader.

2. Thoroughly mix pit refuse. Well blended fuel provides smooth combustion. Mixing is best accomplished by spreading freshly delivered fuel across the pit. Raise a loaded grapple above the pit refuse level. Bridge the crane along the length of the pit

while slowly opening the grapple.

3. Break up bulky refuse before loading to the feedchute.

   Before taking a loaded grapple to the feedchute, raise it a few feet above the refuse in the pit and open the grapple. "Fluffing" the refuse in this manner also helps to mix the refuse as mentioned above.

4. Never feed refuse to the charging hopper if water is running from the grapple. Spread such a load back through the pit so it mixes with drier refuse.

5. Usually, when digging near the bottom of the pit, the refuse has not been disturbed for at least several days. The refuse here is dense and moist because it has been beneath tons of refuse. Mix it with fresher refuse before loading to the feedchute.

6. Once an acceptable bucket of refuse is found, load it into the desired feedchute.

3.3 PROCEDURES FOR FEEDING MSW

3.3.1 LOADING STOKER FUEL AND MISCELLANEOUS TASKS

3.3.1.1 INTRODUCTION

Use the refuse cranes to load fuel to the stoker feedchutes and clear feedchute plugs if necessary. Make complete and accurate crane log entries. Maintain crane cab and charging floor cleanliness.

3.3.1.2 FEEDCHUTE LOADING

After properly preparing a grapple of fuel as discussed in Section 3.2.2, load it to the feedchute as follows. (Fig. 3.3.1-1.)

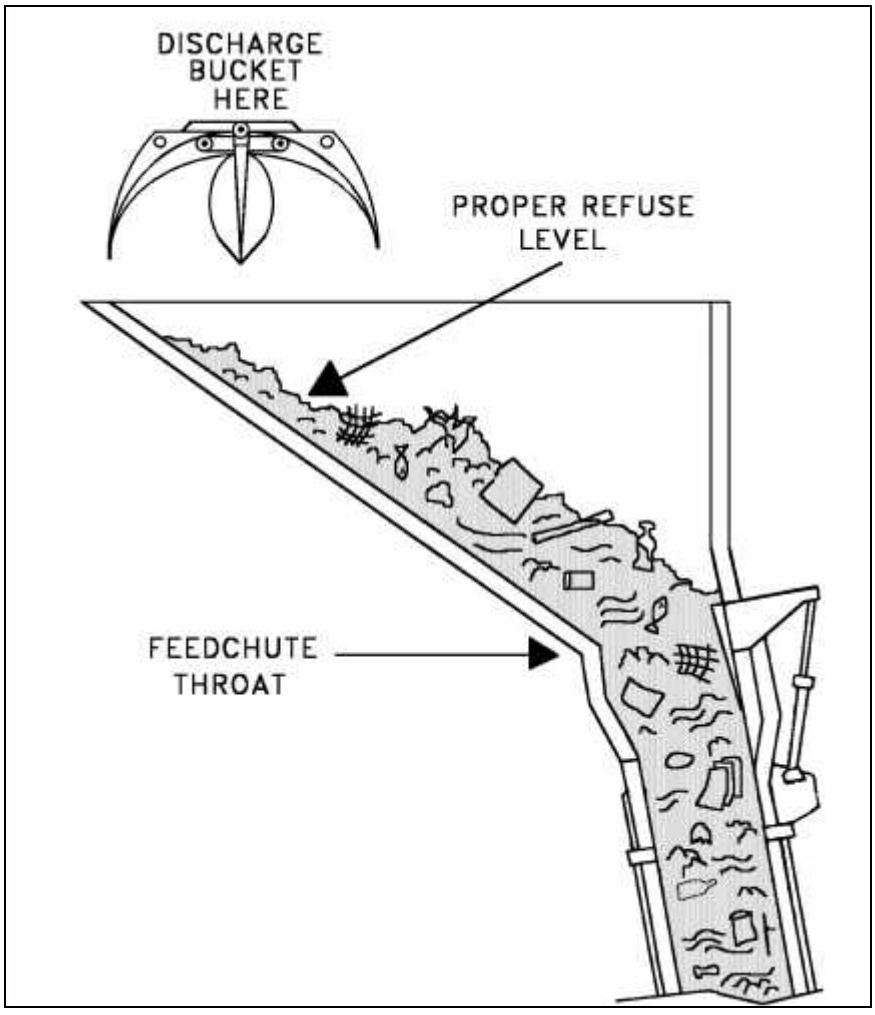


Figure 3.3.1-1: Proper Feedchute Loading

1. Refill the feedchute regularly, as soon as hopper capacity allows. A consistent feedchute level, in combination with point #2 below, supplies a steady head of refuse to the feedrams below. This is necessary for proper computer controlled stoker operation.

2. Spread fuel across the width of the feedchute to keep it level from side to side. "Feather" the grapple open while slowly bridging from one side of the feedchute to the other. Otherwise feed alternate grapple loads to opposite sides of the feedchute.

3. During normal operation, never allow the fuel level to fall below the feedchute throat. This condition could lead to loss of stoker seal from atmosphere as well as affecting the computer controlled fuel stoking.

4. Discharge fuel over the top of the feedchute's inclined face. This allows the refuse to break apart as it tumbles down the inclined face to help avoid hopper plugs at the feedchute throat.

3.3.1.3 CLEARING FEEDCHUTE PLUGS

Most feedchute plugs are avoided by properly preparing fuel as described in Section 3.2.2. However, if a plug occurs the following actions should be taken:

1. Immediately notify the shift engineer of the plug's nature, location and extent. The shift engineer must ensure negative draft so flames and burning materials do not blow to atmosphere if the boiler seal is lost.

2. Attack the plug using the gaff poles. These are long poles with pointed probes and hooks on the end to ram into, or hook and pull at, the plug. Probe for weak spots in the plug. If you can destroy the weakest area, the remainder of the "bridge" will collapse.

3. If the plug cannot be cleared within the first few minutes, request additional help and directions from the Lead Engineer.

4. Continue attacking the plug.

DANGER! NEVER LEAN OVER THE FEEDCHUTE EDGE WHILE CLEARING A PLUG. IT IS ALSO ABSOLUTELY FORBIDDEN TO CLIMB ATOP THE FEEDCHUTE EDGE WHILE THE STOKER IS OPERATING!

3.3.1.4 REFUSE CRANE LOG ENTRIES

Keep complete and accurate crane log entries. Information logged should include:

1. Times that any operator takes control of a refuse crane.

2. Extent and findings of any crane inspections, by operations or maintenance personnel.

3. Any crane repairs, such as cable or brake shoe replacement, etc.

4. Any crane damages or wear which may affect crane operation.

5. Any unusual or unsafe refuse delivery truck operation.

6. Any attempted delivery of unacceptable loads as described in Section 3.2.2.

7. Any unusual operating conditions.

In addition to making log entries, immediately report any of the information discussed above to the Lead Engineer as necessary.

3.3.1.5 CLEANING

1. The Crane Operator is responsible for maintaining charging floor area cleanliness. Wear a dust mask and goggles while working in the charging floor's high dust environment.

2. The crane operator is usually the responsible person for cleaning and inspecting the cranes. At times it will be necessary to designate another operator to clean the cranes due to unusual conditions.

3. The crane operator is responsible for cleanliness of the crane operating area.

3.3.2 REFUSE CRANE SAFETY AND OPERATOR RESPONSE TO REFUSE FIRES

3.3.2.1 SAFETY

In addition to safety items discussed throughout this training manual, follow all safety practices outlined in the Crane Manufacturers and Service vendor manual. A dust mask and goggles must be worn while working in the high dust areas of the charging or tipping floors.

3.3.2.2 REFUSE FIRE RESPONSE

The following are training guidelines. Do not substitute them for plant operating procedures.

Refuse trucks occasionally arrive at the plant carrying **hot loads.** A hot load is smoldering refuse. If the crane operator sees a hot load, he must immediately inform the Tipping Floor Equipment Operator or truck driver over the public address system or by using the crane warning horn not to unload to the pit.

After completing fire fighting preparations (man hoses, don protective gear, etc.) direct the truck to dump the load in the Hot Load Lay Down Area. After extinguishing the load, the Tipping Floor Equipment Operator carries the refuse with the front end loader to the pit. Feed this refuse to the stokers immediately. Maintain a close watch until the refuse descends below the feedchute throat.

Refuse pit fires include smoldering, smoking refuse as well as refuse with live flame. Upon seeing a refuse pit fire, the crane operator first notifies the control room. The fire's location, extent, and severity must be included in this initial report. Move the overhead refuse cranes as necessary to clear the hazard area.

If the refuse is smoldering, do not disturb it until fire fighting preparations are completed in case it ignites into live flame. The refuse atop the smoldering fire helps prevent ignition by keeping oxygen from reaching the smoldering refuse. Fire fighting preparations include manning fire hoses and cannons, donning protective gear and breathing apparatus as necessary, and assuring the shift engineer prepares to call the fire department if necessary.

Once completing fire fighting preparations, lower the grapple into the affected area while disturbing the refuse as little as possible. Feed the grapple directly to whichever feedchute has the lowest refuse level at the time. Continue feeding from the affected pit area until all smoldering refuse is removed. Maintain a watch over the loaded feedchute(s) until the affected refuse descends below the feedchute throat.

Upon seeing live flame in the refuse pit, the crane operator first notifies the control room operator, providing the information outlined above. The control room operator immediately notifies the shift supervisor and calls the fire department. Move the cranes clear of the hazard area.

Put on protective gear and breathing apparatus as required. Fight the fire using the water cannons, hoses, or overhead sprinkler system as necessary. Once the fire department arrives on the scene, follow their instructions to fight the fire.

After extinguishing the fire, feed the affected refuse directly to the stoker feedchutes as described above.

Feedchute fires include smoldering, smoking refuse as well as refuse with live flame in the feedchute. They can occur upon a loss of boiler seal if fire travels back up from the grates. They can also occur if loading hot refuse.

The crane operator first notifies the control room, providing the same information as discussed above. Move the cranes clear of the hazard area. Complete fire fighting preparations. If conditions allow, wait for the lead engineer to determine whether to use water on a feedchute fire. If required, use water sparingly and only as a fine mist.

WARNING! DO NOT POUR WATER DOWN INTO THE FEEDCHUTE. THIS CAUSES EXTENSIVE WARPING OF HOT STOKER COMPONENTS.

The lead engineer may also decide to smother smoldering refuse by loading another grapple atop it in the feedchute.

If a feedchute fire's severity threatens to ignite the refuse pit, use whatever means necessary to extinguish quickly.

If a feedchute plug causes the fire by providing a path for fire from the grates, clear the plug to re-establish stoker seal.

Always watch the feedchute for re-ignition until all affected refuse descends well below the feedchute throat.

Once re-establishing normal operating conditions after any fire, always survey equipment used. Order fire extinguishers, oxygen bottles, etc. as needed. Dry and hang fire hoses and return all other fire fighting gear to readiness condition.