Sarasota County Central County Solid Waste Disposal Complex
Solid Waste Operations Permit Renewal Application
DRAFT DEPARTMENT COMMENTS AND COUNTY RESPONSES

Engineering Report

1. Section C.6 of the operations permit renewal engineering report (pg. 3 of 27) indicates the facility will accept and dispose of biomedical waste in accordance with Rule 62-701.520(5)(c). The provided reference is incorrect. Per 62-701.300(6) the facility may accept biomedical waste has been treated by a process approved by the Department of Health, and provisions in paragraph 62-701.520(5)(d), F.A.C., are complied with. Please update the section to include the approval of DOH and reference the correct section in your report.

   Section C.6 of the Engineering Report has been revised to correct the reference to Rule 62-701.520(5)(d). Also, reference to Rule 62-701.300(6) regarding treated biomedical waste has been added to the section and to Section K.2.c.(6) of the Operations Plan.

   Please see the revised documents included as supplement information.

Operations Plan

2. The next to last sentence of section K.2.f.(1) of the operation plan provided as Attachment C of the operations permit renewal package indicates the "Southwest" district office will be notified. Please revise this sentence to reflect the South district office.

   The sentence has been revised in Section K.2.f.(1) as requested. Please see the revised documents included as supplemental information.

3. The fill sequencing described in K.2.f.(2) and K.7.b appears to be inconsistent with Rule 62-701.500(7)(b) which states "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 waste containing no rigid objects that may damage the liner or leachate collection system". These sections indicate the select waste will be placed with a low ground pressure dozer. Please provide equipment or placement specifications that assure a compacted layer is achieved.

   Following discussion with the Department, there is no response required for this draft comment. The information submitted with the application is sufficient.

4. The fill sequencing described in K.2.f.(2) regarding the filling in New subcell states "The initial lift of solid waste will progress from south to north across the entire width of the landfill subcell". The provided Phase II class I Landfill Staging Plans drawing sheet C-06 indicates that there will be a leachate containment area which is not discussed in the operation plan. Please update the drawings or the text to clearly define the proposed fill sequencing at the site.

   The leachate containment area is discussed in detail in Section K.2.f.(4).1 of the Operations Plan. This section has been updated to provide additional information regarding the filling of the cell across the width. Please see the revised documents included as supplement information.

5. Section K.2.f.(4).2 of the provided operations plan is not well worded. Please update the section to clearly describe the "leachate drains at working face". The proposed drains while not disallowed by rule are not a recommended practice for leachate management based upon Department review. The Department encourages the County investigate alternate operations at the working face to correct the cause of the ponding rather than just dealing with effects.

   Section K.2.f.(4).2 has been revised to provide clarification and additional information in regard to the construction of the proposed leachate drains. Please see the revised documents included as supplemental information.

6. Section K.5 "Effective Barrier/Access Control" indicates the access gate "normally" will be kept closed and locked during non-operation times. Please update the section to indicate the gates will remain locked during non-operation periods.

   Section K.5 has been revised to remove the term "normally" from the description. Additional information has been added to the section to clarify the circumstances in which the gates may be open during non-operations hours. Please see the revised documents included as supplemental information.

7. The second sentence of section K.6(2) "Training of contract personnel shall continue on an ongoing basis" appears not to mesh with the paragraph. Please verify the intent of the paragraph and reword as necessary.

   The sentence in Section K.6.(2) referenced above has been removed and the first sentence clarified to say "a Contractor or County employee". Please see the revised documents included as supplemental information.

8. The fourth bullet point of section K.7 indicates runoff from areas outside the bermed working faced area that have received six inches of compacted soil (or mixture of soil/mulch) would be considered stormwater. The provided Phase II class I Landfill Staging Plans drawing sheet C-06 indicates that the stormwater containment area is covered with 12" intermediate and 6" initial cover. Please update this section to indicate that only runoff from areas which have received initial and intermediate cover that does not contact leachate would be handled as stormwater.

   Section K.7 has been revised to clarify that flow may also be handled as stormwater as long as it has not contacted leachate. Please see the revised documents included as supplemental information.

9. The provided Phase II class I Landfill Staging Plans drawing sheet C-06 indicates that the working face would be split by a temporary stormwater diversion berm with a leachate drain from the working face area discharging to a "Leachate Containment Area" and the other side of the berm would discharge stormwater to the adjacent cell not currently filled with waste. All runoff from areas upslope of the leachate containment area regardless of provided cover would be considered leachate due to the fact the runoff would contact leachate. This configuration appears not to minimize leachate production. Please provide assurance that this configuration would not increase the head on the leachate collection system greater than maximum one foot of head specified in rule.

   Following discussion with the Department, there is no response required for this draft comment. The information submitted with the application is sufficient.

10. Section K.7.k of the operation plan sheet 26 of 39 the first bullet of paragraph four states " If greater than 50 percent of the soil cover material has eroded, then the area will be repaired within seven days." Per 62-701.500(7)(k) erosion control measures shall be employed to correct any erosion which exposes waste or causes malfunction of the stormwater management system. Such measures shall be implemented within three days of occurrence. If the erosion cannot be corrected within seven days of occurance the landfill operater shall notify the Department and propose a correction schedule. Please update this section to comply with the rule requirements for erosion control.

    Following discussion with the Department, there is no response required for this draft comment. The information submitted with the application is sufficient.

11. The Leachate Pumping station table provided on sheet 31 of 39 of the operation plan appears to be formatted incorrectly. Please adjust the format of the table.

    The table provided on Sheet 31 of 39 has been corrected to show the proper formatting. Please see the revised documents included as supplemental information.

12. The second bullet on sheet 32 of 39 of the operation plan does not appear to match the data given in the table provided on the previous sheet. Please adjust the high water alarm elevation to be consistent with the table or clarify this tank is separate from the pumping station.

    The second bullet on Sheet 32 of 39 has been corrected revised to indicate that the County will implement leachate contingency operations at 24 feet depth in the tank. Please see the revised documents included as supplemental information.

13. Section K.11.d page 37 of 39 of the operation plan paragraph two bullet one states "Leachate may only be sprayed on active, bermed fill areas, including the working face, and areas with the required six inches of initial cover". Please adjust the bullet point to specify interior areas only.

    Section K.11.d has been revised to indicate interior areas. Please see the revised documents included as supplemental information.

14. The provided Phase II class I Landfill Staging Plans Sheet numbers C-01 through C-03 notes appear to conflict with the fill sequencing provided in the operations plan. Please update the operation plan or details to be consistent.

    Per Draft Comment Response 4 above, the Section K.2.f.(2) has been revised to clarify the filling sequence for a subcell to better match the fill sequence drawings and details.

15. Attachment K-2-7 used tire storage Area Special rules sub section B. indicates the Tampa office be contacted in case of emergencies. Please update the section to indicate the Fort Myers office be contacted at 239-332-6969.

    Section B of the Waste Tire Safety Plan has been revised to remove reference to the Tampa office and insert reference to the Ft. Myers office. Please see the revised documents included as supplemental information.

16. Section 3.0 of the closure and long term care plan indicates 62-701.610 should be followed. This appears to reference the wrong section of the rule. Please update the section to indicate 62-701.600 should be followed.

    The reference provided in Section 3.0 has been revised as requested. Please see the revised documents included as supplemental information.

17. Section 3.1 of the closure and long term care. Please replace "will be" with "was" in the second sentence.

    Section 3.1 has been revised as requested. Please see the revised documents included as supplemental information.

18. Section 3.2 references an incorrect rule. Please update the section to reference 62-701.600(6)(b).

    The reference provided in Section 3.2 has been revised as requested. Please see the revised documents included as supplemental information.

19. Section 3.3 should reference 62-701.600(6). Please update the section accordingly.

    The reference provided in Section 3.3 has been revised as requested. Please see the revised documents included as supplemental information.

20. Section 3.6 should reference 62-701.610(1). Please update the section accordingly.

    The reference provided in Section 3.6 has been revised as requested. Please see the revised documents included as supplemental information.

Water Quality Monitoring Plan

21. In Section 2.2, Form 62-701.900(30) is referenced for Monitoring Well Completion Report, however, there is no form (30). Please revise to Form 62-701.900(21). Please also revise this reference in Attachment A.

    Following discussion with the Department, there is no response required for this draft comment. The information submitted with the application is sufficient.

22. In Section 4.1, Form 62-701.900(31) is referenced for Water Quality Monitoring Certification, however, there is no form (31). Please revise to Form 62-701.900(22). Please also revise this reference in Attachment B.

    Following discussion with the Department, there is no response required for this draft comment. The information submitted with the application is sufficient.

23. In Section 4.2, please revise the reference to F.A.C. 62-701.510(9)(b) to F.A.C. 62-701.510(8)(b).

    The reference provided in Section 4.2 has been revised as requested. Please see the revised documents included as supplemental information.

24. On Figure 1 (Sheet 1/1), the map shows MW-18, 19, and 20 as TBA, but a locations are listed in the table on the figure for MW-19A and MW-20A. Please clarify.

    MW-19A and MW-20A currently exist at the site as compliance wells and are proposed to replace MW-19 and 20, which will be abandoned, as detection wells.

    MW 18 will be abandoned and replaced with MW-18R. Figure 1 will be revised and submitted to the Department to remove the abandoned wells MW-18, 19, and 20 and provide the actual constructed location of MW-18R. Please note that the location of proposed MW-18R is approximate. The actual location is anticipated to be adjacent to the existing MW-18R near the edge of pavement of the access road as shown in the marked-up, signed and sealed map provided with the supplement information.

SUPPLEMENTAL INFORMATION

ENGINEERING REPORT

REVISED SECTION C.6

f. The CCSWDC is located on property owned by Sarasota County and there are no public right of ways of highways, roads or alleys located within the site.

C.2 If the facility qualifies for any of the exemptions contained in Rules 62-701.300(12) through (18), FAC, then document this qualification(s)

Sarasota County is not requesting any of the exemptions contained in Rule 62-701.300(12) through (18).

C.3 Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC.)

Solid waste burning is prohibited at the CCSWDC.

C.4 Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC.)

The CCSWDC does not accept or dispose of the hazardous waste at the Class I Landfill, yard waste processing facility, tire processing facility, or C&D processing facility. The waste stream is inspected for prohibited materials before disposal and, if found, managed in accordance with the Operations Plan. Household hazardous waste materials are accepted at the Household Hazardous Waste Collection and Citizens Convenience Center (HHWCCC) located to the east of the Main Administration Building and Scales at the CCSWDC. Additional information regarding management of hazardous waste and the HHWCCC is provided in the Section K.2.c of the Operations Plan provided in Attachment C.

C.5 Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC.)

Polychlorinated biphynels (PCB) materials or wastes containing PCBs are not accepted or disposed at the CCSWDC Class I Landfill, tire processing facility, yard waste processing facility or C&D processing facility. PCBs in quantities smaller than a 55-gallon drum are accepted at the HHWCCC.

C.6 Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC.)

The CCSWDC will accept and dispose of treated biomedical waste ~~that is treated~~ in accordance with Rules 62-701.300(6) and 62-701.520(5)(d~~e~~). Untreated biomedical waste will not be accepted or disposed at the CCSWDC.

C.7 Provide documentation that the facility will be in compliance with the Class I surface water restrictions; (62-701.300(7), FAC.)

f. The CCSWDC is located on property owned by Sarasota County and there are no public right of ways of highways, roads or alleys located within the site.

C.2 If the facility qualifies for any of the exemptions contained in Rules 62-701.300(12) through (18), FAC, then document this qualification(s)

Sarasota County is not requesting any of the exemptions contained in Rule 62-701.300(12) through (18).

C.3 Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC.)

Solid waste burning is prohibited at the CCSWDC.

C.4 Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC.)

The CCSWDC does not accept or dispose of the hazardous waste at the Class I Landfill, yard waste processing facility, tire processing facility, or C&D processing facility. The waste stream is inspected for prohibited materials before disposal and, if found, managed in accordance with the Operations Plan. Household hazardous waste materials are accepted at the Household Hazardous Waste Collection and Citizens Convenience Center (HHWCCC) located to the east of the Main Administration Building and Scales at the CCSWDC. Additional information regarding management of hazardous waste and the HHWCCC is provided in the Section K.2.c of the Operations Plan provided in Attachment C.

C.5 Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC.)

Polychlorinated biphynels (PCB) materials or wastes containing PCBs are not accepted or disposed at the CCSWDC Class I Landfill, tire processing facility, yard waste processing facility or C&D processing facility. PCBs in quantities smaller than a 55-gallon drum are accepted at the HHWCCC.

C.6 Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC.)

The CCSWDC will accept and dispose of treated biomedical waste in accordance with Rules 62-701.300(6) and 62-701.520(5)(d). Untreated biomedical waste will not be accepted or disposed at the CCSWDC.

C.7 Provide documentation that the facility will be in compliance with the Class I surface water restrictions; (62-701.300(7), FAC.)

REVISED OPERATIONS PLAN

Sarasota County
Solid Waste Operations

Central County Solid Waste Disposal Complex Operations Plan

September 2013

Prepared by
Sarasota County Solid Waste Operations
4000 Knights Trail Road
Nokomis, FL 34275

TABLE OF CONTENTS

ATTACHMENTS

SECTION K
OPERATIONS PLAN

K.1 TRAINING

In accordance with Rule 62-701.500(1), Florida Administrative Code (F.A.C.), key supervisory staff members at the Central County Solid Waste Disposal Complex (CCSWDC) have received Landfill Operator Certification training. The training plan can be found in Attachment K-1. Sarasota County staff or a qualified landfill operations contractor will operate the CCSWDC. Sarasota County will require the operating entity to provide at least one trained landfill operator certified in accordance with Chapter 62-701.320(15), F.A.C. and at least one trained spotter at each working face during operation when the landfill receives waste to detect unauthorized wastes from each load.

The spotters will be responsible for guiding vehicles and promoting an efficient operation during normal operation hours. The spotters shall also be responsible for enforcing provisions for controlling the waste received. These provisions are described in Section K.2.c.

The CCSWDC will be operated in compliance with all applicable regulations governing the operation of solid waste management facilities and surface water management facilities.

In addition, the equipment operators have sufficient training and knowledge to move waste and soil, and to develop the site in accordance with the design plans and operational standards.

Interim spotters, who do not have the formal spotter training, may be employed at the CCSWDC provided that the interim spotter is under the direct supervision of a trained operator or trained spotter. The interim spotter must receive training as an operator or spotter within three months of employment.

An interim operator may be employed at the CCSWDC provided that the interim operator has had at least one year of experience at the facility or a similar facility. An interim operator must receive operator training within one year of employment as interim operator. An interim operator shall serve as the operator for the facility in lieu of a trained operator for no more than three consecutive months.

In the event the spotter is located on heavy equipment spreading waste at the working face, then the equipment operator must be a trained landfill operator or spotter. The equipment operator will remove unauthorized waste from the working face to a temporary area next to the working face for later removal/management or stop operations and notify another operator or ground personnel to assist with removal/management of the unauthorized waste before resuming operations.

K.2 LANDFILL OPERATIONS PLAN

K.2.a Designation of Responsible Persons

The CCSWDC is owned by Sarasota County and operated under the direction of the Sarasota County Solid Waste Operations ~~Unit~~Division Manager~~.~~ (Manager). The Manager will be the designated responsible person for the operation of the CCSWDC.

A list of the designated landfill positions is provided below. The Contractor must have an adequate number of positions working to fulfill their contractual obligations which at all times shall include at a minimum a manager (general ~~manager, a~~or operations), an equipment operator and a spotter. The County shall have a minimum of one position at the site when waste is being accepted. Training requirements are also provided for each position. The anticipated position list for both the Contractor and the County is provided below.

CONTRACTOR:

- General Manager (~~1) (~~Operator)
- ~~Lead~~ Operations Manager (Operator)
- Equipment ~~Operator (1)~~Operators (Operator~~)~~
- ~~Equipment Operator (5~~/Spotter)
- Laborer/Spotter (~~1) (~~Spotter)
- ~~Laborer (1) (Spotter)~~

COUNTY:

- ~~Solid Waste~~ Manager (~~1) (~~Operator)
- Compliance Specialist (~~1) (~~Operator)
- Solid Waste Engineer (~~1)~~ Operator)

K.2.b Contingency Operations for Emergencies

K.2.b.(1) Emergency Provisions

Emergency conditions at the landfill site may occur as a result of a natural disaster (hurricane, tornado, flooding, etc.) or fire. In the event emergency conditions will interrupt operations at the CCSWDC, the following safety and contingency plan will be implemented (see Attachment K-2). In addition, staff shall review and implement the most current version of the Sarasota County Solid Waste Operations Emergency Plan on file at the CCSWDC. Refuse is not normally delivered to the site during emergency conditions; however, should a major storm occur, the following actions shall be taken:

- Daily cover shall be applied to all exposed refuse before a major storm arrives, if possible.
- All landfill equipment shall be parked near any natural wind screens such as earthen mounds and berms.
- All lightweight signs and equipment shall be secured.
- When operation resumes, work shall commence in dry areas only (up from the active working face). Refuse shall not be deposited in standing water.
- Contract agreements with local contractors, equipment suppliers, or cooperative lending agreements with other County departments will be pursued for backup equipment, if necessary.

Small fires on the working face will be controlled by a bulldozer, landfill compactor and a water wagon and ample cover material to extinguish the fire. On-site stockpiles of soil cover material will always be available for suppressing fires. The large stormwater retention basins adjacent to the landfill will serve as the water source for ~~fire fighting~~firefighting purposes.

In the event of a fire or other emergency, the solid waste operations manager or their designee will notify the Florida Department of Environmental Protection (FDEP) within 24 hours by telephone and within seven days a written report will be submitted describing the origins of the emergency, actions taken, result of the actions taken, and an analysis of the success or failure of the actions. However, if the fire cannot be extinguished by CCSWDC personnel within one hour, the FDEP and the local government will be

notified of the fire and informed of the fire control measures taken at the facility. If the fire cannot be extinguished within 48 hours or Solid Waste Operations determines additional assistance is needed at anytime, the local fire control protection agency will be called.

In addition, the local government and neighbors, which may be impacted by the fire, will be notified.

The Nokomis Fire Department presently maintains a fire station at 111 Pavonia Road in Nokomis, approximately 10.9 miles from the CCSWDC. This station has equipment capable of obtaining water from surface sources for fire fighting. In addition, the City of Venice has a fire station located at 5300 Laurel Road in Venice, FL located approximately 7.6 miles from the CCSWDC.

Waste will continue to be accepted and disposal operations will continue in the event of a fire. Operations will be moved a safe distance from the fire location so as not to pose a hazard to operating personnel or customers.

A hot load area will be provided within the lined disposal area in a location away from the working face to allow vehicles arriving at the landfill with a fire in their load to dump quickly in an area where the material can be spread out and quickly covered with soil. The location of the hot load area will change from time to time with the changing working face locations. Hot loads will not be dumped on the working face until sufficiently cool to avoid combustion.

As described in Sections K.11.a. and K.11.b, the Contractor will provide adequate equipment on-site to ensure proper operation of the landfill and for excavating, spreading, compacting, and covering waste. As part of an agreement with a maintenance contractor, the Contractor will receive loaner equipment within ~~48~~24 hours of equipment breakdown, if required. These basic emergency procedures should protect the landfill and equipment, and allow reactivation of the operation in an orderly and timely manner. Two mobile electrical generators are maintained on-site to provide power during outages for the administration building, scale house, and ~~maintenance building~~Contractor's maintenance building, and leachate collection system. There is also a stationary, dedicated emergency generator to provide power to the administration building, scale house and scales.

In case of an accidental spill of oil, fuel, leachate or chemicals, the spill will be minimized by controlling the source immediately (e.g., by closing valve, turning-off switch, or taking any other necessary action). The affected area will be controlled by diverting vehicular traffic. Runoff from the affected area will be controlled by building a berm, plugging drain or ditch, or adding absorbent material. The affected area will be cleaned, and the effectiveness of the cleanup confirmed by sampling, as needed depending on the nature of the spilled material. For spill countermeasures of secondary containment at the Leachate Storage Tank refer to Section K.8.b, Leachate Collection and Removal System. ~~A list of emergency telephone numbers is provided below.~~

A list of emergency telephone numbers is provided below.

Ambulance Service	911
Police Department	911
Fire Department	911
CCSWDC Administration Building	(941) 861-1573

Main Switchboard Sarasota County Government (941) 861-5000

~~Southwest~~South District, Dept. of Environmental Protection (~~813) 632-7600~~(239)-344-5600

Remember, if you are calling from a phone, which is connected to the County's switchboard, you must dial 9 then 911 to reach the emergency operator.

K.2.b.(2) Wet Weather Operations

Steps to be taken for accommodating wet weather solid waste disposal include: 1) set-aside elevated tipping areas with limestone or shell approaches or other acceptable base material as needed to allow uninhibited vehicular movement; 2) set-aside elevated sandy cover material, and 3) erect containment berms around wet weather tipping areas in accordance with Section K.2.h.

In order to avoid an excessive accumulation of standing water in the area of the working face, a small area of daily cover will be removed by grading to allow direct percolation to the underlying refuse and leachate collection system. In the event direct percolation into the waste does not drain leachate as quickly as needed, the operator may utilize other leachate drainage options including directing leachate to a leachate containment area along the west side of the Phase II active subcell to drain directly into the leachate collection system of the active subcell of Phase II, using drains at the working face constructed of cut/shredded tires to improve drainage at the working face, and using p~~P~~umping equipment that is available on-site, if required, to remove ponded leachate by pumping it to either a tanker truck for proper treatment and disposal, or to a leachate collection manhole. Additional details and information regarding the operational options listed above for wet weather conditions and control of stormwater and leachate is included in Section K.2.f.(4), Stormwater Controls.

K.2.c Controlling the Type of Waste Received at the Site

The ~~automated accounting system,~~ clerks at the ~~scalehouse, and~~ scale house, the site security fence, and access gate system discourage unauthorized entry and disposal of unauthorized waste. A sign located at the entrance states the general regulations including the types of unauthorized solid waste.

At least one trained spotter will be at each working face when wastes are received at the landfill. Normally, one working face will be operating at the landfill. There may be occasions where two or more working faces are required such as when the first lift of waste is placed in a new ~~cell~~subcell, during high volume periods such as after a storm, or when the size of a working face is limited such as at the corner of a ~~cell~~subcell. The spotters will be trained in accordance with Rule 62-701.320(15) and in accordance with the training plan described in Attachment K-1 to recognize unauthorized waste. Each load of waste will be visually inspected at ground level by the spotter as well as by the equipment operators spreading the waste. The spotters and equipment operators will look for containers and other indicators of unauthorized waste. Upon detection of unauthorized waste, the spotters will require the hauler to remove the material for disposal at a proper facility. If the hauler has departed, the spotter will remove the material from the working face for temporary storage until the material is taken to the appropriate recycling, processing or disposal area.

A trained spotter at the working face will visually inspect the waste as it is deposited. If unauthorized waste (i.e., lead-acid batteries, used oil, yard trash, white goods, and whole tires) is

found at the working face, as part of routine operations, the waste would be segregated and removed for recycling~~, as described in Attachment K-12.~~.

Sarasota segregates and/or removes from the Class I Landfill working face the following materials at the CCSWDC for the purpose of recycling these materials:

- Yard Wastes
- White Goods (i.e., household appliances)
- Waste Tires
- Construction and Demolition Wastes
- Lead Acid or Rechargeable Batteries
- Waste Oil
- Lawn Mowers
- Electronic Devices (CRT televisions and computers)

The segregation and removal of the above materials furthers the County's goals for achieving the state-wide mandated recycling goals. Please note that construction and demolition debris and yard waste mixed with MSW are not removed from the Class I working face since they are considered contaminated and are treated as Class I waste. Also, construction and demolition debris may be disposed in the Class I Landfill when the C&D processing facility is not able or not open to accept C&D.

K.2.c.(1) Household Hazardous Waste and Citizen's Convenience Center

The Household Hazardous Waste and Citizen's Convenience Center (HHWCCC) is located near the CCSWDC entrance, just east of the administration building and scalehouse as shown on the Site Plan provided in Attachment K-4. The HHWCCC consists of spaces for roll off containers for MSW, scrap metal, and recyclables. Tires, electronics, and household hazardous waste are also collected at this location. The roll off containers and electronics storage areas are located on concrete pads. Three permanent canopies that prevent the accumulation of water in the containers during inclement weather are available at the site. Household chemicals are stored in a pre-manufactured hazardous waste storage unit. ~~The Citizen's Convenience Center~~HHWCCC has a full-time attendant and is in operation from 8:00 A.M. to 5:00 P.M. Monday through Friday. The attendant meets customers at the entrance, directs them to the appropriate area of the facility, and monitors the waste for unacceptable materials. The roll-off containers of MSW are emptied daily, however small quantities of waste may be left overnight in the containers from customers who arrive near the end of the day. The containers are under cover at the HHWCCC and the waste taken at the HHWCCC typically has deminimus quantities of putrescible waste. ~~and all T~~tires are also taken to the designated Tire Area on a daily basis.

K.2.c.(2) Special Wastes

White goods and electronic wastes are accepted at the CCSWDC for recycling but are not allowed at the working face for disposal. Special wastes not authorized for disposal are accepted for staging at the CCSWDC until they are removed from the site for offsite recycling. These materials shall be stored in the designated white goods and recyclables storage area located near the southeast corner of Phase I as ~~shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the previously submitted Phase II Class I Landfill Expansion Permit Drawings (Revised March 2008).~~shown on the CCSWDC Site Plan provided in Attachment K-4.

K.2.c.(2).1 Shredded Waste

The CCSWDC does not currently accept shredded waste nor does the County shred waste at the CCSWDC.

K.2.c.(2).2 Motor Vehicles, Marine Vessels, and Mobile Homes

The CCSWDC does not accept motor vehicles for disposal. The CCSWDC will accept marine vessels (including motor boats, sail boats, jetskis or other marine vessel), but only when the marine vessel has had the engine(s), fuel tanks (emptied and punctured or completely removed), fluids, batteries or other appliances completely removed from the marine vessel. The CCSWDC will also accept mobile homes for disposal that have had all appliances and air conditioners, and other unacceptable materials, completely removed from the mobile home. These items will be accepted during the operating hours of the CCSWDC, however, in the event a marine vessel or mobile home is accepted near the end of the operating day and there is not sufficient cover or other waste available to properly dispose and cover the item in the working face, then the marine vessel or mobile home maybe kept near the working face overnight and disposed in the landfill the following operational day. Since the marine vessel or mobile home is non-putrescible, it will not contribute to vectors or odors during the time it is waiting at the working face for final disposal.

K.2.c.(2).3 Electronics

Electronic products that are discovered at the working face will be removed and stored in a safe area within the active working face (bermed area). At the end of the day, at a minimum, these materials will be transported directly to the designated storage area. Undamaged electronic wastes recovered for recycling shall be stored in an undamaged condition and records for all quantities received by each recycler shall be kept along with the receipts with the name and address of each recycler. Recovered electronic wastes that have been damaged and will not be recycled will be removed and stored ~~in a designated 30-foot x 45-foot covered concrete pad area adjacent to the Contractor's maintenance building located as shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the previously submitted Phase II Class I Landfill Expansion Permit Drawings. The damaged waste shall be placed inside a watertight container~~at the HHWCCC. The electronics drop off at the HHWCCC is staffed by a full-time attendant who unloads all vehicles that come into the facility. The electronics are mainly from residential curbside collection routes and may include, but are not limited to, televisions, computers, monitors, copiers, etc… The electronics are physically unloaded and placed on pallets or the concrete pad and wrapped in cellophane or loaded into a container if undamaged. Damaged components, such as CRTs, are placed inside a cardboard box or container on a pallet. Electronics are routinely removed by an e-waste recycler such that

the concrete pad and pallets have capacity to continue accepting the electronic wastes. Electronic device storage shall include up to 100 pallets of electronic devices on the e-waste slab, 3 e-waste roll-off containers, and 10 e-waste broken unit palletized boxes. Note that broken unit palletized boxes are kept under cover. FDEP will be notified if for any reason the e-waste storage quantities will be exceeded. The County will provide a plan for additional storage areas and/or containers, the amount of storage time needed for the additional quantity, and the schedule for removal.

K.2.c.(2).4 White Goods

White goods, as defined in Rule 62-701, FAC, will be removed from the working face and taken to the white goods storage area located south of Phase I as shown on ~~Sheet G-03, Overall Site Plan and Phasing Plan, provided in the previously submitted Phase II Class I Landfill Expansion Permit Drawings.~~the Site Plan provided as part of the Landfill Staging Plans provided in Attachment K-4. White goods shall be removed from the site at least monthly. Refrigeration units will be stored in an upright position until all liquids, CFCs and Freon are removed. Refrigerants are removed from the items on-site by a contractor licensed to perform this function. White goods that have had fluids and/or refrigerant removed from them will be clearly marked.

The white goods are periodically collected by a steel recycler who transports the materials to a facility that recycles the materials into new steel products.

A maximum of 1,250 (total) white goods and lawn mowers may be stored at the site at any time. The white goods shall be removed from the site at least monthly (every 30 days).

K.2.c.(2).5 Asbestos

Special waste such as asbestos will be accepted and managed in accordance with the requirements of 62-701.520(3), F.A.C. The asbestos waste haulers will be required to notify the County who will notify the landfill contract operator in advance and provide information on the estimated volume and delivery date of the asbestos. All incoming asbestos material will be required to comply with all applicable permit conditions and be wet down and properly wrapped or bagged. The uncompacted asbestos material will be covered with a minimum 6-inch layer of soil upon disposal. If additional asbestos deliveries are scheduled on the same day, the asbestos may remain uncovered until the end of the work day. The disposal location will be recorded in accordance with 40 C.F.R., Part 61.154, and a record of the asbestos location will be maintained.

K.2.c.(2).6 Waste Oil and Oily Waste

Used (waste) oil and oily wastes will not be mixed or commingled with solid waste that is to be disposed of at the CCSWDC. Waste oil will not be directly disposed of at the CCSWDC disposal areas.

Oily wastes, sorbents or other materials used for maintenance or to clean up or contain leaks, spills or accidental releases of used oil, and soils contaminated with used oil as a result of spills or accidental releases are not subject to the disposal prohibition listed above.

Waste oil or oily wastes that are collected for the purpose of recycling from residents or during routine waste collection routes by the franchise hauler are accepted at the HHWCCC. Waste oil and oily wastes are stored in containers until removed from the site for recycling or disposal. The CCSWDC has the following containers on-site.

- 2 - 500 gallon containers for used oil with double containment (HHWCCC).
- 3 - 55-gallon containers for oily wastes.
- 20 gallons of used oil placed upright in undamaged container (Contractor's maintenance building).

FDEP will be notified if for any reason the waste oil and oily waste storage quantities will be exceeded. The County will provide a plan for additional storage areas and/or containers, the amount of storage time needed for the additional quantity, and the schedule for removal.

K.2.c.(2).7 Lawn Mowers

Lawn mowers are accepted at the CCSWDC provided that all fluids have been drained. Lawn mowers are managed as white goods. After inspection for fluids, mowers are stored in the white goods area until collected by the white goods recycling contractor.

K.2.c.(2).8 Yard Waste

The yard waste processing facility location is south of Phase I as shown on the Site Plan. The facility is permitted under a separate yard waste processing facility registration. Yard wastes are brought to the CCSWDC as segregated loads, either from residential collection vehicles or commercial landscaping contractors. Yard waste loads are directed to the yard waste composting area located south of the Phase I Class I Landfill Area. New yard waste loads are deposited in a designated area of this site.

Bagged yard waste shall not be mulched at the site unless the bags are removed prior to mulching.

The incoming yard waste is stored in a pile until such time that enough material is accumulated to begin processing. Yard waste processing includes size reduction via a tub grinder and screening of the size reduced materials.

Once processing is completed, the resulting yard waste mulch is either placed into windrows for composting or is used by the landfill operations as erosion control and road stabilizing material. The composted material is used on site as a replacement for soil.

Any unprocessed yard trash will be removed from the facility within six months, or within the period required to accumulate 3,000 tons or 12,000 cubic yards, whichever comes first. Processed yard trash will be removed or marketed within 18 months. Yard waste shall be managed in accordance with the facility's yard waste processing facility registration and Rule 62-709.320, F.A.C.

K.2.c.(2).9 Lead Acid Batteries and Other Unauthorized Waste

Other unauthorized waste and small quantity household hazardous wastes such as lead-acid batteries, fluorescent tubes, pesticides, solvents, cadmium batteries, and thermometers are accepted at the HHWCCC. In the event these type of wastes are~~, which are~~ discovered at the working face, they are~~will be~~ removed and temporarily stored in containers at the working face. ~~in the designated 30 foot x 45 foot covered concrete pad adjacent to the maintenance building. This designated storage area is only for T~~temporary storage of material removed from the working face ~~and~~ is not a designated public household hazardous waste disposal facility or transfer station. The temporarily stored materials are taken at the end of each day to the HHWCCC for disposal or recycling. ~~These wastes will be placed on a 4 drum spill pallet. These pallets will be made up of 100 percent polyethylene with UV inhibitors and have spill~~

~~reservoirs which meet the uniform fire code capacity requirements. Two pallets will be placed in the designated area. These materials will be collected each month by hazardous materials disposal companies or removed for alternate disposal or recycling. Unauthorized wastes will be removed from the site monthly. The maximum on-site storage for unauthorized wastes will be as follows:~~

Up to 100 lead-acid batteries may be stored on a secondary spill containment pallet under roof cover and protected from rainfall at the HHWCCC. Picked up by a battery recycling company and components (mainly lead) are recovered. Other wastes listed in this section are property containerized or packaged at the HHWCCC for disposal or recycling.

- ~~1,000 electronic devices on e-waste slab.~~
- ~~30 batteries in a secondary containment covered tray.~~
- ~~2 - 500 gallon containers for used oil with double containment (at the Citizen Convenience Center).~~
- ~~20 gallons of used oil placed upright in undamaged container (at the Contractor's maintenance building).~~
- ~~1,250 white goods, and lawnmowers, will be placed upright until all liquids, CFCs, and Freon are removed.~~

~~Sarasota County will accept~~ FDEP will be notified if for any reason the quantities listed above will be exceeded, the County will provide a plan for additional storage areas and/or containers, the amount of storage time needed for the additional quantity, and the schedule for removal.

K.2.c.(2).10 Contaminated Soil

Acceptance of contaminated soil ~~for the purpose of landfilling (disposal)~~, as defined by Rule 62-713, FAC, at the CCSWDC is conducted on a case-by-case basis whereby soils may be tested using the toxicity characteristic leaching procedure (TCLP) and the paint filter test for free liquids. Results of the tests are evaluated to determine whether the soil will be accepted at the landfill. In any case, contaminated soil accepted at CCSWDC ~~in accordance with the criteria included in Attachment K-4~~would be placed directly into the lined active landfill subcell and not stockpiled at the site.

K.2.c.(2).11 Waste Tires

Waste tires are delivered to the CCSWDC in segregated loads by customers or delivered on waste hauler trucks when collected on the residential waste collection routes. The tires are taken to the waste tire processing facility located to the east of the yard waste processing area as shown on the Site Plan. Waste tires encountered during operations at the Class I Landfill working face will be placed in a container at the working face that will be removed ~~at~~when the ~~end of~~container has reached capacity and taken to the ~~working day and stored in the area designated for~~ waste tire processing within the CCSWDC. ~~The waste tire processing facility is located within the future Phase V landfill area as shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided~~ The CCSWDC may use the waste tires for initial cover or dispose of the tires in the Class I landfill as long as the tires are size reduced in accordance with Rule 62-711, FAC. Waste tires shall be managed in accordance with the current waste tire processing facility permit issued by FDEP and Rule 62-711, FAC. ~~with the previously submitted Phase II Class I Landfill Expansion Permit Drawings.~~

~~At least one trained spotter will be at each working face when wastes are received at the landfill. Normally, one working face will be operating at the landfill. There may be occasions where two or more working faces are required such as when the first lift of waste is placed in a new cell, during high volume periods such as after a storm, or when the size of a working face is limited such as at the corner of a cell. The spotters will be trained in accordance with Rule 62-701.320(15) and in accordance with the training plan described in Attachment K-1 to recognize unauthorized waste. Each load of waste will be visually inspected at ground level by the spotter as well as by the equipment operators spreading the waste. The spotters and equipment operators will look for containers and other indicators of unauthorized waste. Upon detection of unauthorized waste, the spotters will require the hauler to remove the material for disposal at a proper facility. If the hauler has departed, the spotter will remove the material from the working face for temporary storage at the designated 30 foot x 45 foot covered concrete pad adjacent to the maintenance building and ultimate removal from the site for proper disposal or recycling.~~

K.2.c.(3) Liquid Waste

"Liquid Waste" means any waste material that is determined to contain free liquids as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).

Non-containerized liquid waste will not be accepted at the CCSWDC unless:

1. The liquid waste is household waste other than septic waste; or

2. The liquid waste is leachate or gas condensate derived from the CCSWDC, or byproducts of the treatment of such leachate or gas condensate, since the CCSWDC Class I Landfill is lined and has a leachate collection system.

Containers holding liquid waste shall not be accepted at the CCSWDC unless:

1. The container is a small container similar in size to that normally found in household waste;

2. The container is designed to hold liquids for use other than storage; or

3. The waste is household waste.

Containers or tanks twenty gallons or larger in capacity shall either have one end removed or cut open, or have a series of punctures around the bottom to ensure the container is empty and free of residue. The empty container or tank shall be compacted to its smallest practical volume for disposal.

K.2.c.(4) Hazardous Waste

If any hazardous waste is detected in the load, the hauler shall be informed immediately of the violation. In the event of discovery of hazardous materials, the procedures outlined in Items 3, 4, 5, and 6 of Section K.6 will be followed. ~~if any unauthorized wastes are discovered.~~

If unauthorized waste (i.e., hazardous, PCBs, untreated biomedical, or free liquid) are found at the landfill working face, the waste will be isolated and the contractor's general manager or designee would be promptly notified~~.~~, who would then immediately notify the County Manager. The ~~contractor's general manager or designee is trained in the proper procedure to follow including notification to the~~County Manger then notifies FDEP. ~~Similarly, if suspect waste is found the waste will be isolated, identified if~~

possible, and the County's operation manager or designee will be notified. The County's operation manager or designee will prepare a suspect waste report and ensure that the waste is properly disposed. The waste load inspection form contained in Attachment K-5 is used for this purpose. Hazardous waste will be isolated and restricted from access until it is removed from the CCSWDC Landfill by a licensed hazardous waste contractor and properly disposed in accordance with federal, state and local regulationsof from the CCSWC Landfill by a licensed hazardous waste contractor. Hazardous wastes will be removed from the site within 48 hours or as soon as practical.

K.2.c.(5) Construction and Demolition Debris

Construction and Demolition (C&D) wastes are delivered to the CCSWDC in segregated loads. A specialized contractor operates a permitted C&D waste processing facility located at the CCSWDC, south of the Waste Tire Processing Facility. The contractor screens and sorts C&D waste and resells lumber, cardboard, concrete, and roofing shingles to various users or distributors of these materials.

The maximum quantities of C&D wastes that may be stored at the site, and the schedule for removal from the site, shall be as required under the current Waste Processing Facility Permit issued by FDEP.

K.2.c.(6) Biological Waste

The CCSWDC will accept for disposal the following provided the referenced provisions are met:

- Bodies of domestic animals, upon the death of such animals due to disease, shall be accomplished pursuant to Section 823.041(1), F.S.
- Bodies of captive wildlife, as well as bodies of domestic animals that have not died due to disease.
- Biomedical waste that has been treated, in accordance with Rule 62.701.300(6) by a method approved by the Department of Health, may be disposed of as solid waste that is not biomedical at the CCSWDC. Such treated waste must be in containers clearly labeled with the phrase "Treated Biomedical Waste." Sarasota County CCSWDC will only accept the waste if the generator notified the County that treated biomedical waste will be disposed of at the CCSWDC before such disposal. This requirement does not supersede the provisions of Section 381.0098(8), F.S., regarding acute care hospitals. It is the sole responsibility of the generator, not Sarasota County or the CCSWDC, to ensure that all transport vehicles transporting treated biomedical waste to the CCSWDC for disposal shall be fully enclosed and secured when unattended. Sarasota County and the CCSWDC may set limitations or restrictions on the disposal of treated biomedical waste at the CCSWDC.

Special waste such as asbestos will be accepted and managed in accordance with the requirements of 62-701.520(3), F.A.C. The asbestos waste haulers will be required to notify the County who will notify the landfill contract operator in advance and provide information on the estimated volume and delivery date of the asbestos. All incoming asbestos material will be required to comply with all applicable permit conditions and be wet down and properly wrapped or bagged. The uncompacted asbestos material will be covered with a minimum 6 inch layer of soil upon disposal. If additional asbestos deliveries are scheduled on the same day, the asbestos may remain uncovered until the end of the work day. The disposal location

will be recorded in accordance with 40 C.F.R., Part 61.154, and a record of the asbestos location will be maintained.

Waste oil that is collected for the purpose of recycling is accepted at the CCSWDC Citizen's Convenience Center. Waste oil is stored in secure containers until removed from the site for recycling purposes. Lawn mowers are accepted at the CCSWDC as long as they are drained of all fluids and are managed as white goods. After inspection for fluids, lawn mowers are stored in the white goods area until collected by the scrap metal vendor who collects white goods. Waste oil, lawn mowers, and yard trash will be managed as described in the Landfill Recycling Plan, Attachment K-12. The yard waste processing facility location is south of Phase I as shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the previously submitted Phase II Class I Landfill Expansion Permit Drawings. The facility is permitted under a separate yard waste processing facility registration.

The Citizen's Convenience Center is located near the CCSWDC entrance and consists of spaces for roll off containers for MSW, scrap metal, and recyclables. Tires, electronics, and household hazardous waste is also collected at this location. The roll-off containers and electronics storage areas are located on concrete pads. Three permanent canopies that prevent the accumulation of water in the containers during inclement weather are available at the site. Household chemicals are stored in a pre-manufactured hazardous waste storage unit. The Citizen's Convenience Center has a full-time attendant and is in operation from 8:00 A.M. to 5:00 P.M. six days per week. The attendant meets customers at the entrance, directs them to the appropriate area of the facility, and monitors the waste for unacceptable materials. The roll-off containers of MSW are emptied daily and all tires are also taken to the designated Tire Area on a daily basis.

The electronics drop off at the Citizen's Convenience Center is manned by a full time attendant who unloads all vehicles that come into the facility. The electronics are from residential curbside collection routes and may include, but are not limited to, televisions, computers, monitors, copiers, etc. The electronics are physically unloaded and placed on pallets or the concrete pad and wrapped in cellophane. Electronics typically will remain at the facility for less than one week but may remain for up to two weeks. Any debris from the operation is swept up and placed in a closed drum for disposal. A vendor will remove the electronics to a recycler by backing semi trailers up to the slab and loading the pallets onto the truck with pallet jacks or fork lifts.

K.2.d Weighing or Measuring Incoming Wastes

All waste entering the landfill site will be weighed. Three electronic 50-ton scales are installed at the CCSWDC entrance. An Information Management System (IMS) is linked to the scales to facilitate accurate data collection and measurement of incoming materials.

K.2.e Vehicle Traffic Control and Unloading

Directional signs will be placed to safely direct vehicles to the current waste unloading area. These signs will have large legible letters and will be cleaned when necessary. Signs will be strategically placed so that the route is clear to the drivers. Speed limit, safety, and prohibitive practice signs will be placed as necessary to encourage a safe, clean operating area. Unloading will be permitted only at the designated working face. On the fill area, temporarydisposal or processing areas. Temporary signs, barricades, and flagged stakes will be used to direct vehicles to the proper tipping area. Haulers will be responsible for

unloading their own vehicles. Wastes requiring special handling will be coordinated with and unloaded under the direct supervision of landfill contract operation personnel.

K.2.f Method and Sequence of Filling Waste

~~The overall phasing plan for the CCSWDC is depicted on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the previously submitted Phase II Class I Landfill Expansion Permit Drawings. The layout for the four (4) cells in Phase II of the Class I landfill is shown on Sheet C-01, Basegrade Plan. A detailed staging plan for the fill sequencing within Phase II is provided on Sheets C-07, C-08, and C-09. Revisions were made to the staging plan and sections of the permit drawings to accurately reflect the fill sequencing in each cell. The revised staging plan and sections, Sheets C-07, C-08, C-09, C-10, and C-11, and Fill Sequence Sheet 45 are included in Attachment K-13.~~The Landfill Staging Plans for the Phase II Class I disposal area are provided in Attachment K-4. These plans provide a general guide for the Contractor to use during fill operations. The typical maximum height for each lift is 10 feet. The temporary roads and swales for access and surface water drainage will be phased in as the Phase II area is filled. The maximum width of the working face will be 200 feet. However, the landfill operations may be conducted with a working face width of less than 200 feet. These landfill staging plans are intended as a general guide for the operator and are not intended to indicate the exact daily fill operations. The operations will progress in accordance with these plans, however, based on actual site and weather conditions the Contractor may adjust filling location to achieve safe and efficient waste filling operations.

K.2.f.(1) Temporary Gas Vent Removal

Four temporary gas vents were installed within the bottom liner system during Phase II construction. These gas vents were required when naturally occurring gas within the soil beneath Phase II began to collect beneath the liner and ~~cause~~caused the liner system to lift off of the subgrade in several locations. The vents ~~are located~~were constructed near the center of Cells 2 and 3 close to the ridge line between the two cells. Attachment K-~~15~~11 contains information on the construction and locations of the gas vents.

~~Prior to the placement of waste within Cell 2, three of the temporary gas vents located in the cell were removed and the liner system repaired. FDEP Southwest District office was notified of the vent removal/liner repair in Cell 2. The vent in Cell 3 is still in place.~~There is only one gas vent remaining in Phase II. The remaining gas vent is located in Subcell 3. The gas vents in Subcell 2 were removed and the liner repaired before waste operations began in that subcell. ~~–~~When the vent in ~~Cell~~Subcell 3 will need to be removed and the liner repaired, prior to placement of waste within the ~~cell~~subcell, FDEP South~~west~~ District office will be notified at least two (2) weeks prior. Vent removal and liner repair will be performed in accordance with the following procedures:

1. Remove rain cover (if present) in vicinity of vent and excavate protective cover soil near repair area;
2. Remove protective casing from standpipe;
3. Remove clamp from primary liner boot, cut primary liner outside of boot weld, and lift boot over standpipe;
4. Remove clamp from secondary liner boot, cut secondary liner outside of boot weld, and lift boot over standpipe;

5. Remove any hydrated or damaged geosynthetic clay liner (GCL) as necessary to allow removal of vent pipe;

6. Remove vent pipe, being careful not to damage in-place liner components or subgrade;

7. Inspect subgrade, replace any soft soil with material meeting requirements of Phase II project specifications, and provide smooth surface for placement of overlying geosynthetics;

8. Patch GCL, secondary liner, secondary geocomposite, primary liner, and primary geocomposite in accordance with the requirements of Phase II project specifications and CQA Plan with the exception that no laboratory or field testing beyond vacuum testing of liner welds will be required of the repair materials due to the limited extent of the repairs;

9. Replace protective cover material over repair; and,

10. Replace rain cover if ~~needed~~it was present before the repair.

All repairs shall be performed by a company approved by a liner manufacturer to perform liner installation. All repairs shall be observed by a third party inspector who will submit documentation to the FDEP ~~Southwest~~South District office that the repairs were performed in general accordance with the Phase II specifications and CQA Plan.

K.2.f.(2) **Filling in New ~~Cell~~Subcell**

The initial lift of solid waste shall be deposited in each new Phase II ~~cell~~subcell (designated disposal unit) beginning at the south end of the landfill ~~cell~~subcell.

Waste will be placed within the designated edge of waste shown on the previously submitted Permit Drawings. The edge of waste will be located by measuring 7 feet inward from the edge of liner markers on the north and west sides of Phase II. The edge of waste will be located by measuring 14 feet inward from the edge of liner markers on the south side of Phase II. Periodic inspections will be made to ensure that the markers are in place and the edge of waste is located the required distance from the edge of the liner.

The initial lift of solid waste will progress from south to north~~, then north to south fill pattern,~~ across the ~~entire~~ width of the landfill ~~cell~~subcell. The working face will primarily move in an east/west direction across the width of the landfill ~~cell~~subcell. The width of the landfill may be the full width of the subcell or up to the limit of the leachate containment area if used in the subcell. The leachate containment area is discussed in detail in Section K.2.f.(4).1. ~~Selected solid waste loads containing no rigid objects will be used for at least the first 4 feet of the first lift, and it will be filled to an elevation of approximately 40 feet NGVD within the Phase II cells which is higher than~~ The initial lift will be composed of select solid waste loads containing no rigid objects and will be a minimum of 4 feet thick. The initial 4 feet of select waste will be placed with a low ground pressure dozer and not the waste compactor in order to minimize the potential for damage to the bottom liner. A spotter will also be stationed on the bottom liner protective cover sand during placement of select waste in the initial lift to remove any large rigid objects. The top surface of the initial lift will be filled to the ~~cell~~subcell's lined external containment berms in order to promote stormwater runoff. The lower lift thickness will be placed in the high end (south) of the cells and the greater lift thickness will be placed on the low end (north).

The method of waste disposal for each lift is described as follows. All incoming solid waste will be directed to the working face and placed against the side slope of the previous day's waste. The first row of waste in a new lift will be placed against the toe of a containment berm to provide a guide for the placement of waste for the remaining rows. A slope of not more than 3H : 1V will be maintained. The working face shall be less than 200 feet wide. A maneuvering area shall be provided for large private and commercial vehicles. Depending on space limitation within the working face area, a section of the working face may also be designated for smaller loads and vehicles.

Solid waste will be placed at the working face and spread in 2-foot layers then compacted. The spreading of waste will be a continuous operation.

In compliance with 62-701.500(10), F.A.C., the stormwater management systems will be operated and maintained as necessary to meet applicable standards of Chapters 62-701, 62-302, and 62-25, F.A.C. The stormwater management system at the CCSWDC Class I landfill is designed to avoid mixing of stormwater with leachate. Stormwater or other surface water which comes into contact with the landfilled solid waste or mixes with leachate will be considered leachate and subjected to applicable requirements.

The filling of each lined ~~cell~~subcell within the Phase II area will follow the sequence outlined below~~:~~ ~~(Refer to revised Sheets C-07 through C-09, Landfill Staging~~ and as shown in the ~~Plans~~Landfill Staging Plans~~,~~ provided in Attachment K-~~4.13).~~:

Filling of each ~~cell~~subcell will generally progress from the south end of the ~~cell~~subcell to the north end, then from the north end to the south end of the ~~cell~~subcell while providing a slope on the cover to allow storm water drainage as shown on the ~~revised Staging Plans~~Landfill Staging Plans~~, Sheets C-07 through C-09, Landfill Staging Plans,~~ provided in Attachment K-~~13. Only select waste containing no rigid materials will be used~~4. In addition, during the wet weather season (generally May to October), the operator may progress from east to west only within the ~~first 4 feet of the initial lift~~cell in ~~a cell~~order to keep drainage to the west from the Phase I side slope.

Subsequent waste lifts will be added to a ~~cell~~subcell in accordance with the L~~l~~andfill S~~s~~taging P~~p~~lans before opening new cells to waste disposal.

The surface runoff from unused portions of cells will be directed away from solid waste by grading and using temporary diversion berms.

Areas on the top and sides of each lift will be adequately covered and stabilized to maximize surface runoff away from the bermed, sloped working area and towards the stormwater drainage areas to minimize leachate generation, as shown on the ~~revised Sheets C-07 through C-09, Landfill Staging Plans, provided in Attachment K-13. Intermediate cover will be applied to internal top and side slopes and completed external slopes within seven days if the area will not receive more waste within 180 days. The top of lifts will be sloped to promote storm water drainage. Intermediate covered areas that will not be landfilled or covered with final cover within six months will be sodded (external slopes) or mulched (internal and top slopes) to avoid slope erosion. Storm water collected within the bermed working area will be considered leachate and will be collected and disposed as such. Efficient use of these techniques~~

~~will decrease leachate volumes~~Landfill Staging Plans provided in Attachment K-4. Intermediate cover operations are discussed in detail in Section K.7.g.

~~K.2.g~~K.2.f.(3) Waste Compaction and Application of Cover

Cover material for daily operations of the landfill will be obtained from the designated stockpile area, C&D Site, and/or compost generated from yard waste recycling. Compost used with soil for cover material shall be free of waste. Cover material will be deposited in the stockpile area location shown on ~~Sheet G-03, Overall Site Plan and Phasing Plan, provided with the previously submitted Phase II Class I Landfill Expansion Permit Drawings.~~the Site Plan. The designated stockpile area will have 3H:1V side slopes in order to minimize erosion. Additional soil obtained from offsite borrow areas will be placed within the stockpile area during the operational life of the facility. A silt fence will be installed around the stockpile area ~~and~~if the side slopes ~~will be grassed to further reduce and control erosion~~of the stockpiles are not vegetated.

Waste will be spread in layers approximately two feet thick on the working face and compacted to approximately one foot in thickness before application of the next layer. The solid waste will be compacted with a minimum of three to five passes of a compactor. Initial, intermediate and final cover will be applied as detailed in Sections K.7.f, K.7.g, and K.7.h., of this Operations Plan.

~~K.2.h~~K.2.f.(4) Stormwater and Leachate Controls

The stormwater management system at the CCSWDC consists of a series of swales, culverts, and detention ponds. The system is designed to comply with all of the requirements of both Chapters 62-25 F.A.C. and 40 D-4 F.A.C. The stormwater management system for CCSWDC was constructed under a permit issued by the ~~Southwest~~South Florida Water Management District in 1993~~.~~ and under a FDEP Environmental Resource Permit for Phase II issued in 2008. All components of the system were installed during Phase I and Phase II construction.

The side slope of each ~~cell~~subcell within Phase II as well as the Phase I/Phase II overlay liner system were constructed with a rain cover to avoid erosion of the protective cover, limit plant growth, and assist with the management of stormwater until waste is deposited within the cells. The rain cover consists of a 20-mil scrim-reinforced polyethylene liner held in place with sand bags. ~~Specifications for the rain cover installed during Phase II construction are provided in Attachment K-16.~~

Stormwater collected on the protective sand layer of Phase II cells that have not yet received waste ~~(i.e. in active cell)~~ will flow north to the sump areas within each ~~cell~~subcell. Any collected stormwater that has not been in contact with solid waste or otherwise contaminated by leachate will be collected in the temporary stormwater inlets installed in Subc~~C~~ells 3 and 4 and routed to the leachate collection manhole fitted with temporary stormwater piping that will outfall into the perimeter channel which is part of the permitted stormwater management system. Stormwater may also be pumped over the perimeter berm to the perimeter channel. Any stormwater collected in an open ~~cell~~subcell that has been in contact with solid waste will be considered leachate. The leachate will not be allowed to enter the stormwater collection system and will be routed, drained or pumped to the existing Phase II pump station north of ~~Cell~~Subcell 2 or to the nearest active ~~cell~~subcell as described later in this section. If it is not clear whether stormwater has been impacted by leachate, the County will collect samples and perform testing of the stormwater management system as specified within the current Environmental Resource Permit (ERP) prior to

disposal as leachate or stormwater. ~~Stormwater from Phase II Cells 3 and 4 will be collected utilizing the existing leachate collection system. Inlet structures were installed in line with the existing 8-inch leachate collection pipe at the north end of each cell. Valves will be closed on the pipes from the leachate collection manholes to the Phase II pump station. Stormwater will be directed to the leachate collection manhole. The collection manhole was penetrated and an 8-inch outfall pipe was installed to direct the captured stormwater to the existing perimeter channel. The discharge point into the channel is lined with riprap to avoid erosion of the channel.~~

One month prior to the acceptance of the waste into each ~~cell~~subcell (~~cells~~Subcells 3 and 4), Sarasota County shall notify FDEP that the stormwater diversion modifications were removed. Sarasota County will provide FDEP a schedule of when the inlets are to be removed, the tee ~~-~~capped, the 8-inch outfall pipe from the leachate collection system to the perimeter channel is to be plugged or grout filled, and the downstream valve ~~-~~opened. After the work has been completed, Sarasota County shall provide a construction certification to the FDEP for the decommissioning of the Phase II stormwater diversion modification.~~.~~

If the rain cover system on the side slopes in Phase II becomes irreparable, Sarasota County may elect to replace the rain cover, place a sod layer or simply maintain the protective sand layer cover in each ~~cell~~subcell. Prior to receiving waste, the 24-inch protective sand layer will be restored to original design and permitted specifications for ~~Cell~~Subcells ~~-~~3~~,~~ and 4.

The rain cover or sod will be removed prior to the placement of waste within a ~~cell~~subcell. The rain cover or sod within a ~~cell~~subcell may be removed either all at once or in stages depending on how long it is anticipated it will take to place the first lift of waste within the ~~cell~~subcell. If the rain cover or sod is removed in stages, then stormwater that has not been in contact with waste may be collected and pumped over the top of the berm and into the perimeter channel or inactive adjacent ~~cell~~subcell.

All stormwater runoff will be conveyed via perimeter drainage channels to detention facilities. Ditch blocks located in the perimeter channels at strategic locations act as sediment traps and will require periodic maintenance.

The ultimate discharge of the detention facilities will be to Old Cow Pen Slough or isolated wetlands through fixed control weirs and spreader swales.

On areas of the landfill that are covered with intermediate cover, pipes may be used from the top of the landfill to the areas of Phase II that are collecting only stormwater. The pipes will be installed as shown in the Landfill Staging Plans provided in Attachment K-4. As the filling of the waste progresses, temporary stormwater letdown structures will be installed from the intermediate cover to facilitate drainage without erosion. Temporary stormwater diversion berms will be installed around the top perimeter of each lift and connected to the temporary letdown structures. The temporary letdowns will be located in the approximate locations as shown on the ~~revised Sheets C-07 through C-09, Landfill Staging Plans,~~Landfill Staging Plans provided in Attachment K-~~13~~4. Stormwater will be directed to these temporary letdown structures by sloping the top of each lift to promote drainage as shown on the staging plans.

Sediment collection provided by perimeter ditches and ditch blocks will minimize siltation of the main retention areas. In addition, the active working face(s) will be surrounded by berms to capture stormwater that comes in contact with waste and to prevent run-on and mixing with the stormwater from outside the

active working face. Stormwater collected within the berms surrounding the active working face(s) is considered to be leachate and will be allowed to percolate into the landfill for collection by the leachate collection system~~.~~ or will be routed to the collection area to the west of the subcell as described below. ~~This leachate may also be pumped to a leachate cleanout pipe or leachate manhole as a means of discharging it to the leachate collection system. This water will be filtered through a screen on the pump intake prior to discharge to a cleanout pipe or manhole.~~

~~During normal operations and rainfall events, rain water which becomes leachate at the working face will percolate into the waste to drain the area. However,~~

K.2.f.(4).1 Leachate Containment Area

I~~i~~n order for the operator to limit leachate ponding at the working face during intense rainfall events, the operator may install piping which drains excessive leachate to the toe of the landfill and into the leachate collection system as shown ~~onSheet 45~~in the Landfill Staging Plans provided in Attachment ~~K13~~K-4, also referred to as the leachate containment area. The leachate containment area may extend the north-south length of the subcell or only a portion of the subcell. The subcell will be filled the width of the subcell to the subcell divider berm as shown in the detail sheets provided with the Landfill Staging Plans in Attachment K-4 if the leachate containment area is not used. If the leachate containment area is used, the subcell will be filled approximately 30 feet short of the entire width of the subcell as shown in the details provided in the Landfill Staging Plans provided in Attachment K-4. At the pipe inlet, tires or sand with silt fence maybe used as a filter medium to limit sediment transport through the pipe, allow leachate to freely drain to the inlet of the pipe, and to prevent objects from blocking the pipe inlet. Leachate may accumulate while the pipe is draining the area; however, the operator will inspect the inlet area periodically to ensure that the pipe inlet is not clogged and is allowing free drainage of water to the pipe to keep the accumulation at the inlet to a minimum. As the working face moves, the piping used to assist in drainage of excessive leachate will be relocated and reinstalled in a location selected by the operator which best drains the area. The general setup and installation of the piping will be as shown ~~on the Sheet 45 provided in Attachment K-13~~in the Landfill Staging Plans provided in Attachment K-4. If tires are used for the inlet and outlet areas, they will be temporary and before final disposal of the tire pieces, they will be reduced in size in accordance with the tire disposal requirements of Rule 62-711, F.A.C.

The leachate may be pumped to a leachate cleanout pipe or leachate manhole as a means of discharging it to the leachate collection system from the containment area. The pumped leachate will be filtered through a screen on the pump intake prior to discharge to a cleanout pipe or manhole.

~~.~~

K.2.f.(4).2 Leachate Drains at Working Face

In order for the operator to limit leachate ponding and to improve leachate percolation back into the waste at the working face, the operator may install trench drains constructed of cut/shredded tires which meet the size requirements for disposal in accordance with Rule 62-711, F.A.C. The drains will be excavated near the working face to promote drainage of leachate. In general, the drains will be approximately 5 to 10 feet deep per lift, approximately 5 to 10 feet wide, and a length as needed to contain the runoff from the turnaround area and working face. These dimensions may require adjustment based on actual field conditions and drainage requirements. At no time will the bottom of the tire trenches be closer than 20

feet to the top of protective cover sand of the bottom liner. The tire trenches will improve drainage of leachate which accumulates at the working face, decrease the size of the area that may be exposed to leachate, and decrease the leachate amount that may be piped to the containment area.

~~If tires are used for the inlet and outlet areas, they will be temporary and before final disposal of the tire pieces, they will be reduced in size in accordance with the tire disposal requirements of Rule 62-711, F.A.C.~~

~~On areas of the landfill that are covered with intermediate cover, pipes may be used from the top of the landfill to the areas with rain cover on Phase II to shed stormwater off the landfill and reduce erosion. The pipes will be installed as shown on the Sheet 45 provided in Attachment K-13.~~

K.2.f.(5) Stormwater Operation and Maintenance Procedures

The stormwater management system for the CCSWDC consists of a variety of treatment and conveyance methods. The treatment system for the main solid waste handling and disposal areas includes seven wet detention basins. Conveyance to these ponds is through a series of letdown structures, perimeter channels and swales, and culverts. Stormwater collection along the entrance road is provided by the roadside swales. All portions of the stormwater system will be visually inspected by Sarasota County weekly and immediately following a storm event of 0.5 inch or greater. The inspections will identify buildup of debris, surface sheen, erosion and sedimentation, overgrown or exotic vegetation, and structural problems. Any problems identified by these inspections will be corrected within three days. The wet detention basins will be inspected to estimate quantities of sediment within each pond. If the sediment occupies 30 percent of the volume below the normal pool elevation, the sediment will be removed and disposed of in the landfill. Vegetation in all portions of the conveyance systems will be removed on an as needed basis to prevent blockage. The ponds and stormwater conveyance systems will be maintained and operated in accordance with the SWFWMD and FDEP ERP Permits for the CCSWDC.

~~K.2.i~~K.2.g ~~Groundwater~~Water Quality Monitoring Plan

Please refer to the Water Quality Monitoring Plan and addenda for the CCSWDC for information regarding the groundwater monitoring network and well locations.

~~K.2.j~~K.2.h Maintaining Leachate Collection System

Leachate collection system maintenance will include daily inspection of all leachate pump stations, leachate collection ~~metering~~ manholes and leak detection manholes. All pump running data as well as leachate level and flow data will be recorded, as described in Section K.8 of the Operations Plan, and checked for irregularities. Pumps are pulled and checked for operational parameters ~~at least once~~ every two years~~.~~ or as needed. An example leachate pump data form is provided in Attachment K-~~7~~6. The leachate collection system will be cleaned and inspected as described in part K.8.h of this Operations Plan.

K.3 LANDFILL OPERATION RECORD

The Administrative office located adjacent to the scale facilities at the entrance of the CCSWDC is shown on ~~Sheet C-03, Overall Site Plan and Phasing Plan of the previously submitted Phase II Class I Landfill Expansion Permit Drawings.~~the Site Plan. The office provides facilities for employees including a training/meeting room, sanitary facilities, and first aid equipment. Similar additional facilities are located at the ~~Equipment Maintenance~~County and Contractor's maintenance building. Files are located in the Administrative office and contain the operating record for the facilities as required by regulatory agencies/permits. Items that will be stored in the operation record include:

- This Operations Plan.
- All permits for the facility.
- All records and drawings used for developing permit applications.
- All monitoring information, calibration and maintenance records, and copies of reports required by permit (maintained for at least 10 years).
- Background water quality records.
- Annual estimates of the remaining life of the constructed landfill and other permitted landfill areas.
- All monthly waste records which shall include tonnages received for Class I, C&D, yard waste and recyclables.
- Asbestos records with location ~~records~~information if friable asbestos.
- All monitoring reports for groundwater, ~~stormwater, leachate~~ surface ~~and~~water, and landfill gas.
- Waste tire processing records.
- Copies of all notifications required by 62-701 F.A.C.
- On-site precipitation record.
- FDEP inspection reports.
- Load checking reports.
- Leachate storage tank inspection reports.
- All training verifications.
- All other reports related to the design, operation, monitoring and permitting for the facilities.

K.4 LANDFILL WASTE REPORTS

Each month, a summary report of waste tonnage received for Class I waste, C&D debris, yard waste, and recyclables will be compiled. Copies of the monthly reports will be submitted to FDEP annually or upon request.

K.5 EFFECTIVE BARRIER/ACCESS CONTROL

Access control at CCSWDC includes a perimeter fence with a locking access gate at the scalehouse, which is the only entrance/exit for the facility. The access gate ~~normally~~ will be kept open during hours of operations and an attendant will be at the scalehouse during those times. When CCSWDC is not in operation, this access gate ~~normally~~ will be kept closed and locked. During special events, emergencies, or due to construction that does not include waste filling operations, the gates may be open or unlocked when the CCSWDC is not in operation and not accepting waste. During these times, a County representative or designee (event organizers and volunteers etc…) will be onsite to monitor the activities and access to the site. Also, the County would barricade the internal access roads leading to the disposal areas of the site so that access is open to only the portions of the facility for the event (i.e. RC Fliers field).

In addition to the lockable access gates, which are the primary barriers and access controls when the CCSWDC is closed, the access lanes to the scales, the bypass lane and exits lanes include a powered access control arms that were voluntarily installed by the County. These gates are activated using HID cards issued to County and staff and other authorized users or can be activated by scale house and administration staff upon identification of visitors requesting access. These gates provide additional access control during the CCSWDC's operational hours.

K.6 LOAD CHECKING PROGRAM

At least three random loads of Class I Municipal Solid Waste (MSW) delivered to the landfill each week will be examined in accordance with the following procedure:

Mechanism for Inspections

(1) Specific locations within the active working face are to be dedicated to load examination. These areas should be relatively free from extraneous debris and capable of maintaining isolation of the material for one calendar week.

(2) The inspection of the load shall be controlled by a ~~Contracting Operator employee~~County or Contractor employee. ~~Training of contract personnel shall continue on an ongoing basis.~~ In accordance with Rule 62-701.500(6)(a), FAC, a minimum of three random loads will be checked at the active working face(s) each week. The selected driver will be directed to discharge their load at a designated location adjacent to the working face. If any unauthorized waste (i.e., lead-acid batteries, used oil, yard trash, white goods, and whole tires) is found by the random inspection, or as part of routine operations, the waste will be segregated and removed from the site for recycling as described in Section K.2.c. These unauthorized wastes will be stored as described in Section K.2.c. and removed from the site within 30 days.

(3) The inspection form (see Attachment K-~~5~~7) shall be filled out and signed off by the inspector. The inspector will identify and note all unauthorized waste found during random load inspection, estimated quantity, and the action taken. The inspector will sign the inspection form that will be retained at the CCSWDC. It shall be the County's responsibility to file/store/distribute the reports.

(4) The Sarasota County Solid Waste Operations Unit or the Solid Waste's Hazardous Waste Section will investigate violations found during the inspection process. The Contract Operator will remove or clean-up the disposed materials.

(5) Violations involving hazardous waste dumping will be handled by the Sarasota County Solid Waste's Hazardous Waste Section. Every attempt will be exhausted to place responsibility on the generator relative to having the hazardous waste in question removed from the landfill at the expense of the generator. In the event that generator responsibility cannot be determined and that the waste appears to be from a commercial source, it will be the Contract Operator's responsibility to segregate and secure the waste and pay all costs relative to safely disposing of said waste.

(6) A list of offenders will be compiled by the Solid Waste's Hazardous Waste Section and the list will be provided to Sarasota County with updates on a periodic basis.

K.7 PROCEDURES FOR SPREADING & COMPACTING WASTE AT THE LANDFILL

The following guidelines will provide an efficient and environmentally sound method of operation for the CCSWDC.

- Portable litter fencing will be placed at the working face where needed to reduce windblown litter.
- Cracks or eroded sections in the surface of any filled and covered area will be repaired and a regular maintenance program will be followed to eliminate pockets or depressions that may develop as waste settles.
- If 12 inches of intermediate cover (free of waste) has been placed over a partially filled area, it will be removed and either reused or stockpiled for later use prior to the placement of a new lift.
- The materials described in Attachment K-~~9~~8 may be used for initial cover. Stormwater runoff will not be allowed from waste filled areas covered with tire chips or tarp. Runoff from outside of the bermed working face area will be considered stormwater only if the flow passes over areas that have no exposed waste and have been adequately covered with at least six inches of compacted soil (or a mixture of soil/mulch), free of waste, ~~and~~ stabilized to control erosion, and the flow does not contact leachate.
- Sufficient cover material will be stockpiled near the working face to provide an adequate supply for initial cover operations. In some areas, daily stockpiling near the working face may not be necessary because of the proximity of the on-site soil stockpile area.

K.7.a Waste Layer Thickness and Compaction Frequencies

Waste will be spread in layers approximately two feet thick on the working face and compacted to approximately one foot in thickness before application of the next layer. The solid waste will be compacted with a minimum of three to five passes of a compactor.

K.7.b First Layer of Waste

Selected solid waste loads containing no large rigid objects will be used for at least the first four feet of the first lift of a new ~~cell~~subcell in order to protect the liner and leachate collection system. The first lift will be a minimum of four feet deep to bring the daily cover grade to an elevation ~~of approximately 40 feet NGVD which is~~ higher than the ~~cell~~subcell's lined external containment berms in order to promote shedding of stormwater. The first 4 feet of select waste will be placed with a low ground pressure dozer and a spotter will be located on the sand layer during placement to remove any large, rigid objects. Waste will be deposited at the inside toe of the ~~cell~~subcell's lined external containment berm on the south end of the ~~cell~~subcell and spread to the north. ~~No solid waste will be placed beyond the litter fences.~~ For the initial lift, hauling vehicles will reach the working face by traveling on top of the previously deposited waste and depositing the loads at the top of the working face. The fill will be spread and compacted "down slope" to prevent vehicles from traveling on the protective sand layer. Also see Section K.2.f. in this Operations Plan.

K.7.c Slopes, Side Grades, and Lift Height

The typical height for each lift is 10 feet. All incoming solid waste will be directed to the working face and placed against the toe of the side slope of the previous day's refuse. The first row of waste in a new lift will be placed ~~against the toe of the containment berm to provide a guide for the placement of refuse for the remaining rows.~~as shown in the Landfill Staging Plans provided in Attachment K-4. The toe of waste will be placed approximately 30 feet from the divider berm or on the lower portion of the divider berm, depending on if the operation is including a leachate containment area for leachate drainage. The leachate containment area at the toe of a subcell divider berm is discussed in subsequent sections. A maximum slope of 3H: 1V will be maintained on the working face. All top slope areas will be sloped to drain stormwater off of the landfill.

Waste will be placed within the ~~designated edge~~limits of waste ~~as shown on the previously submitted~~of Phase II ~~Class I Landfill Expansion Permit Drawings~~. The edge of waste will be located by measuring seven feet inward from the edge of liner markers on the north and west sides of Phase II ~~including the temporary liner termination for Cell 2.~~. The edge of waste will be located by measuring 14 feet inward from the edge of liner markers on the south side of Phase II. Periodic inspections will be made to ensure that the markers are in place and the edge of waste is located the required distance from the edge of the liner.

K.7.d Maximum Width of Working Face

Maximum width of the working face will be 200 feet. This will provide a sufficient area for maneuvering large private and commercial vehicles as well as minimize the exposed area and the unnecessary use of cover material.

K.7.e Initial Cover

For the Class I landfill, a minimum of six inches of compacted initial cover consisting of native sandy soils, top soil, soil-yard waste compost mixture, shredded tires, or other FDEP approved initial cover will be applied to the top of the lift and to the working face at the end of each day. Attachment K-~~9~~8 provides a description and specification for initial cover materials previously approved for this facility.

A layer of shredded yard waste may be applied when needed to the top of the initial cover to minimize erosion during rainy weather and to prevent birds from pecking through the initial cover layer to the garbage. The shredded yard waste layer shall not exceed 12-inches and shall be removed prior to placement of additional waste. The application of initial cover over the landfilled waste will assure control of disease vector breeding/animal attraction, odors, waste combustion (fire), blowing litter, and moisture infiltration.

The initial cover material will be spread over the exposed waste and, with the exception of tarps, compacted by the equipment used to spread the cover (likely a bulldozer or scraper). The initial cover material will not be removed prior to placement of successive lifts of waste, with the exception of tarps, which would be removed prior to placement of successive lifts. To enhance the infiltration of leachate through the waste, the initial cover material may be broken up in place by a dozer blade or equipment traffic immediately prior to the placement of the subsequent lift of waste. As described in previous sections, other methods may be used during wet weather conditions to enhance infiltration of leachate as needed. Any remaining litter and cleanings from equipment will be placed at the bottom of the completed ~~cell~~subcell and covered.

Before moving the working face, the area that will remain inactive will be covered with compacted cover soil (free of waste) or a mixture of 50 percent unscreened wood mulch and 50 percent soil, with sufficient thickness (minimum 6-inches) to prevent erosion and the mixing of leachate with stormwater.

K.7.f Application of Initial Cover

Initial cover will be applied at the end of each working day, except when solid waste will be placed on the working face within 18 hours. A temporary cover such as a tarpaulin may be used to cover the working face and removed before placement of additional waste. Initial cover alternative materials are listed in Attachment K-~~9~~8.

K.7.g Intermediate Cover

Intermediate cover consisting of at least one foot of compacted native sandy soils or composted yard trash screened through ½-inch mesh mixed with 25 percent soil, by volume, will be applied within seven days if final cover or an additional lift is not to be applied within 180 days. Intermediate covered areas that will not be landfilled or covered with final cover within 6 months will have all external~~, internal and top~~ slopes sodded. Top slopes ~~greater than 6:1 sodded,~~ and ~~the~~ internal areas will be either seeded and mulched or mulched only to avoid erosion. If only mulch is utilized, the mulch layer shall not exceed 12-inches in depth and shall be removed along with the ~~interim~~intermediate soil cover layer prior to the placement of additional waste.

To conserve the intermediate cover material, a portion of the intermediate cover will be removed immediately before placement of additional solid waste on top of the lift or before placement of additional

waste. The intermediate cover material (free of waste) will be stripped and reused as intermediate cover material. The stripped intermediate cover will be pushed ahead as needed for the perimeter containment berms constructed around the active working face area. The intermediate cover areas will be graded to promote drainage and seeded to prevent erosion.

Components of the landfill gas collection system may be installed in areas that receive intermediate cover. The locations of all underground piping associated with these systems will be marked to avoid damage to them during landfill operation and intermediate cover maintenance activities. Above ground structures such as well heads, and valves, will be kept readily visible by such measures as clearing vegetation, painting components bright colors, and installing protective posts and flagging. These measures should protect the above ground structures from damage during routine intermediate cover maintenance activities such as mowing, grass repair, and washout repair.

K.7.h Final Cover

Following the receipt of a closure permit, final cover will be applied to the Class I landfill on the completed portions of Phase II. The perimeter ~~sideslopes~~side slopes of all completed ~~cell~~subcells will have a slope of 3H:1V.

The cap and final cover will consist of a minimum of 12 inches of intermediate cover soil, a geomembrane layer that complies with FDEP rules, a geocomposite drainage layer, and 24 inches of local common soil of which the upper 6 inches will be capable of supporting vegetative cover. Specifications for the local common soil will be provided with the closure permit application.

Components of the landfill gas collection system may be installed in areas that receive final cover. The locations of all underground piping associated with these systems will be marked to avoid damage to them during landfill operation and final cover maintenance activities. Above ground structures such as well heads, and valves, will be kept readily visible by such measures as clearing vegetation, painting components bright colors, and installing protective posts and flagging. Protective posts shall be installed such that they do not damage the final cover system. These measures should protect the above ground structures from damage during routine final cover maintenance activities such as mowing, grass repair, and washout repair.

Additional information regarding final closure requirements, final cover design, closure and maintenance/long-term care of the Phase I Landfill area, which was closed in June 2013, except for the south slope which has a TPO geomembrane temporary final cover, is provided in the Phase I Closure and Long-term Care Plan provided in Attachment K-5.

K.7.i Scavenging and Salvaging Control Devices

Scavenging and salvaging is not allowed ~~on the working face~~ at CCSWDC. In the event spotters working in this area observe scavenging or salvaging activities~~ on the working face, the landfill manager~~, the Manager will be notified.

K.7.j Litter Control Devices

Litter will be controlled by requiring covered loads, efficient unloading and cover operations, litter fences, perimeter fencing, and routine clean-up. Litter outside the working area will be picked up within 24 hours.

A small litter fence will be placed at the limit of each landfill ~~cell~~subcell area for the full length of the active working face.

K.7.k Erosion Control Procedures

Erosion control procedures at CCSWDC mainly consist of stormwater management for active working face areas and in areas surrounding the landfill phases~~cells~~. Stormwater management, for used portions of active ~~cell~~subcells where initial or intermediate cover over the waste has been placed in accordance with FDEP requirements, is achieved by:

- Grading the waste-in-place with an adequate slope and adequately covering the waste to divert stormwater away from the working face.
- Use of terraces and letdown pipes.
- Maintaining internal and external berms.

The stormwater management system will be of critical importance during the filling sequence. As each lift is constructed, temporary stormwater diversion berms will be constructed.

A containment berm will isolate the working face from the remaining covered areas. Stormwater which accumulates behind the containment berm in the area of the working face is leachate and will be retained and allowed to percolate into the landfill where it will eventually be collected in the leachate collection system.

Other berms will divert stormwater from top slopes to letdown structures and will serve as erosion control to protect recently covered side slopes. These external berms will be sodded to minimize erosion and will be directly connected to the temporary letdown structures to facilitate proper management of stormwater runoff.

Sediments that reach the perimeter channels will collect behind the ditch blocks and will require periodic removal. Within 30 days after applying intermediate cover to side slopes that have reached designed dimensions, sod shall be applied. As filling progresses above the proposed first drainage terrace, the first set of temporary letdown structures will be constructed. This operating procedure will minimize the amount of erosion and sediment accumulation that must periodically be removed from the perimeter ditches.

Areas provided with intermediate cover, or other areas that discharge to the stormwater management system that exhibit significant erosion, will be repaired as follows:

- If greater than 50 percent of the soil cover material has eroded, then the area will be repaired within seven days.
- If waste or liner is exposed, then the area will be repaired by the end of the next working day.

K.8 PROCEDURE FOR LEACHATE MANAGEMENT

K.8.a Leachate ~~Monitoring, Sampling, and Analysis~~Collection

The sump pumps located in ~~Cell~~Subcells 1 through 5 of Phase I will operate in an automatic mode based on the liquid level in the sump. Figure L-2 in Attachment K-3 shows the operation levels for the sump pumps. The pressure transducer located at the end of the pump housing accurately measures the level of liquid in the sump and provides a digital readout of this level at the control panel mounted on the valve box at the top of each ~~cell~~subcell's lined external containment berm. As shown on Figure L-2, the high water alarm will result if leachate levels rise to cause 12 inches of head on the liner system adjacent to the sump area.

Two additional pump units are provided for backup of the Phase I sump pumps. This allows for removal of each pump on a regular scheduled basis to perform preventative maintenance. When a sump pump is removed for schedule maintenance and the pump will not be reinstalled within 24 hours, a spare pump will be reinstalled immediately while the maintenance is being performed. Each pump will receive preventative maintenance in accordance with the manufacturer's recommendations ~~at a frequency based on run time~~.

During normal operations, ~~Cell~~Subcells 1 through 4 of Phase II will drain by gravity to a duplex leachate pump station located north of ~~Cell~~Subcell 2. The pump station will operate in an automatic mode based on the liquid level within the wet well. ~~Sheet C-17, Leachate Collection System Details, of the previously submitted Phase II Class I Landfill Expansion Permit Drawings shows the operation levels for the pumps.~~ Pump levels are set to keep the liquid level in the leachate collection sump below the inlet from the metering manhole and the pump off is set above the intake of the pumps to avoid air suction or running the pumps dry. The pressure transducers located at the end of the pump housing accurately measure the level of liquid within the wet well and provide a digital readout of this level at the control panel mounted adjacent to the pump station. ~~As shown on Sheet C-17, Leachate Collection System Details, the~~ The duplex pumps will operate on a lead/lag basis.

~~Additional details on leachate sampling locations, sampling and analysis schedule, and data submission is provided in the Water Quality Monitoring Plan and Addendums.~~

K.8.b Leachate Collection and Removal System

K.8.b.(1) Phase I Collection System

The Phase I Class I landfill leachate collection system consists of a geonet drainage layer and perforated collection pipe above the composite liner system to collect and convey leachate. The leachate that is conveyed to sumps will be pumped to an existing 1,800,000 gallon on-site leachate storage tank. A typical detail for the Phase I sumps is provided in Figure L-2 of Attachment K-3. The leachate collection piping system consists of 8-inch diameter perforated HDPE pipe sloped in such a manner that leachate flowing through the solid waste of the landfill will be collected and transported by gravity to a sump and leachate pump. The discharge line from the sump pump connects to a HDPE header line ~~via a valve vault. Provisions for sampling the leachate as well as monitoring flows and pressure are provided in the valve boxes.~~.

K.8.b.(2) Phase II Collection System

The Phase II Class I landfill leachate collection system consists of a geonet composite drainage layer and perforated collection pipe above the double synthetic liner system to collect and convey leachate. The leachate that is collected within the Phase II ~~cell~~subcells will be pumped to the on-site leachate storage tank. The leachate collection piping system consists of 8-inch diameter perforated HDPE pipe sloped in such a manner that leachate flowing through the solid waste of the landfill will be collected and transported by gravity to a metering manhole located on the north perimeter berm of each ~~cell~~subcell. The original design included measurement of~~At the metering manhole,~~ leachate flows from each ~~cell~~subcell ~~are measured~~ using a Parshall flume and an ultrasonic water level sensor in the metering manholes. ~~The ultra-sonic level sensors in the metering manholes were selected based on anticipated normal flow rates. Specifically, the level-sensor was selected for a flow rate of 3 gpm to 194 gpm. The metering manhole was designed to accurately measure flows of 0.6 inches in depth or greater which corresponds to 2.29 gpm and above.~~ However,~~Therefore,~~ during periods of low flow below the measurement ability of the ultra-sonic level sensors or when methane gas interfered with operation of the ultrasonic flow sensor, flow was~~ill~~ not ~~be~~ registered at each ~~cell~~subcell, but the total leachate collected was~~will be~~ measured by the flow meter at the main Phase II pump station~~s~~. This made the measurements at the metering manholes unreliable and unusable for leachate quantification. Therefore, in 2013, the County requested that flow from the Phase II Main Leachate Pump Station be recorded as well as flow from the leak detection manholes, but flow recording from the leachate metering manholes be discontinued since these measurements had considerable error associated with them. Each metering manhole drains by gravity to a duplex leachate pump station located adjacent to ~~Cell~~Subcell 2. The discharge from the leachate pump station is directed through a HDPE leachate forcemain installed along the north and west sides of Phase II, the west and south sides of future Phase III and the south side of future Phase IV. ~~Provisions for sampling the Phase II leachate as well as monitoring flows and pressure are provided in the valve vault located adjacent to the leachate pump station as shown on the details provided on Sheet C-17, Leachate Collection System Details, of the previously submitted Phase II Class I Landfill Expansion Permit Drawings.~~ Any stormwater accumulated in an unused ~~cell~~subcell will be routed to the leachate collection manholes. The leachate collection manholes are fitted with a temporary stormwater piping that allows discharge of stormwater directly into the perimeter channel. Otherwise, the stormwater can be pumped out from the ~~cell~~subcell using portable pumps and discharged to the perimeter channel. The valve connecting the leachate collection pipe within the ~~cell~~subcell to the manhole will be in the closed position to prevent stormwater from draining to the leachate pump station. Prior to waste disposal within a ~~cell~~subcell, the temporary stormwater diversion modifications will be removed. Immediately prior to solid waste being deposited into a new landfill ~~cell~~subcell, the valve at the manhole will be opened to allow the free flow of leachate to the pump station.

Leachate collected within the geocomposite drainage layer of the leak detection system of Phase ~~-~~II will be drained by gravity to a leak detection manhole located on the north perimeter berm of each ~~cell~~subcell. The discharge valve at the leak detection manhole will normally be closed to allow the quantity of leakage to be measured. An ultrasonic water level sensor calibrated to the storage volume within the manhole at a given level will be used to measure leakage rate. After the leakage rate has been determined, the leachate within the leak detection manholes will subsequently be drained by gravity to the leachate pump station and the valve closed for another measurement. The leak detection system has been

designed such that a leak developing within the most remote part of a ~~cell~~subcell will flow to the leak detection manhole within 12 hours. A Leakage Action Rate (LAR) of 100 gallons/acre/day has been established for the Phase II ~~cell~~subcells, which corresponds to the Environmental Protection Agency guidance and FDEP experience with facilities containing similar liner systems. At this rate, the 470 gallon storage volume within the leak detection manhole will be exhausted within 8.75 hours. For leakage rates greater than 100 gallons/acre/day, measures should be initiated to find and repair or minimize leaks within the primary liner system.

The following procedures will be initiated if the LAR of 100 gallons/acre/day is exceeded:

1. Increase monitoring of the leakage quantity from the ~~cell~~subcell(s) affected. This consists of increasing the frequency of monitoring liquid levels within the leak detection manhole(s) to determine the time required to fill the five-foot storage volume in the manholes. It is anticipated that readings will be made at least daily after the LAR is exceeded and the calculated leakage rates will be recorded.
2. Immediately notify FDEP once it is ascertained that the LAR is being exceeded and provide a plan on how Sarasota County intends to address the exceedance.
3. Attempt to locate and fix sources of leaks to the extent practical. Measures to locate leaks could include inspecting the leak detection manhole to determine whether groundwater is leaking into it, observing the surface of the ~~cell~~subcell to determine if there are indications as to where leaks may be located such as large protrusions of waste that may have penetrated the liner system, and ~~video taping~~videotaping the leak detection pipe to determine where large inflows are occurring. If the location of a leak can be identified and excavation of waste is practical, then the liner will be exposed and repaired.
4. Adjust operational practices as needed to reduce the likelihood of future damage to the liner such as increasing the thickness of the initial layer of select waste on the ~~cell~~subcell bottom.
5. If leaks cannot be specifically located or if it is not practical to find them, adjust operations to try to reduce the leakage to below the LAR. This could include measures to reduce the generation of leachate such as grading the landfill to promote runoff, installing drains and berms to direct runoff away from the landfill, the installation of additional intermediate or temporary cover, installing temporary geomembrane rain covers, or accelerating the placement of final cover in areas that have reached final elevation.

K.8.b.(3) Phase I/Phase II Overlay Liner System

The overlay liner system, located over the west ~~sideslope~~side slope of Phase I, reduces the quantity of leachate entering the Phase I leachate collection system from the Phase II expansion areas by directing it to the Phase II leachate collection system. This will be accomplished by hydraulically separating the newer waste above it from the older waste beneath the overlay liner system.

The overlay liner system consists of (from the top down) two feet of protective cover material, a geonet composite drainage layer, a textured 60-mil HDPE liner, and a minimum of 12 inches of intermediate cover placed over the waste. The rain cover ~~would~~will be removed prior to the placement of waste against the overlay liner system.

~~The rain cover on the overlay liner system includes rain gutters to divert stormwater off the rain cover to temporary letdowns that will direct the stormwater to the perimeter channel located north of Phase I. The locations of the rain gutters and temporary letdowns are shown on Sheet C-03 of the previously submitted Phase II Class I Landfill Expansion Permit Drawings. Details of these features are included on Sheet C-13B of the previously submitted Phase II Class I Landfill Expansion Permit Drawings. Calculations demonstrating that the rain gutters and letdowns are capable of transmitting the flow generated from the 25 year design storm are included in Attachment H.2 of the Phase II Permit Application Engineering Report.~~

Leachate percolating through the newer waste located above the overlay liner system will be captured by the liner and directed to the base of the overlay liner system by means of the geonet composite drainage layer. A stone-filled trench drain with an 8-inch diameter perforated HDPE pipe located at the Phase I/Phase II divider berm will collect the leachate and direct it to the low point within ~~Cell~~Subcell 1 of Phase II where it will flow out of the ~~cell~~subcell with the rest of the leachate collected within ~~Cell~~Subcell 1. From there, the leachate will flow as previously described for the Phase II collection system.

K.8.b.(4) **Leachate Disposal System: General Description**

Leachate that is generated from the landfill ~~cell~~subcells will be pumped to the existing 1.8 million gallon leachate storage tank. The leachate accumulated in the leachate storage tank will be removed by a leachate pumping station that will pump through a 4-inch PVC forcemain to a connection to the Sarasota County wastewater collection system south of the landfill on Knights Trail Road. The Sarasota County wastewater collection system in this area flows to the City of Venice Water Reclamation Facility (WRF) for treatment.

The leachate pumping and forcemain system is the primary disposal method for the CCSWDC leachate. Transfer pumps that discharge to tanker trucks for hauling to the Bee Ridge WRF will serve as a secondary emergency disposal location.

The following information provides a description of the above ground leachate storage tank in accordance with the requirements of 62-701.400(6)(c).

The existing leachate storage tank has a total capacity of 1.8 million gallons. The exposed plan area of the secondary containment system surrounding the existing leachate storage tank is 5,419 square feet. This will allow 27,000 gallons of water to accumulate after an 8-inch rainfall event. ~~All~~The liquid ~~accumulating~~collected in the secondary containment area may be handled as leachate or discharged to the stormwater system. In the event the liquid in the secondary containment is pumped to the stormwater system then the liquid will be tested for specific conductance. Specific conductance of the stormwater in the secondary containment shall not be more than 50 percent above the specific conductance of water in the nearest downstream stormwater pond (Stormwater Pond No. 6) or shall not exceed 1,275 *u*mhos/cm, whichever is greater. If the specific conductance is greater than these criteria or if a visible sheen is present, then the stormwater will be pumped directly into the leachate storage tank and managed as leachate. If the liquid collected in the secondary containment system is pumped back to the leachate storage tank to be handled as leachate then the liquid will not be tested for specific conductance.

A log of discharges from the secondary containment system will be maintained. The date, specific conductance measurements, and visual sheen observations shall be recorded.

An electronic water level sensor will automatically determine when the leachate storage tank reaches 90 percent capacity (1.62 million gallons) and a high water alarm will be activated. An electric actuated shutoff valve in the fill line will be activated to prevent overfilling the tank when the capacity reaches 1.8 million gallons in the tank. The electric actuated shutoff valve will be tested by inducing a false signal from the level sensor and confirming proper operation on a weekly schedule. The exposed tank exterior will be inspected weekly by visual observation. The inspection will include looking for leaks, corrosion, or other maintenance deficiencies. This will be accomplished by inspection from platforms at the top of the 20-foot high secondary containment wall, positioned 120 degrees apart around the circumference of the tank. The tank interior will be inspected annually when the tank is empty or at least once every three years. If any failures are detected, the tank construction company shall be contacted immediately and appropriate repairs conducted based on the nature of the problem. Leachate will be managed in accordance with the Contingency Plan (Section K.8.e) when the tank is out of service. Reports of the above inspections will be maintained by Sarasota County.

The leachate pumping station will have automatic controls with the following set points:

~~Elevation~~ Elevation (feet NGVD 1929)		Height from Bottom of Tank (feet)
High water alarm	40	18
Lag pump on	28	6
Lead pump on	27	5
Pumps off	26	4
Tank bottom	22	0

The set points can be modified by adjusting the pump control system. The duplex pumps will automatically alternate operation each time the pump is stopped by the level control system. The pumping station is equipped with a data logger to record flow~~, pH, and conductivity on a continuous basis~~.

K.8.c If Leachate Becomes Regulated as Hazardous Waste

Sarasota County will evaluate options for pre-treating the leachate and alternate disposal if it becomes regulated as a hazardous waste.

K.8.d Off-Site Treatment of Leachate

The primary disposal location for CCSWDC leachate ~~and alternate disposal~~ is the City of Venice WWTP. ~~Facility commitment letters are provided in Attachment K-6.~~ A secondary disposal location is the Bee Ridge WRF. CCSWDC may use other secondary facilities for the offsite treatment or disposal of leachate; however, the County will notify FDEP of the change prior to use.

The CCSWDC will dispose of leachate at the primary treatment location provided the leachate meets the disposal quality requirements. Should leachate quality change such that it is no longer acceptable at the primary treatment location, the CCSWDC will dispose of leachate at the secondary facility.

K.8.e Contingency Plan for Leachate Management

Should one of the following events occur, the leachate contingency management plan shall be implemented.

- Any mechanical failure of the leachate management system that would prevent operation of the landfill leachate collection system pumps or the leachate transfer pumps for more ~~then~~than three consecutive days.
- Liquid accumulation in the leachate storage tank leak detection system in amounts greater than expected from rainfall.
- Rise of leachate levels inside the leachate storage tank greater than 46~~52.6~~ feet NGVD (~~high water alarm~~ elevation represented by 24~~31~~ foot mark on the external tank gauge).

Implementation of the contingency plan includes the following actions.

(1) The landfill manager shall notify the FDEP (within 24 hours) and leachate disposal facilities of the emergency event.

(2) If the problem is excess leachate in the detection system of the leachate storage tank, remedial measures shall be taken immediately to eliminate the leak. The detection system of the concrete leachate storage tank consists of a layer of gravel located between the bottom of the leachate storage tank and the top of the secondary containment slab that enables the detection of leaks at the bottom of the leachate storage tank. Additional tractor trailer tanker units and operators shall be called to the site to expedite transport of leachate to the receiving WWTP or additional quantities shall be pumped through the forcemain to the City of Venice lift station. The leachate storage tank shall be emptied completely, if required, to facilitate repairs. Leachate will be pumped to mobile tanks during repair periods.

(3) If the problem is excessive levels of leachate in the leachate storage tank (elevation exceeds the ~~high water alarm level~~level listed above), the maximum amount of leachate shall be diverted from the tank by increasing the frequency or number of tanker trucks hauling leachate to the primary or secondary WWTPs, pumping additional quantities of leachate through the forcemain to the City of Venice lift station, or storing leachate in mobile tanks.

(4) Once the problem causing the implementation of the contingency plan has been resolved to an acceptable degree, the landfill manager shall notify FDEP (within three days) that the facility is ready to return to normal operating conditions.

(5) Inspections and repairs to the leachate storage tank will be scheduled during winter months to the extent possible in order to minimize the quantity of leachate that must be removed. While the leachate storage tank is out of service, leachate will be pumped directly to either tanker trucks, temporary storage tanks, or through the forcemain to the City of Venice lift station.

K.8.f Recording Quantities of Leachate Generated

K.8.f.(1) Phase I Leachate Pump Stations

A control panel for each sump pump in Cell Nos. 1 through 5 of Phase I is ~~mounted on~~ located near the ~~valve box at the top of each cell's lined external containment berm~~pump station. Each ~~control panel will be~~pump station is equipped with a pump hour meter, level indicator, and flow meter.

A control panel for the Phase II duplex leachate pump station is mounted adjacent to the pump station. The control panel is equipped with a flow meter, water level indicator, and a pump hour meter.

The following information will be recorded once per operating day from each pump location.

~~Cell~~Subcell No. or Phase
Flow Meter Reading
Hour Meter Reading
Sump or Wet Well Liquid Level

The above information is recorded on the form provided in Attachment K-~~7~~6.

In the event a flow meter is not in operation, Sarasota County may record the run-time hours for the pump and convert time to flow using historical records, until the flow meter is returned to service.

K.8.f.(2) Phase II Leachate Metering Manholes and Leak Detection Manholes

Flow is not recorded from the separate leachate collection metering manholes at Subcells 1 through 4.

The level sensor reading at each leak detection manhole in Subcells 1 through 4 is recorded each operational day and the change in level converted to gallons/acre/day to compare to the allowable ALR as described in Section K.8.b.(2) above. ~~A control panel for the Phase II metering manholes is mounted adjacent to the manholes. The panel is equipped with a water level indicator, instantaneous flow meter, and a flow totalizer.~~

~~The following information will be recorded once per operating day from each metering manhole location.~~

~~Cell No.~~
~~Instantaneous Flow~~
~~Totalized Flow~~
~~Liquid Level~~

~~The above information is recorded on the form provided in Attachment K-7.~~

K.8.f.(3) Phase II Main Pump Station

The Phase II leachate collection manholes from Subcell 1 through 4 gravity drain to the main leachate pump station at Phase II where the leachate is pumped from the sump to the leachate storage tank. There are two sump pumps located in the pump station. The following information is recorded daily from the pump station location.

Flow Meter Reading
Hour Meter Reading (Both Pumps)

K.8.f.(4) Recording Methods

The leachate collection information included in the sections above for Phases I and II~~pump station information~~ may be recorded visually at each pump station by recording the values directly from the pump station readouts or by the collection of the data via a telemetry system. Please note that the telemetry system, as of September 2013, is planned as a future installation. The telemetry system, when installed, will upload a minimum of one reading of the leachate pump station parameters per day. The readings can then be viewed by County staff via computer and recorded on the forms provided in Attachment K-~~8.~~6. The leachate data recorded on the individual pump station forms are used in the overall leachate generation form for the facility. These forms are provided in Attachment K-6.

K.8.g Precipitation and Leachate Generation Rates

Rainfall for each 24-hour period measured at an official gauge located on-site will be recorded and entered onto a spreadsheet (format included in Attachment K-~~10~~6) to compare precipitation to leachate generation.

K.8.h Leachate Collection System Inspection and Cleaning

~~CCSWDC~~The County will water pressure clean or conduct a video inspection of the leachate collection ~~system~~systems in Phase I and Phase II at least once every five years in accordance with Rule 62-701.500 F.A.C. requirements. Leachate pumps, metering manholes, and leak detection manholes at CCSWDC will be inspected for operation failures at least daily. Control panels will be inspected and operational data recorded as described in Section K.8.f.

K.9 LANDFILL GAS MANAGEMENT AND MONITORING

K.9.a Landfill Gas Management

The CCSWDC is located near the center of ~~a~~over 6,000 ~~acre site~~acres of County-owned property. The minimum distance from the Class I landfill to the nearest property line is 1,800 feet. This distance represents a substantial buffer to allow for dispersion of odors normally associated with MSW landfill operations. Therefore, it is not anticipated that collection of landfill gas will be necessary for odor control.

In order to comply with air quality requirements, a Non-Methane Organic Compound (NMOC) emission report will be submitted to the implementing authority on an annual basis following the requirements of New Source Performance Standards (NSPS). Within 12 months after reporting NMOC emissions greater than or equal to 50 Mg/year (megagram per year), a detailed landfill gas collection and controls system design plan submittal shall be made to the NSPS implementing agency. Within 18 months after this submittal, the installation of the landfill gas collection and control system shall be completed. Based on current Tier 2 sampling and model projections, the CCSWDC Class I landfill has not exceeded the NMOC threshold at the time of this report and is not expected to exceed the threshold until 2015. Operation of the Landfill Gas System is provided in greater detail in Attachment K-~~14~~9, LFGCCS Operation and Maintenance Plan.

K.9.b Landfill Gas Monitoring Program

A gas monitoring program will be implemented to prevent explosions and fires and to minimize off-site odors and damage to vegetation. The landfill gas monitoring program for CCSWDC will include monitoring of the landfill perimeter and enclosed on-site structures at the monitoring locations shown on Figure 1 in Attachment K-3. Monitoring will be conducted on a quarterly basis and a report submitted to FDEP within 15 days after the end of the quarter in which monitoring occurred. The outside monitoring locations, as shown on Figure 1 provided in Attachment K-3, will consist of gas monitoring probes as shown on Figure L-3 in Attachment K-3. All gas probes will be clearly labeled and easily visible at all times.

The CCSWDC gas monitoring locations include four gas monitoring probes as described above and numbered GP-2, GP-3, GP-7, and GP-9 and six gas monitoring locations GM-1, GM-2, GM-3, GM-4, GM-5, and GM-7 in structures as shown on Figure 1 provided in Attachment K-3.

These locations are summarized in the table below:

CCSWDC Landfill Gas Monitoring Points

MONITORING POINT	TYPE OF MONITORING	LOCATION
GP-2	Probe	North of Phase I
GP-3	Probe	East of Phase I
GP-7	Probe	North of C&D Processing Area
GP-9	Probe	West of ~~Cell~~Subcell 4, Phase II
GM-1	Monitoring Location	Contractor's Maintenance Bldg.
GM-2	Monitoring Location	C&D Processing Area
GM-3	Monitoring Location	County Maintenance Bldg.
GM-4	Monitoring Location	Administrative Bldg.
GM-5	Monitoring Location	Scale House
GM-7	Monitoring Location	Control Panel at Leachate Storage Tank

Low areas, base boards, floor drains, and floor mounted cabinets shall be monitored inside the structures. Other structures on the site are not monitored because their great distance from the landfill (over 3,400 feet) and the shallow groundwater table (5 to 7 feet below surface) at the site would cause any migrating gas, if it existed, to purge to the atmosphere before it would travel to these structures through the ground. Also, there are no connections via conduit pipes between these structures and the landfill area.

Please note that gas monitoring probes north of Phase II are not necessary due to the presence of Stormwater Pond No. 1 that will effectively cut off the migration route of landfill gas in that direction. Also, gas monitoring probes south of Phase II are not necessary due to the long distance between the edge of waste and the property line and structures that can be adversely affected by migrating landfill gas. The high water table at the site also makes it unlikely that gas will migrate significant distances.

The landfill gas probes and monitoring locations shown on Figure 1 will be sampled at least quarterly for concentrations of combustible gases determined as a percent of the lower explosive limit (LEL) calibrated to methane as described in FAC 62-701.530.(2).

A methane/combustible gas detector (meter) will be used to measure the LEL at the monitoring locations. No purging of the probe will be allowed. Once the meter is connected to the sampling port, the valve will be opened and the meter pump will be engaged and meter reading observed. The highest value observed is recorded as well as the steady state value observed.

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

K.9.c Odor Reporting Procedures

The CCSWDC shall be operated to control objectionable odors in accordance with Rule 62-296.320(2), F.A.C. After being notified by the FDEP that objectionable odors have been confirmed beyond the landfill property boundary, the CCSWDC shall:

(1) Immediately take steps to reduce the objectionable odors. Such steps may include applying or increasing initial cover, reducing the size of the working face, and ceasing operations in the areas where odors have been detected;

(2) Submit to the FDEP for approval an odor remediation plan for the gas releases. The plan shall describe the nature and extent of the problem and the proposed long-term remedy. The remedy shall be initiated within 30 days of approval;

(3) Implement a routine odor monitoring program to determine the timing and extent of any off-site odors, and to evaluate the effectiveness of the odor remediation plan.

K.10 STORMWATER MANAGEMENT SYSTEM

The landfill stormwater management system for CCSWDC is discussed in Section K.2.f~~h~~ – Stormwater System.

K.11 EQUIPMENT AND OPERATION FEATURE REQUIREMENTS

K.11.a Adequate In-Service Equipment

Equipment proposed for the CCSWDC will include the equipment listed in Table K-1 . The exact equipment complement may vary from time to time and additional equipment will be acquired if needed. One roll-off container will be placed at the Class I landfill area.

Emergency Electrical Generation Equipment is of adequate size to assure complete operation of the Leachate Disposal and Collection Systems.

TABLE K-1. EQUIPMENT USED AT THE CCSWDC

NUMBER	EQUIPMENT
2	Bulldozer
1	Compactor
1	Dump Truck
1	Front-end Loader or Hydraulic Excavator
1	Grader
1	Water Truck

K.11.b Reserve Equipment

Cooperative lending agreements with the Contract Operator's company and standing agreements with local equipment suppliers will provide a means for procuring additional back-up equipment within 24 hours of a need being identified.

K.11.c Communication Equipment~~Facilities~~

Radios and cell phones will be the primary communications devices to provide safe conditions for landfill personnel.

K.11.d Dust Control Methods

Dust from unpaved haul roads and construction areas within the Class I landfill area will be controlled through the use of a water spray truck. An alternate dust control measure that may be used in active cells of the Class I landfill area is leachate reuse (see Attachment K-~~11~~10 for FDEP approval letter). The reuse of leachate involves spraying small quantities of leachate from a spray bar mounted on the rear of a tank

~~**TABLE K-1. EQUIPMENT USED AT THE CCSWDC**~~

~~NUMBER~~	~~EQUIPMENT~~
~~2~~	~~Bulldozer~~
~~2~~	~~Compactors~~
~~2~~	~~Dump Truck~~
~~1~~	~~Front-end Loader~~
~~1~~	~~Grader~~
~~1~~	~~Hydraulic Excavator~~
~~1~~	~~Water Truck~~
~~1~~	~~Fuel Truck~~
~~2~~	~~Pick-up Trucks~~
~~2~~	~~UD Gators~~
~~1~~	~~Roll-off Truck~~
~~1~~	~~Compressor~~
~~1~~	~~Pressure Washer~~
~~1~~	~~Welder~~

truck onto active fill areas of the landfill. The landfill operation crew will monitor the rate of leachate application, soil moisture conditions, and the specific landfill areas used to prevent the generation of leachate runoff. Leachate will only be applied under the following conditions:

- Leachate may only be sprayed on interior active, bermed fill areas, including the working face, and areas with the required six inches of initial cover.
- Leachate may not be sprayed on areas with intermediate or final cover.
- The maximum grade leachate will be sprayed on is a ~~10H~~5H:1V slope. Areas within 150 feet of a 4H:1V or steeper side slope will not be sprayed on. At all times areas receiving leachate must be controlled to prevent run-off from entering the stormwater system
- Leachate will not be sprayed during a rainfall event, and when the application area is in a saturated condition.
- The application rate of leachate should be such that leachate does not accumulate on the landfill surface, and infiltrates quickly into the covered refuse.
- Leachate will not be sprayed at the end of the day on the initial cover of the active working face or other areas. Spraying should be done early in the morning after any dew evaporates and continue until early afternoon or until all available areas have been used.
- If a water truck that is normally used for dust control on areas outside the working face is used, the operator, following leachate spraying, will fill the truck tank with clean water and the load sprayed as if it were leachate. This will flush and decontaminate the truck tank so that it may be used again for dust control outside the working face.

Daily volume of leachate sprayed (gallons), per this method, will be recorded.

If needed, dust masks will be available to personnel working in excessively dusty areas.

In general the CCSWDC will employ multiple methods for dust control as described above; in addition, many of the CCSWDC's roads are paved for all-weather conditions, as described in Section K.12 below.

Reasonable dust control precautions may include, but are not limited to, the following:

- Paving and maintenance of roads, parking areas and yards.
- Application of water to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- Application of asphalt, water, or other FDEP-approved dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- Landscaping or planting of vegetation.
- Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

K.11.e Litter Control Devices

See Section K.7.j. in this Operations Plan.

K.11.f Signs Indicating Name of Operating Authority, Traffic Flow, Hours of Operations, and Charges for Disposal

Permanent signs ~~along the access road and~~ at the facility identify the Sarasota County Central County Solid Waste Disposal Facility and indicate hours of operation and charges for different types of loads. The sign indicates materials that are not accepted for disposal in the landfill. Signs indicating approach and exit routes and one-way roads are strategically placed so traffic at the landfill will move smoothly and efficiently to and from the working face area.

K.12 ALL WEATHER ACCESS ROADS

A paved entrance from Knights Trail Road terminates at the landfill perimeter roadway. ~~In addition, paved perimeter roads around the landfill areas are shown on Sheet G-03, Overall Site Plan and Phasing Plan of the previously submitted Phase II Class I Landfill Expansion Permit Drawings.~~ All weather access roads will be constructed within the Class I area to route traffic to the active working face. The all weather access roads will be constructed of earth, ground shingles, crushed rock, shell or any other stabilizing material, as appropriate.

K.13 ADDITIONAL RECORD KEEPING AND REPORTING

See Section K.3 of this Operations Plan for records and documents retained. Documents used for development, operations, construction, background water quality, and permitting of the CCSWDC will be kept for the design life of the CCSWDC. Weigh tickets shall be kept for five years. All monitoring information, including calibration and maintenance records, chart recordings, and all reports required by permit shall be kept for 10 years.

Records that are more than five years old may be archived at an off-site storage location. The archived records will be stored in a secure place where they will be protected from damage. Provisions will be made to retrieve records from storage as required within seven days. The County utilizes electronic archiving where a document is scanned and archived as an electronic document. The electronic files will be available and accessible within seven days as well.

ATTACHMENT K-1

TRAINING PLAN

~~ATTACHMENT K-1~~

TRAINING PLAN

As stated in 62-701.500(1), F.A.C., all landfills shall have at least one trained operator at the landfill during all times when the landfill receives waste. The operator training includes a 24-hour initial course and 16 hours of continuing education every 3 years. Spotter training includes an 8-hour initial course and 4 hours of continuing education every 3 years.

In accordance with Rule 62-701.320(15), the owner or operator of a landfill, or other solid waste management facility required by this chapter to have trained operators or spotters, shall not employ a person to perform, nor may any person perform, the duties of an operator or spotter at such a facility unless that person is a trained operator or trained spotter. Interim spotters, who do not have the formal spotter training, may be employed at the CCSWDC provided that the interim spotter is under the direct supervision of a trained operator or trained spotter. The interim spotter must receive training as an operator or spotter within 3 months of employment. An interim operator may be employed at the facility provided that it is for a period of no longer than 3 months from employment or if supervised by a trained operator, the interim operator must receive training within one year of employment.

Operator and spotter training courses are available at the University of Florida Center for Training, Research and Education for Environmental Occupations (UF/TREEO) and through other sources. A listing of the current year training courses available through TREEO can be found at the following website: http://www.treeo.ufl.edu/sw/. A listing of positions requiring training is provided in Section K.2.a.

ATTACHMENT K-2

SAFETY AND CONTINGENCY PLAN

~~***SOLID WASTE OPERATIONS***~~

~~CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX~~

~~**SAFETY PLAN**~~

~~SAFETY~~

The program shall consist of the following parts:

I. Training

A. General and safety training of all landfill and contractor personnel will be required.

B. Safety topics may include, but not be limited to the following: CPR, First Aid, Site Safety, Personal Protection Equipment (PPE), Lock Out / Tag Out, Weather Hazards, Heat Stress, and Fire Extinguisher training.

C. All staff shall receive training on the job-specific aspects of their position. This training will be provided by and is the responsibility of the employee's immediate supervisor, or their designee.

D. Special training shall be required for each employee on a job-specific basis. Each operator of a piece of equipment shall be trained in the operation of that piece of equipment by his immediate supervisor, or their designee. This training shall be given in accordance with the manufacturer's recommendations and operating manuals. This training will be provided by and is the responsibility of the immediate supervisor in charge of the employee, or their designee.

II. PPE

Special safety equipment such as rain gear including rubber boots, boots having steel toes and puncture resistant soles, work gloves, goggles, dust masks, protective eye glasses, rubber gloves, face guards, hearing protection, and rubber aprons shall be utilized as part of the day-to-day operational procedures where applicable. It shall be the responsibility of each individual employee and the immediate supervisor to assure that proper safety equipment is in use. All employees will be required to wear safety shoes or boots when working in an environment dictating the need for such equipment. Generally, safety shoes will be required except when working in the scalehouse or office. Safety shoes will be issued to all employees whose duties require the wearing of safety shoes.

III. Safety Meetings

A. Safety meetings shall be held periodically but no less than one meeting shall be held every month.

B. Safety meetings shall be the responsibility of the Solid Waste Operations Manager and all on-site contractors for their respectively personnel.

C. Safety meeting topics shall include a discussion of all incidents which have occurred since the last safety meeting was held along with topics of current importance and interest.

IV. Safety Officer

A. The Solid Waste Operations Safety Officer shall be appointed by the Manager of the Solid Waste Operations.

B. The position of Solid Waste Operations Safety Officer shall be held in conjunction with the regular duties of the position for which the person was hired. However, the Solid Waste Operations Safety Officer shall be given time during the regular working hours to perform the duties of the Safety Officer.

V. Emergency & Fire Safety

This section provides the standard operating procedures for all personnel in the event of an emergency or fire of any nature that may take place within the boundaries of landfill or transfer station.

A. Notification: CALL 911. As in any emergency, the first thing to do is to immediately notify the proper emergency response team. In the case of FIRE, immediately notify the Fire Department through the emergency phone number 911. Remember, if you are calling from a phone that is connected to the County phone system you must dial 9- 911 to reach the emergency operator.

B. Be sure to SPEAK SLOWLY, DISTINCTLY, DELIBERATELY, and remain as calm as possible. Briefly tell the person to whom you are reporting the emergency the following: the nature of the emergency, any injuries or persons involved, and where the emergency is located.

C. If there are injuries, you should render whatever assistance you can without endangering yourself. An Automatic Defibulator (AED) for CPR emergencies is located in the Landfill Administration Office.

D. If possible, evacuate any personnel or equipment that may be endangered.

E. In the event of small fires, the use of a fire extinguisher may be sufficient to contain the fire until the arrival of the Emergency Responders. Fire extinguishers can be found in every Solid Waste Operations vehicle, on every piece of heavy equipment, and in buildings located throughout the landfill site. Upon arrival of the Emergency Responders, you should take whatever steps necessary to assist.

~~E.~~F. In the event of fire in the landfill, it may be necessary to smother the fire using available dirt from the dirt stockpiles located at the landfill. In this case, the Manager of the landfill shall make immediate provisions to provide that earth cover. Also, the procedures described in Section K.2.b~~11.e~~ of the Operations Plan shall be followed.

VI. Waste Tire Storage Area

Refer to Waste Tire Storage Area Safety Plan included in this attachment.

VII. List of Emergency Response Equipment

A. In the event of a fire emergency, the following equipment may be available at the landfill and may be used as the situation dictates in the evolution of responding to a fire emergency, such as making berms, smothering with earth and materials, and then use of water in extinguishing fires:

- Front End Loaders.
- Tractors.
- Water Truck.
- Water Pumps.

B. It should be noted that from time to time the equipment available for fire emergency use may be changed, and it should be the responsibility of the persons in charge at the facility to be aware of those changes and respond accordingly with the appropriate equipment in the event of a fire emergency.

C. Dry hydrant connections are available as shown on the drawings for the purpose of supplying water in the event of a fire or other emergency. Upon arrival of the fire department, this water supply will be used under the direction of the officer in charge from the fire department.

VIII. Procedure to be Followed for Cleanup

Any residual from a fire shall be addressed as follows:

A. The County will conduct soil sampling as applicable of the area to confirm the absence or presence of contaminants.

B. If contaminants are found that exceed established clean-up target levels, then remedial actions may be taken that can include removal of soil.

CONTINGENCY PLAN

In the event an emergency should occur that would interrupt operations at the landfill, the emergency provisions of Section K.2.b.~~1~~ of the Operations Plan shall be followed and the following procedures shall be implemented:

The waste collection entities operating within the County shall be notified of the operational interruption and approximate time when operations will be restored.

If it is anticipated that the interruption of operations will be ~~no~~ longer than 48 hours, an alternate disposal site shall be determined. The following alternate disposal sites are available and listed in order of preference. Should one facility also not be available the next facility on the list shall be contacted.

- Manatee County Lena Road Landfill
- Charlotte County Zemel Road Landfill
- Waste Management Landfill in Okeechobee County

~~WASTE TIRE STORAGE AREA SAFETY PLAN~~

SOLID WASTE OPERATIONS

CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX

SAFETY PLAN
WASTE TIRE STORAGE AREA

Updated June 1, 2012 **as part of Waste Tire Processing Facility Permit Application**

SAFETY

The program shall consist of the following parts:

I. Training

A. General & safety training of all landfill and contractor personnel will be required.

B. Safety topics may include, but not be limited to the following: CPR, First Aid, Site Safety, Personal Protection Equipment (PPE), Lock-out / Tag Out, Weather Hazards, Heat Stress, and Fire Extinguisher training.

C. All staff shall receive training on the job-specific aspects of their position. This training will be provided by and it the responsibility of the employee's immediate supervisor, or their designee.

D. Special training shall be required for each employee on a job-specific basis. Each operator of a piece of equipment shall be trained in the operation of that piece of equipment by his immediate supervisor, or their designee. This training shall be given in accordance with the manufacturer's recommendations and operating manuals. This training will be provided by and is the responsibility of the immediate supervisor in charge of the employee, or their designee.

II. PPE

A. Special safety equipment such a rain gear including rubber boots, boots having steel toes and puncture resistant soles, work gloves, goggles, dust masks, protective eye glasses, rubber gloves, face guards, hearing protection, and rubber aprons shall be utilized as part of the day-to-day operational procedures where applicable. It shall be the responsibility of each individual employee and their immediate supervisor to assure that proper safety equipment is in use.

III. Safety Meetings

A. Safety meeting shall be held periodically but no less than one meeting shall be held every other month.

B. Safety meeting shall be the responsibility of the Solid Waste Operations Manager and all on-site contractors for their respectively personnel.

C. Safety meeting topics shall include a discussion of all incidents which have occurred since the last safety meeting was held along with topics of current importance and interest.

IV. Safety Officer

A. The Solid Waste Operations Safety Officer shall be appointed by the Manager of the Solid Waste Operations.

B. The position of Solid Waste Operations Safety Officer shall be held in conjunction with the regular duties of the position for which the person was hired. However, the Solid Waste Operations Safety Officer shall be given time during the regular working hours to perform the duties of the Safety Officer.

V. Emergency & Fire Safety

This section provides the standard operating procedure for all personnel in the event of an emergency or fire of any nature that may take place within the boundaries of the landfill or transfer station.

A. Notification: Call 911. As in any emergency, the first thing to do is to notify the proper emergency response team. In the case of FIRE, notify the Fire Department through the emergency phone number 911. Remember; if you are calling from a phone that is connected to the County phone system you must dial 9-911 to reach an emergency operator.
B. Be sure to SPEAK SLOWLY, DISTINCTLY, DELIBERATELY, and remain as calm as possible. Briefly tell the person to whom you are reporting the emergency the following: the nature of the emergency, any injuries or persons involved, and where the emergency is located.
C. If there are injuries, you should render whatever assistance you can without endangering yourself. An Automatic Defibulator (AED) for CPR emergencies is located in the Landfill Administration Office.
D. If possible, evacuate any personnel or equipment that may be endangered.
E. In the event of small fires, the use of a fire extinguisher may be sufficient to contain the fire until the arrival of the Emergency Responders. Fire extinguishers can be found in every Solid Waste Operations vehicle, on every piece of heavy equipment and in buildings located throughout the landfill site.
F. Upon arrival of the Emergency Responders, you should take whatever steps necessary to assist.

Used Tire Storage Area Special Rules

In the event there is a fire or other emergency in the used tire storage area, the following rules shall apply:

A. After following the emergency procedure outlined above, personnel shall ensure that a berm is placed to the west of the waste tire pile area and the drain to the east is diked-off to assure that no oily material generated by the combustion of the tires escapes the designated Waste Tire area.
B. The State of Florida, Department of Environmental Protection shall be immediately notified by calling the ~~Tampa office~~South District Office at 239-332-6969~~813-632-7600~~. Within 7 days of any emergency involving potential impacts to the site, the Solid Waste Operations Manager shall submit to the Department a written report on the emergency, the results of the action taken and an action plan to mitigate future occurrences.
C. In addition, any special conditions as set forth by the jurisdictional Fire Department shall be met.

List of Emergency Response Equipment

A. In the event of a fire emergency, the following equipment may be available at the landfill and may be used as the situation dictates in the evolution of responding to a fire emergency, such

as making berms, smothering with earth & materials, and then use of water in extinguishing fires:

- Front End Loaders
- Tractors
- Water Truck
- Water Pumps

B. It should be noted that from time to time the equipment available for fire emergency use may be changed, and it should be the responsibility of the persons in charge at the facility to be aware of those changes and respond accordingly with the appropriate equipment in the event of a fire emergency.

C. Dry hydrant connections are available as shown on the drawings for the purpose of supplying water in the event of a fire or other emergency. Upon arrival of the fire department, this water supply will be used under the direction of the officer in charge from the fire department.

VI. Procedure to be Followed for Clean-up

Any residual from a fire at the tire storage area shall be addressed as follows:

A. The County will conduct soil sampling of the waste tire area to confirm the absence or presence of contaminants.

B. If contaminants are found that exceed established clean-up target levels, then remedial actions may be taken that can include remove of soil.

ATTACHMENT K-3

FIGURES

ATTACHMENT K-4

~~CONTAMINATED SOIL ACCEPTANCE CRITERIA~~

LANDFILL STAGING PLANS

ATTACHMENT K-~~4~~5

~~CONTAMINATED SOIL ACCEPTANCE CRITERIA~~

~~According to the Hazardous Waste Division of Sarasota County, there are no standard contaminated soil acceptance criteria for the CCSWDC. Acceptance of contaminated soil at CCSWDC is only conducted on a case-by-case basis whereby soils must be tested for the toxicity characteristic leaching procedure (TCLP) and the paint filter test. The Hazardous Waste Division evaluates results from these tests to determine whether the soil will be accepted at the landfill. In any case, contaminated soil accepted at CCSWDC would be placed directly into the lined active landfill cell and not stockpiled at the site unless authorized in writing by the FDEP.~~

PHASE I CLOSURE AND LONG-TERM CARE PLAN

3.0 CLOSURE PROCEDURES

The following section describes the procedures that ~~will be~~were followed in accordance with 62-701.600~~610~~, F.A.C., for closure of Phase I of the CCSWDC Class I Landfill.

3.1 Survey Monuments

Survey monuments ~~are~~were not required for Phase I of the CCSWDC Class I landfill since the final elevation of the landfill was~~will be~~ more than 20 feet above the natural land surface.

3.2 Final Survey Report

A final survey report ~~or aerial map~~ of the constructed Phase I closure ~~will be~~was conducted in compliance with 62-701.600(6)(b)~~610(3)~~, F.A.C. The final survey report ~~or aerial map will be~~was prepared by a registered land surveyor and ~~will be~~was submitted to the FDEP to verify that the final contours and elevations ~~are~~were in accordance with the plans approved in the closure permit. The contours in the final survey ~~will be~~were shown at no greater than 5-foot intervals.

3.3 Closure Construction Certifications

In accordance with 62-701.600(6)~~610(4)~~, F.A.C., a signed, dated, and sealed Certificate of Closure Construction Completion by the engineer of record ~~will be~~was submitted to the FDEP upon completion of Phase I closure construction. ~~This certificate will indicate any deviations~~ Deviations from the permitted closure plans were noted in the report. The FDEP approved the closure construction certification report in June 2013.

3.4 Declaration to the public

After final closure operations are inspected and approved for the entire CCSWDC Class I landfill by the FDEP, the Sarasota County Solid Waste Department will file a declaration to the public in the deed records of Sarasota County. The declaration will include a legal description of the property and a site plan specifying the area actually filled with solid waste. The declaration was~~will~~ not be submitted after closure of Phase I since the landfill will remain in operation.

3.5 Official date of closing

The requirements identified in Sections 3.2 and 3.3 will be submitted to the FDEP after closure of each phase. The declaration to the public described in Section 3.4 will be completed when all phases are closed and the CCSWDC ceases waste disposal operations. Upon receipt, the FDEP will notify the Sarasota County Solid Waste Department in writing that the notice of termination of operations and closure of the facility has been received. The official date of the landfill closing will be the date of the FDEP letter.

3.6 Closed Landfill use

No use has been designated for the closed Phase I landfill area. In accordance with 62-701.610(1~~7~~), F.A.C., Sarasota County will consult with the FDEP before conducting activities at the closed landfill. Sarasota County acknowledges that the FDEP retains regulatory control over any activities that may affect the integrity of the environmental protection measures of the landfill.

ATTACHMENT K-~~5~~6

~~WASTE~~ LEACHATE PUMP DATA AND LEACHATE GENERATION FORMS

ATTACHMENT K-7

LOAD INSPECTION ~~AND REPORTING~~ FORM

SARASOTA COUNTY SOLID WASTE DEPARTMENT
SOLID WASTE LOAD INSPECTION FORM

Florida Administrative Code 62-701 requires landfills to periodically inspect loads presented for disposal. If unauthorized wastes are found, the responsible party shall be required to cause removal of said waste and the Florida Department of Environmental Protection shall be notified. Inspection records shall be maintained for a period of three years.

Inspection Location _____

Date _____ Time _____ Truck No. _____

Hauler _____ Vehicle License Plate No. _____

Source of Waste _____

Driver (print name) _____

Driver (signature) _____

Inspector/Title _____

Waste Observed _____

Unauthorized Waste _____

FDEP Contacted _____ Name of Contact _____

What action was taken to properly dispose of the unauthorized waste?

(Use attachments if necessary)

~~**ATTACHMENT K-6**~~

~~**LEACHATE DISPOSAL COMMITMENT LETTER**~~

~~**ATTACHMENT K-7**~~

~~**LEACHATE PUMP DATA FORM**~~

~~**AND**~~

~~**METERING MANHOLE DATA FORM**~~

ATTACHMENT K-8

~~**LABORATORY CERTIFICATION**~~

~~**ATTACHMENT K-9**~~

INITIAL COVER SPECIFICATIONS

ATTACHMENT K-~~9~~8

INITIAL COVER SPECIFICATIONS

Materials approved for use as initial cover shall include soils as well as the following:

- Waste tires that have been cut into sufficiently small parts, which means that 70 percent of the waste tire materials 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 within the bermed working area.
- ~~Composted yard trash~~Processed yard waste, unscreened, and then mixed in the ratio of 50 percent processed yard waste~~unscreened compost~~ to 50 percent soil, and applied in a six (6) inch compacted layer may be used as initial cover within the bermed working area. ~~Ninety percent of the unscreened compost shall pass through a 3/4 inch screen prior to mixing with soil.~~
- Shredded asphalt roofing shingles, screened through a 1 inch mesh, and then mixed in the ratio of 50 percent shredded shingles to 50 percent soil, and applied in a six (6) inch compacted layer may be used as initial cover within the bermed working area.
- Ground-up construction and demolition debris, unscreened, and applied in a six (6) inch compacted layer, may be used as initial cover within the bermed working area. Ninety percent of the unscreened ground-up debris shall pass a 2 inch screen and 50 percent shall pass a ¼ inch screen.
- Processed yard waste~~Composted yard trash~~, screened through ½ inch mesh, and then mixed in the ratio of 75 percent screened compost to 25 percent soil, and applied in a six (6) inch compacted layer may be used as initial cover, or applied in a one (1) foot compacted layer in addition to the six (6) inch initial cover may be used as intermediate cover.
- ~~A mixture of yard trash mulch and soil such that the mixture will achieve the following: 100 percent passes 2 inch screen, 85 percent passes a ¾ inch screen, and 70 percent passes a ¼ inch screen. The mixture shall be applied in a 6 inch compacted layer.~~
- Street sweeping which is material consisting primarily of soil, rocks, asphalt, leaves and other vegetative matter generated during routine cleaning of roads and is not mixed with any Class I waste. It does not include material generated during the ~~clean up~~cleanup of an oil of hazardous chemical spill or material that is believed to be contaminated.

ATTACHMENT K-~~10~~9

~~**LEACHATE REPORT FORM**~~

~~**AND**~~

~~**LCRS INSPECTION REPORT**~~

LFGCCS OPERATIONS AND MAINTENANCE PLAN

ATTACHMENT K-~~11~~10

FDEP APPROVAL LETTER FOR LEACHATE REUSE

ATTACHMENT K-11~~15~~

PHASE II TEMPORARY GAS VENT INFORMATION

~~ATTACHMENT K-12~~

~~LANDFILL RECYCLING PLAN~~

~~ATTACHMENT K-12~~

~~LANDFILL RECYCLING PLAN~~

~~**Sarasota County Solid Waste Operations (SWO) segregates the following materials at the Central County Solid Waste Disposal Complex (CCSWDC) for the purpose of recycling these materials:**~~

~~**Yard Wastes**~~

Sarasota County
Solid Waste Operations

Central County Solid Waste Disposal Complex Operations Plan

September 2013

Prepared by
Sarasota County Solid Waste Operations
4000 Knights Trail Road
Nokomis, FL 34275

TABLE OF CONTENTS

ATTACHMENTS

SECTION K
OPERATIONS PLAN

K.1 TRAINING

In accordance with Rule 62-701.500(1), Florida Administrative Code (F.A.C.), key supervisory staff members at the Central County Solid Waste Disposal Complex (CCSWDC) have received Landfill Operator Certification training. The training plan can be found in Attachment K-1. Sarasota County staff or a qualified landfill operations contractor will operate the CCSWDC. Sarasota County will require the operating entity to provide at least one trained landfill operator certified in accordance with Chapter 62-701.320(15), F.A.C. and at least one trained spotter at each working face during operation when the landfill receives waste to detect unauthorized wastes from each load.

The spotters will be responsible for guiding vehicles and promoting an efficient operation during normal operation hours. The spotters shall also be responsible for enforcing provisions for controlling the waste received. These provisions are described in Section K.2.c.

The CCSWDC will be operated in compliance with all applicable regulations governing the operation of solid waste management facilities and surface water management facilities.

In addition, the equipment operators have sufficient training and knowledge to move waste and soil, and to develop the site in accordance with the design plans and operational standards.

Interim spotters, who do not have the formal spotter training, may be employed at the CCSWDC provided that the interim spotter is under the direct supervision of a trained operator or trained spotter. The interim spotter must receive training as an operator or spotter within three months of employment.

An interim operator may be employed at the CCSWDC provided that the interim operator has had at least one year of experience at the facility or a similar facility. An interim operator must receive operator training within one year of employment as interim operator. An interim operator shall serve as the operator for the facility in lieu of a trained operator for no more than three consecutive months.

In the event the spotter is located on heavy equipment spreading waste at the working face, then the equipment operator must be a trained landfill operator or spotter. The equipment operator will remove unauthorized waste from the working face to a temporary area next to the working face for later removal/management or stop operations and notify another operator or ground personnel to assist with removal/management of the unauthorized waste before resuming operations.

K.2 LANDFILL OPERATIONS PLAN

K.2.a Designation of Responsible Persons

The CCSWDC is owned by Sarasota County and operated under the direction of the Sarasota County Solid Waste Operations Division Manager (Manager). The Manager will be the designated responsible person for the operation of the CCSWDC.

A list of the designated landfill positions is provided below. The Contractor must have an adequate number of positions working to fulfill their contractual obligations which at all times shall include at a minimum a manager (general or operations), an equipment operator and a spotter. The County shall have a minimum of one position at the site when waste is being accepted. Training requirements are also provided for each position. The anticipated position list for both the Contractor and the County is provided below.

CONTRACTOR:

- General Manager (Operator)
- Operations Manager (Operator)
- Equipment Operators (Operator
- Laborer/Spotter (Spotter)

COUNTY:

- Manager (Operator)
- Compliance Specialist (Operator)
- Solid Waste Engineer (Operator)

K.2.b Contingency Operations for Emergencies

K.2.b.(1) Emergency Provisions

Emergency conditions at the landfill site may occur as a result of a natural disaster (hurricane, tornado, flooding, etc.) or fire. In the event emergency conditions will interrupt operations at the CCSWDC, the following safety and contingency plan will be implemented (see Attachment K-2). In addition, staff shall review and implement the most current version of the Sarasota County Solid Waste Operations Emergency Plan on file at the CCSWDC. Refuse is not normally delivered to the site during emergency conditions; however, should a major storm occur, the following actions shall be taken:

- Daily cover shall be applied to all exposed refuse before a major storm arrives, if possible.
- All landfill equipment shall be parked near any natural wind screens such as earthen mounds and berms.
- All lightweight signs and equipment shall be secured.
- When operation resumes, work shall commence in dry areas only (up from the active working face). Refuse shall not be deposited in standing water.
- Contract agreements with local contractors, equipment suppliers, or cooperative lending agreements with other County departments will be pursued for backup equipment, if necessary.

Small fires on the working face will be controlled by a bulldozer, landfill compactor and a water wagon and ample cover material to extinguish the fire. On-site stockpiles of soil cover material will always be available for suppressing fires. The large stormwater retention basins adjacent to the landfill will serve as the water source for firefighting purposes.

In the event of a fire or other emergency, the solid waste operations manager or their designee will notify the Florida Department of Environmental Protection (FDEP) within 24 hours by telephone and within seven days a written report will be submitted describing the origins of the emergency, actions taken, result of the actions taken, and an analysis of the success or failure of the actions. However, if the fire cannot be extinguished by CCSWDC personnel within one hour, the FDEP and the local government will be notified of the fire and informed of the fire control measures taken at the facility. If the fire cannot be extinguished within 48 hours or Solid Waste Operations determines additional assistance is needed at

anytime, the local fire control protection agency will be called.

In addition, the local government and neighbors, which may be impacted by the fire, will be notified.

The Nokomis Fire Department presently maintains a fire station at 111 Pavonia Road in Nokomis, approximately 10.9 miles from the CCSWDC. This station has equipment capable of obtaining water from surface sources for fire fighting. In addition, the City of Venice has a fire station located at 5300 Laurel Road in Venice, FL located approximately 7.6 miles from the CCSWDC.

Waste will continue to be accepted and disposal operations will continue in the event of a fire. Operations will be moved a safe distance from the fire location so as not to pose a hazard to operating personnel or customers.

A hot load area will be provided within the lined disposal area in a location away from the working face to allow vehicles arriving at the landfill with a fire in their load to dump quickly in an area where the material can be spread out and quickly covered with soil. The location of the hot load area will change from time to time with the changing working face locations. Hot loads will not be dumped on the working face until sufficiently cool to avoid combustion.

As described in Sections K.11.a. and K.11.b, the Contractor will provide adequate equipment on-site to ensure proper operation of the landfill and for excavating, spreading, compacting, and covering waste. As part of an agreement with a maintenance contractor, the Contractor will receive loaner equipment within 24 hours of equipment breakdown, if required. These basic emergency procedures should protect the landfill and equipment, and allow reactivation of the operation in an orderly and timely manner. Two mobile electrical generators are maintained on-site to provide power during outages for the administration building, scale house, and Contractor's maintenance building, and leachate collection system. There is also a stationary, dedicated emergency generator to provide power to the administration building, scale house and scales.

In case of an accidental spill of oil, fuel, leachate or chemicals, the spill will be minimized by controlling the source immediately (e.g., by closing valve, turning-off switch, or taking any other necessary action). The affected area will be controlled by diverting vehicular traffic. Runoff from the affected area will be controlled by building a berm, plugging drain or ditch, or adding absorbent material. The affected area will be cleaned, and the effectiveness of the cleanup confirmed by sampling, as needed depending on the nature of the spilled material. For spill countermeasures of secondary containment at the Leachate Storage Tank refer to Section K.8.b, Leachate Collection and Removal System.

A list of emergency telephone numbers is provided below.

Ambulance Service	911
Police Department	911
Fire Department	911
CCSWDC Administration Building	(941) 861-1573
Main Switchboard Sarasota County Government	(941) 861-5000
South District, Dept. of Environmental Protection	((239)-344-5600

Remember, if you are calling from a phone, which is connected to the County's switchboard, you must dial 9 then 911 to reach the emergency operator.

K.2.b.(2) Wet Weather Operations

Steps to be taken for accommodating wet weather solid waste disposal include: 1) set-aside elevated tipping areas with limestone or shell approaches or other acceptable base material as needed to allow uninhibited vehicular movement; 2) set-aside elevated sandy cover material, and 3) erect containment berms around wet weather tipping areas in accordance with Section K.2.h.

In order to avoid an excessive accumulation of standing water in the area of the working face, a small area of daily cover will be removed by grading to allow direct percolation to the underlying refuse and leachate collection system. In the event direct percolation into the waste does not drain leachate as quickly as needed, the operator may utilize other leachate drainage options including directing leachate to a leachate containment area along the west side of the Phase II active subcell to drain directly into the leachate collection system of the active subcell of Phase II, using drains at the working face constructed of cut/shredded tires to improve drainage at the working face, and using pumping equipment that is available on-site, if required, to remove ponded leachate by pumping it to either a tanker truck for proper treatment and disposal, or to a leachate collection manhole. Additional details and information regarding the operational options listed above for wet weather conditions and control of stormwater and leachate is included in Section K.2.f.(4), Stormwater Controls.

K.2.c Controlling the Type of Waste Received at the Site

The clerks at the scale house, the site security fence, and access gate system discourage unauthorized entry and disposal of unauthorized waste. A sign located at the entrance states the general regulations including the types of unauthorized solid waste.

At least one trained spotter will be at each working face when wastes are received at the landfill. Normally, one working face will be operating at the landfill. There may be occasions where two or more working faces are required such as when the first lift of waste is placed in a new subcell, during high volume periods such as after a storm, or when the size of a working face is limited such as at the corner of a subcell. The spotters will be trained in accordance with Rule 62-701.320(15) and in accordance with the training plan described in Attachment K-1 to recognize unauthorized waste. Each load of waste will be visually inspected at ground level by the spotter as well as by the equipment operators spreading the waste. The spotters and equipment operators will look for containers and other indicators of unauthorized waste. Upon detection of unauthorized waste, the spotters will require the hauler to remove the material for disposal at a proper facility. If the hauler has departed, the spotter will remove the material from the working face for temporary storage until the material is taken to the appropriate recycling, processing or disposal area.

A trained spotter at the working face will visually inspect the waste as it is deposited. If unauthorized waste (i.e., lead-acid batteries, used oil, yard trash, white goods, and whole tires) is found at the working face, as part of routine operations, the waste would be segregated and removed for recycling.

Sarasota segregates and/or removes from the Class I Landfill working face the following materials at the CCSWDC for the purpose of recycling these materials:

- Yard Wastes
- White Goods (i.e., household appliances)
- Waste Tires
- Construction and Demolition Wastes
- Lead Acid or Rechargeable Batteries
- Waste Oil
- Lawn Mowers
- Electronic Devices (CRT televisions and computers)

The segregation and removal of the above materials furthers the County's goals for achieving the state-wide mandated recycling goals. Please note that construction and demolition debris and yard waste mixed with MSW are not removed from the Class I working face since they are considered contaminated and are treated as Class I waste. Also, construction and demolition debris may be disposed in the Class I Landfill when the C&D processing facility is not able or not open to accept C&D.

K.2.c.(1) Household Hazardous Waste and Citizen's Convenience Center

The Household Hazardous Waste and Citizen's Convenience Center (HHWCCC) is located near the CCSWDC entrance, just east of the administration building and scalehouse as shown on the Site Plan provided in Attachment K-4. The HHWCCC consists of spaces for roll off containers for MSW, scrap metal, and recyclables. Tires, electronics, and household hazardous waste are also collected at this location. The roll off containers and electronics storage areas are located on concrete pads. Three permanent canopies that prevent the accumulation of water in the containers during inclement weather are available at the site. Household chemicals are stored in a pre-manufactured hazardous waste storage unit. HHWCCC has a full-time attendant and is in operation from 8:00 A.M. to 5:00 P.M. Monday through Friday. The attendant meets customers at the entrance, directs them to the appropriate area of the facility, and monitors the waste for unacceptable materials. The roll-off containers of MSW are emptied daily, however small quantities of waste may be left overnight in the containers from customers who arrive near the end of the day. The containers are under cover at the HHWCCC and the waste taken at the HHWCCC typically has deminimus quantities of putrescible waste. Tires are also taken to the designated Tire Area on a daily basis.

K.2.c.(2) Special Wastes

White goods and electronic wastes are accepted at the CCSWDC for recycling but are not allowed at the working face for disposal. Special wastes not authorized for disposal are accepted for staging at the CCSWDC until they are removed from the site for offsite recycling. These materials shall be stored in the designated white goods and recyclables storage area located near the southeast corner of Phase I as shown on the CCSWDC Site Plan provided in Attachment K-4.

K.2.c.(2).1 Shredded Waste

The CCSWDC does not currently accept shredded waste nor does the County shred waste at the CCSWDC.

K.2.c.(2).2 Motor Vehicles, Marine Vessels, and Mobile Homes

The CCSWDC does not accept motor vehicles for disposal. The CCSWDC will accept marine vessels (including motor boats, sail boats, jetskis or other marine vessel), but only when the marine vessel has had the engine(s), fuel tanks (emptied and punctured or completely removed), fluids, batteries or other appliances completely removed from the marine vessel. The CCSWDC will also accept mobile homes for disposal that have had all appliances and air conditioners, and other unacceptable materials, completely removed from the mobile home. These items will be accepted during the operating hours of the CCSWDC, however, in the event a marine vessel or mobile home is accepted near the end of the operating day and there is not sufficient cover or other waste available to properly dispose and cover the item in the working face, then the marine vessel or mobile home maybe kept near the working face overnight and disposed in the landfill the following operational day. Since the marine vessel or mobile home is non-putrescible, it will not contribute to vectors or odors during the time it is waiting at the working face for final disposal.

K.2.c.(2).3 Electronics

Electronic products that are discovered at the working face will be removed and stored in a safe area within the active working face (bermed area). At the end of the day, at a minimum, these materials will be transported directly to the designated storage area. Undamaged electronic wastes recovered for recycling shall be stored in an undamaged condition and records for all quantities received by each recycler shall be kept along with the receipts with the name and address of each recycler. Recovered electronic wastes that have been damaged and will not be recycled will be removed and stored at the HHWCCC. The electronics drop off at the HHWCCC is staffed by a full-time attendant who unloads all vehicles that come into the facility. The electronics are mainly from residential curbside collection routes and may include, but are not limited to, televisions, computers, monitors, copiers, etc… The electronics are physically unloaded and placed on pallets or the concrete pad and wrapped in cellophane or loaded into a container if undamaged. Damaged components, such as CRTs, are placed inside a cardboard box or container on a pallet. Electronics are routinely removed by an e-waste recycler such that the concrete pad and pallets have capacity to continue accepting the electronic wastes. Electronic device storage shall include up to 100 pallets of electronic devices on the e-waste slab, 3 e-waste roll-off containers, and 10 e-waste broken unit palletized boxes. Note that broken unit palletized boxes are kept under cover. FDEP will be notified if for any reason the e-waste storage quantities will be exceeded. The County will provide a plan for additional storage areas and/or containers, the amount of storage time needed for the additional quantity, and the schedule for removal.

K.2.c.(2).4 White Goods

White goods, as defined in Rule 62-701, FAC, will be removed from the working face and taken to the white goods storage area located south of Phase I as shown on the Site Plan provided as part of the Landfill Staging Plans provided in Attachment K-4. White goods shall be removed from the site at least monthly. Refrigeration units will be stored in an upright position until all liquids, CFCs and Freon are removed. Refrigerants are removed from the items on-site by a contractor licensed to perform this function. White goods that have had fluids and/or refrigerant removed from them will be clearly marked.

The white goods are periodically collected by a steel recycler who transports the materials to a facility that recycles the materials into new steel products.

A maximum of 1,250 (total) white goods and lawn mowers may be stored at the site at any time. The white goods shall be removed from the site at least monthly (every 30 days).

K.2.c.(2).5 Asbestos

Special waste such as asbestos will be accepted and managed in accordance with the requirements of 62-701.520(3), F.A.C. The asbestos waste haulers will be required to notify the County who will notify the landfill contract operator in advance and provide information on the estimated volume and delivery date of the asbestos. All incoming asbestos material will be required to comply with all applicable permit conditions and be wet down and properly wrapped or bagged. The uncompacted asbestos material will be covered with a minimum 6-inch layer of soil upon disposal. If additional asbestos deliveries are scheduled on the same day, the asbestos may remain uncovered until the end of the work day. The disposal location will be recorded in accordance with 40 C.F.R., Part 61.154, and a record of the asbestos location will be maintained.

K.2.c.(2).6 Waste Oil and Oily Waste

Used (waste) oil and oily wastes will not be mixed or commingled with solid waste that is to be disposed of at the CCSWDC. Waste oil will not be directly disposed of at the CCSWDC disposal areas.

Oily wastes, sorbents or other materials used for maintenance or to clean up or contain leaks, spills or accidental releases of used oil, and soils contaminated with used oil as a result of spills or accidental releases are not subject to the disposal prohibition listed above.

Waste oil or oily wastes that are collected for the purpose of recycling from residents or during routine waste collection routes by the franchise hauler are accepted at the HHWCCC. Waste oil and oily wastes are stored in containers until removed from the site for recycling or disposal. The CCSWDC has the following containers on-site.

- 2 - 500 gallon containers for used oil with double containment (HHWCCC).
- 3 - 55-gallon containers for oily wastes.
- 20 gallons of used oil placed upright in undamaged container (Contractor's maintenance building).

FDEP will be notified if for any reason the waste oil and oily waste storage quantities will be exceeded. The County will provide a plan for additional storage areas and/or containers, the amount of storage time needed for the additional quantity, and the schedule for removal.

K.2.c.(2).7 Lawn Mowers

Lawn mowers are accepted at the CCSWDC provided that all fluids have been drained. Lawn mowers are managed as white goods. After inspection for fluids, mowers are stored in the white goods area until collected by the white goods recycling contractor.

K.2.c.(2).8 Yard Waste

The yard waste processing facility location is south of Phase I as shown on the Site Plan. The facility is permitted under a separate yard waste processing facility registration. Yard wastes are brought to the CCSWDC as segregated loads, either from residential collection vehicles or commercial landscaping contractors. Yard waste loads are directed to the yard waste composting area located south of the Phase I Class I Landfill Area. New yard waste loads are deposited in a designated area of this site.

Bagged yard waste shall not be mulched at the site unless the bags are removed prior to mulching.

The incoming yard waste is stored in a pile until such time that enough material is accumulated to begin processing. Yard waste processing includes size reduction via a tub grinder and screening of the size reduced materials.

Once processing is completed, the resulting yard waste mulch is either placed into windrows for composting or is used by the landfill operations as erosion control and road stabilizing material. The composted material is used on site as a replacement for soil.

Any unprocessed yard trash will be removed from the facility within six months, or within the period required to accumulate 3,000 tons or 12,000 cubic yards, whichever comes first. Processed yard trash will be removed or marketed within 18 months. Yard waste shall be managed in accordance with the facility's yard waste processing facility registration and Rule 62-709.320, F.A.C.

K.2.c.(2).9 Lead Acid Batteries and Other Unauthorized Waste

Other unauthorized waste and small quantity household hazardous wastes such as lead-acid batteries, fluorescent tubes, pesticides, solvents, cadmium batteries, and thermometers are accepted at the HHWCCC. In the event these type of wastes are discovered at the working face, they are removed and temporarily stored in containers at the working face. Temporary storage of material removed from the working face is not a designated public household hazardous waste disposal facility or transfer station. The temporarily stored materials are taken at the end of each day to the HHWCCC for disposal or recycling.

Up to 100 lead-acid batteries may be stored on a secondary spill containment pallet under roof cover and protected from rainfall at the HHWCCC. Picked up by a battery recycling company and components (mainly lead) are recovered. Other wastes listed in this section are property containerized or packaged at the HHWCCC for disposal or recycling.

FDEP will be notified if for any reason the quantities listed above will be exceeded, the County will provide a plan for additional storage areas and/or containers, the amount of storage time needed for the additional quantity, and the schedule for removal.

K.2.c.(2).10 Contaminated Soil

Acceptance of contaminated soil, as defined by Rule 62-713, FAC, at the CCSWDC is conducted on a case-by-case basis whereby soils may be tested using the toxicity characteristic leaching procedure (TCLP) and the paint filter test for free liquids. Results of the tests are evaluated to determine whether the soil will be accepted at the landfill. In any case, contaminated soil accepted at CCSWDC would be placed directly into the lined active landfill subcell and not stockpiled at the site.

K.2.c.(2).11 Waste Tires

Waste tires are delivered to the CCSWDC in segregated loads by customers or delivered on waste hauler trucks when collected on the residential waste collection routes. The tires are taken to the waste tire processing facility located to the east of the yard waste processing area as shown on the Site Plan. Waste tires encountered during operations at the Class I Landfill working face will be placed in a container at the working face that will be removed when the container has reached capacity and taken to the waste tire processing within the CCSWDC. The CCSWDC may use the waste tires for initial cover or dispose of the tires in the Class I landfill as long as the tires are size reduced in accordance with Rule 62-711, FAC. Waste tires shall be managed in accordance with the current waste tire processing facility permit issued by FDEP and Rule 62-711, FAC.

K.2.c.(3) Liquid Waste

"Liquid Waste" means any waste material that is determined to contain free liquids as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).

Non-containerized liquid waste will not be accepted at the CCSWDC unless:

1. The liquid waste is household waste other than septic waste; or

2. The liquid waste is leachate or gas condensate derived from the CCSWDC, or byproducts of the treatment of such leachate or gas condensate, since the CCSWDC Class I Landfill is lined and has a leachate collection system.

Containers holding liquid waste shall not be accepted at the CCSWDC unless:

1. The container is a small container similar in size to that normally found in household waste;

2. The container is designed to hold liquids for use other than storage; or

3. The waste is household waste.

Containers or tanks twenty gallons or larger in capacity shall either have one end removed or cut open, or have a series of punctures around the bottom to ensure the container is empty and free of residue. The empty container or tank shall be compacted to its smallest practical volume for disposal.

K.2.c.(4) Hazardous Waste

If any hazardous waste is detected in the load, the hauler shall be informed immediately of the violation. In the event of discovery of hazardous materials, the procedures outlined in Items 3, 4, 5, and 6 of Section K.6 will be followed.

If unauthorized waste (i.e., hazardous, PCBs, untreated biomedical, or free liquid) are found at the landfill working face, the waste will be isolated and the contractor's general manager or designee would be promptly notified, who would then immediately notify the County Manager. The County Manger then notifies FDEP. The County's operation manager or designee will prepare a report and ensure that the waste is properly disposed. Hazardous waste will be isolated and restricted from access until it is removed from the CCSWDC Landfill by a licensed hazardous waste contractor and properly disposed in

accordance with federal, state and local regulations. Hazardous wastes will be removed from the site within 48 hours or as soon as practical.

K.2.c.(5) Construction and Demolition Debris

Construction and Demolition (C&D) wastes are delivered to the CCSWDC in segregated loads. A specialized contractor operates a permitted C&D waste processing facility located at the CCSWDC, south of the Waste Tire Processing Facility. The contractor screens and sorts C&D waste and resells lumber, cardboard, concrete, and roofing shingles to various users or distributors of these materials.

The maximum quantities of C&D wastes that may be stored at the site, and the schedule for removal from the site, shall be as required under the current Waste Processing Facility Permit issued by FDEP.

K.2.c.(6) Biological Waste

The CCSWDC will accept for disposal the following provided the referenced provisions are met:

- Bodies of domestic animals, upon the death of such animals due to disease, shall be accomplished pursuant to Section 823.041(1), F.S.
- Bodies of captive wildlife, as well as bodies of domestic animals that have not died due to disease.
- Biomedical waste that has been treated, in accordance with Rule 62.701.300(6) by a method approved by the Department of Health, may be disposed of as solid waste that is not biomedical at the CCSWDC. Such treated waste must be in containers clearly labeled with the phrase "Treated Biomedical Waste." Sarasota County CCSWDC will only accept the waste if the generator notified the County that treated biomedical waste will be disposed of at the CCSWDC before such disposal. This requirement does not supersede the provisions of Section 381.0098(8), F.S., regarding acute care hospitals. It is the sole responsibility of the generator, not Sarasota County or the CCSWDC, to ensure that all transport vehicles transporting treated biomedical waste to the CCSWDC for disposal shall be fully enclosed and secured when unattended. Sarasota County and the CCSWDC may set limitations or restrictions on the disposal of treated biomedical waste at the CCSWDC.

K.2.d Weighing or Measuring Incoming Wastes

All waste entering the landfill site will be weighed. Three electronic 50-ton scales are installed at the CCSWDC entrance. An Information Management System (IMS) is linked to the scales to facilitate accurate data collection and measurement of incoming materials.

K.2.e Vehicle Traffic Control and Unloading

Directional signs will be placed to safely direct vehicles to the current waste unloading area. These signs will have large legible letters and will be cleaned when necessary. Signs will be strategically placed so that the route is clear to the drivers. Speed limit, safety, and prohibitive practice signs will be placed as necessary to encourage a safe, clean operating area. Unloading will be permitted only at the designated disposal or processing areas. Temporary signs, barricades, and flagged stakes will be used to direct vehicles to the proper tipping area. Haulers will be responsible for unloading their own vehicles. Wastes

requiring special handling will be coordinated with and unloaded under the direct supervision of landfill contract operation personnel.

K.2.f Method and Sequence of Filling Waste

The Landfill Staging Plans for the Phase II Class I disposal area are provided in Attachment K-4. These plans provide a general guide for the Contractor to use during fill operations. The typical maximum height for each lift is 10 feet. The temporary roads and swales for access and surface water drainage will be phased in as the Phase II area is filled. The maximum width of the working face will be 200 feet. However, the landfill operations may be conducted with a working face width of less than 200 feet. These landfill staging plans are intended as a general guide for the operator and are not intended to indicate the exact daily fill operations. The operations will progress in accordance with these plans, however, based on actual site and weather conditions the Contractor may adjust filling location to achieve safe and efficient waste filling operations.

K.2.f.(1) Temporary Gas Vent Removal

Four temporary gas vents were installed within the bottom liner system during Phase II construction. These gas vents were required when naturally occurring gas within the soil beneath Phase II began to collect beneath the liner and caused the liner system to lift off of the subgrade in several locations. The vents were constructed near the center of Cells 2 and 3 close to the ridge line between the two cells. Attachment K-11 contains information on the construction and locations of the gas vents.

There is only one gas vent remaining in Phase II. The remaining gas vent is located in Subcell 3. The gas vents in Subcell 2 were removed and the liner repaired before waste operations began in that subcell. When the vent in Subcell 3 will need to be removed and the liner repaired, prior to placement of waste within the subcell, FDEP South District office will be notified at least two (2) weeks prior. Vent removal and liner repair will be performed in accordance with the following procedures:

1. Remove rain cover (if present) in vicinity of vent and excavate protective cover soil near repair area;
2. Remove protective casing from standpipe;
3. Remove clamp from primary liner boot, cut primary liner outside of boot weld, and lift boot over standpipe;
4. Remove clamp from secondary liner boot, cut secondary liner outside of boot weld, and lift boot over standpipe;
5. Remove any hydrated or damaged geosynthetic clay liner (GCL) as necessary to allow removal of vent pipe;
6. Remove vent pipe, being careful not to damage in-place liner components or subgrade;
7. Inspect subgrade, replace any soft soil with material meeting requirements of Phase II project specifications, and provide smooth surface for placement of overlying geosynthetics;

8. Patch GCL, secondary liner, secondary geocomposite, primary liner, and primary geocomposite in accordance with the requirements of Phase II project specifications and CQA Plan with the exception that no laboratory or field testing beyond vacuum testing of liner welds will be required of the repair materials due to the limited extent of the repairs;
9. Replace protective cover material over repair; and,
10. Replace rain cover if it was present before the repair.

All repairs shall be performed by a company approved by a liner manufacturer to perform liner installation. All repairs shall be observed by a third party inspector who will submit documentation to the FDEP South District office that the repairs were performed in general accordance with the Phase II specifications and CQA Plan.

K.2.f.(2) **Filling in New Subcell**

The initial lift of solid waste shall be deposited in each new Phase II subcell (designated disposal unit) beginning at the south end of the landfill subcell.

Waste will be placed within the designated edge of waste shown on the previously submitted Permit Drawings. The edge of waste will be located by measuring 7 feet inward from the edge of liner markers on the north and west sides of Phase II. The edge of waste will be located by measuring 14 feet inward from the edge of liner markers on the south side of Phase II. Periodic inspections will be made to ensure that the markers are in place and the edge of waste is located the required distance from the edge of the liner.

The initial lift of solid waste will progress from south to north across the width of the landfill subcell. The working face will primarily move in an east/west direction across the width of the landfill subcell. The width of the landfill may be the full width of the subcell or up to the limit of the leachate containment area if used in the subcell. The leachate containment area is discussed in detail in Section K.2.f.(4).1. The initial lift will be composed of select solid waste loads containing no rigid objects and will be a minimum of 4 feet thick. The initial 4 feet of select waste will be placed with a low ground pressure dozer and not the waste compactor in order to minimize the potential for damage to the bottom liner. A spotter will also be stationed on the bottom liner protective cover sand during placement of select waste in the initial lift to remove any large rigid objects. The top surface of the initial lift will be filled to the subcell's lined external containment berms in order to promote stormwater runoff. The lower lift thickness will be placed in the high end (south) of the cells and the greater lift thickness will be placed on the low end (north).

The method of waste disposal for each lift is described as follows. All incoming solid waste will be directed to the working face and placed against the side slope of the previous day's waste. The first row of waste in a new lift will be placed against the toe of a containment berm to provide a guide for the placement of waste for the remaining rows. A slope of not more than 3H : 1V will be maintained. The working face shall be less than 200 feet wide. A maneuvering area shall be provided for large private and commercial vehicles. Depending on space limitation within the working face area, a section of the working face may also be designated for smaller loads and vehicles.

Solid waste will be placed at the working face and spread in 2-foot layers then compacted. The spreading of waste will be a continuous operation.

In compliance with 62-701.500(10), F.A.C., the stormwater management systems will be operated and maintained as necessary to meet applicable standards of Chapters 62-701, 62-302, and 62-25, F.A.C. The stormwater management system at the CCSWDC Class I landfill is designed to avoid mixing of stormwater with leachate. Stormwater or other surface water which comes into contact with the landfilled solid waste or mixes with leachate will be considered leachate and subjected to applicable requirements.

The filling of each lined subcell within the Phase II area will follow the sequence outlined below and as shown in the Landfill Staging Plans provided in Attachment K-4.:

Filling of each subcell will generally progress from the south end of the subcell to the north end, then from the north end to the south end of the subcell while providing a slope on the cover to allow storm water drainage as shown on the Landfill Staging Plans provided in Attachment K-4. In addition, during the wet weather season (generally May to October), the operator may progress from east to west only within the cell in order to keep drainage to the west from the Phase I side slope.

Subsequent waste lifts will be added to a subcell in accordance with the Landfill Staging Plans before opening new cells to waste disposal.

The surface runoff from unused portions of cells will be directed away from solid waste by grading and using temporary diversion berms.

Areas on the top and sides of each lift will be adequately covered and stabilized to maximize surface runoff away from the bermed, sloped working area and towards the stormwater drainage areas to minimize leachate generation, as shown on the Landfill Staging Plans provided in Attachment K-4. Intermediate cover operations are discussed in detail in Section K.7.g.

K.2.f.(3) Waste Compaction and Application of Cover

Cover material for daily operations of the landfill will be obtained from the designated stockpile area, C&D Site, and/or compost generated from yard waste recycling. Compost used with soil for cover material shall be free of waste. Cover material will be deposited in the stockpile area location shown on the Site Plan. The designated stockpile area will have 3H:1V side slopes in order to minimize erosion. Additional soil obtained from offsite borrow areas will be placed within the stockpile area during the operational life of the facility. A silt fence will be installed around the stockpile area if the side slopes of the stockpiles are not vegetated.

Waste will be spread in layers approximately two feet thick on the working face and compacted to approximately one foot in thickness before application of the next layer. The solid waste will be compacted with a minimum of three to five passes of a compactor. Initial, intermediate and final cover will be applied as detailed in Sections K.7.f, K.7.g, and K.7.h., of this Operations Plan.

K.2.f.(4) Stormwater and Leachate Controls

The stormwater management system at the CCSWDC consists of a series of swales, culverts, and detention ponds. The system is designed to comply with all of the requirements of both Chapters 62-25 F.A.C. and 40 D-4 F.A.C. The stormwater management system for CCSWDC was constructed under a

permit issued by the South Florida Water Management District in 1993 and under a FDEP Environmental Resource Permit for Phase II issued in 2008. All components of the system were installed during Phase I and Phase II construction.

The side slope of each subcell within Phase II as well as the Phase I/Phase II overlay liner system were constructed with a rain cover to avoid erosion of the protective cover, limit plant growth, and assist with the management of stormwater until waste is deposited within the cells. The rain cover consists of a 20-mil scrim-reinforced polyethylene liner held in place with sand bags.

Stormwater collected on the protective sand layer of Phase II cells that have not yet received waste will flow north to the sump areas within each subcell. Any collected stormwater that has not been in contact with solid waste or otherwise contaminated by leachate will be collected in the temporary stormwater inlets installed in Subcells 3 and 4 and routed to the leachate collection manhole fitted with temporary stormwater piping that will outfall into the perimeter channel which is part of the permitted stormwater management system. Stormwater may also be pumped over the perimeter berm to the perimeter channel. Any stormwater collected in an open subcell that has been in contact with solid waste will be considered leachate. The leachate will not be allowed to enter the stormwater collection system and will be routed, drained or pumped to the existing Phase II pump station north of Subcell 2 or to the nearest active subcell as described later in this section. If it is not clear whether stormwater has been impacted by leachate, the County will collect samples and perform testing of the stormwater management system as specified within the current Environmental Resource Permit (ERP) prior to disposal as leachate or stormwater. One month prior to the acceptance of the waste into each subcell (Subcells 3 and 4), Sarasota County shall notify FDEP that the stormwater diversion modifications were removed. Sarasota County will provide FDEP a schedule of when the inlets are to be removed, the tee capped, the 8-inch outfall pipe from the leachate collection system to the perimeter channel is to be plugged or grout filled, and the downstream valve opened. After the work has been completed, Sarasota County shall provide a construction certification to the FDEP for the decommissioning of the Phase II stormwater diversion modification.

If the rain cover system on the side slopes in Phase II becomes irreparable, Sarasota County may elect to replace the rain cover, place a sod layer or simply maintain the protective sand layer cover in each subcell. Prior to receiving waste, the 24-inch protective sand layer will be restored to original design and permitted specifications for Subcells 3 and 4.

The rain cover or sod will be removed prior to the placement of waste within a subcell. The rain cover or sod within a subcell may be removed either all at once or in stages depending on how long it is anticipated it will take to place the first lift of waste within the subcell. If the rain cover or sod is removed in stages, then stormwater that has not been in contact with waste may be collected and pumped over the top of the berm and into the perimeter channel or inactive adjacent subcell.

All stormwater runoff will be conveyed via perimeter drainage channels to detention facilities. Ditch blocks located in the perimeter channels at strategic locations act as sediment traps and will require periodic maintenance.

The ultimate discharge of the detention facilities will be to Old Cow Pen Slough or isolated wetlands through fixed control weirs and spreader swales.

On areas of the landfill that are covered with intermediate cover, pipes may be used from the top of the

landfill to the areas of Phase II that are collecting only stormwater. The pipes will be installed as shown in the Landfill Staging Plans provided in Attachment K-4. As the filling of the waste progresses, temporary stormwater letdown structures will be installed from the intermediate cover to facilitate drainage without erosion. Temporary stormwater diversion berms will be installed around the top perimeter of each lift and connected to the temporary letdown structures. The temporary letdowns will be located in the approximate locations as shown on the Landfill Staging Plans provided in Attachment K-4. Stormwater will be directed to these temporary letdown structures by sloping the top of each lift to promote drainage as shown on the staging plans.

Sediment collection provided by perimeter ditches and ditch blocks will minimize siltation of the main retention areas. In addition, the active working face(s) will be surrounded by berms to capture stormwater that comes in contact with waste and to prevent run-on and mixing with the stormwater from outside the active working face. Stormwater collected within the berms surrounding the active working face(s) is considered to be leachate and will be allowed to percolate into the landfill for collection by the leachate collection system or will be routed to the collection area to the west of the subcell as described below.

K.2.f.(4).1 Leachate Containment Area

In order for the operator to limit leachate ponding at the working face during intense rainfall events, the operator may install piping which drains excessive leachate to the toe of the landfill and into the leachate collection system as shown in the Landfill Staging Plans provided in Attachment K-4, also referred to as the leachate containment area. The leachate containment area may extend the north-south length of the subcell or only a portion of the subcell. The subcell will be filled the width of the subcell to the subcell divider berm as shown in the detail sheets provided with the Landfill Staging Plans in Attachment K-4 if the leachate containment area is not used. If the leachate containment area is used, the subcell will be filled approximately 30 feet short of the entire width of the subcell as shown in the details provided in the Landfill Staging Plans provided in Attachment K-4. At the pipe inlet, tires or sand with silt fence maybe used as a filter medium to limit sediment transport through the pipe, allow leachate to freely drain to the inlet of the pipe, and to prevent objects from blocking the pipe inlet. Leachate may accumulate while the pipe is draining the area; however, the operator will inspect the inlet area periodically to ensure that the pipe inlet is not clogged and is allowing free drainage of water to the pipe to keep the accumulation at the inlet to a minimum. As the working face moves, the piping used to assist in drainage of excessive leachate will be relocated and reinstalled in a location selected by the operator which best drains the area. The general setup and installation of the piping will be as shown in the Landfill Staging Plans provided in Attachment K-4. If tires are used for the inlet and outlet areas, they will be temporary and before final disposal of the tire pieces, they will be reduced in size in accordance with the tire disposal requirements of Rule 62-711, F.A.C.

The leachate may be pumped to a leachate cleanout pipe or leachate manhole as a means of discharging it to the leachate collection system from the containment area. The pumped leachate will be filtered through a screen on the pump intake prior to discharge to a cleanout pipe or manhole.

K.2.f.(4).2 Leachate Drains at Working Face

In order for the operator to limit leachate ponding and to improve leachate percolation back into the waste

at the working face, the operator may install trench drains constructed of cut/shredded tires which meet the size requirements for disposal in accordance with Rule 62-711, F.A.C. The drains will be excavated near the working face to promote drainage of leachate. In general, the drains will be approximately 5 to 10 feet deep per lift, approximately 5 to 10 feet wide, and a length as needed to contain the runoff from the turnaround area and working face. These dimensions may require adjustment based on actual field conditions and drainage requirements. At no time will the bottom of the tire trenches be closer than 20 feet to the top of protective cover sand of the bottom liner. The tire trenches will improve drainage of leachate which accumulates at the working face, decrease the size of the area that may be exposed to leachate, and decrease the leachate amount that may be piped to the containment area.

K.2.f.(5) Stormwater Operation and Maintenance Procedures

The stormwater management system for the CCSWDC consists of a variety of treatment and conveyance methods. The treatment system for the main solid waste handling and disposal areas includes seven wet detention basins. Conveyance to these ponds is through a series of letdown structures, perimeter channels and swales, and culverts. Stormwater collection along the entrance road is provided by the roadside swales. All portions of the stormwater system will be visually inspected by Sarasota County weekly and immediately following a storm event of 0.5 inch or greater. The inspections will identify buildup of debris, surface sheen, erosion and sedimentation, overgrown or exotic vegetation, and structural problems. Any problems identified by these inspections will be corrected within three days. The wet detention basins will be inspected to estimate quantities of sediment within each pond. If the sediment occupies 30 percent of the volume below the normal pool elevation, the sediment will be removed and disposed of in the landfill. Vegetation in all portions of the conveyance systems will be removed on an as needed basis to prevent blockage. The ponds and stormwater conveyance systems will be maintained and operated in accordance with the SWFWMD and FDEP ERP Permits for the CCSWDC.

K.2.g Water Quality Monitoring Plan

Please refer to the Water Quality Monitoring Plan and addenda for the CCSWDC for information regarding the groundwater monitoring network and well locations.

K.2.h Maintaining Leachate Collection System

Leachate collection system maintenance will include daily inspection of all leachate pump stations, leachate collection manholes and leak detection manholes. All pump running data as well as leachate level and flow data will be recorded, as described in Section K.8 of the Operations Plan, and checked for irregularities. Pumps are pulled and checked for operational parameters every two years or as needed. An example leachate pump data form is provided in Attachment K-6. The leachate collection system will be cleaned and inspected as described in part K.8.h of this Operations Plan.

K.3 LANDFILL OPERATION RECORD

The Administrative office located adjacent to the scale facilities at the entrance of the CCSWDC is shown on the Site Plan. The office provides facilities for employees including a training/meeting room, sanitary facilities, and first aid equipment. Similar additional facilities are located at the County and Contractor's maintenance building. Files are located in the Administrative office and contain the operating record for the facilities as required by regulatory agencies/permits. Items that will be stored in the operation record include:

- This Operations Plan.
- All permits for the facility.
- All records and drawings used for developing permit applications.
- All monitoring information, calibration and maintenance records, and copies of reports required by permit (maintained for at least 10 years).
- Background water quality records.
- Annual estimates of the remaining life of the constructed landfill and other permitted landfill areas.
- All monthly waste records which shall include tonnages received for Class I, C&D, yard waste and recyclables.
- Asbestos records with location information if friable asbestos.
- All monitoring reports for groundwater, surface water, and landfill gas.
- Waste tire processing records.
- Copies of all notifications required by 62-701 F.A.C.
- On-site precipitation record.
- FDEP inspection reports.
- Load checking reports.
- Leachate storage tank inspection reports.
- All training verifications.
- All other reports related to the design, operation, monitoring and permitting for the facilities.

K.4 LANDFILL WASTE REPORTS

Each month, a summary report of waste tonnage received for Class I waste, C&D debris, yard waste, and recyclables will be compiled. Copies of the monthly reports will be submitted to FDEP annually or upon request.

K.5 EFFECTIVE BARRIER/ACCESS CONTROL

Access control at CCSWDC includes a perimeter fence with a locking access gate at the scalehouse, which is the only entrance/exit for the facility. The access gate will be kept open during hours of operations and an attendant will be at the scalehouse during those times. When CCSWDC is not in operation, this access gate will be kept closed and locked. During special events, emergencies, or due to construction that does not include waste filling operations, the gates may be open or unlocked when the CCSWDC is not in operation and not accepting waste. During these times, a County representative or designee (event organizers and volunteers etc…) will be onsite to monitor the activities and access to the site. Also, the County would barricade the internal access roads leading to the disposal areas of the site so that access is open to only the portions of the facility for the event (i.e. RC Fliers field).

In addition to the lockable access gates, which are the primary barriers and access controls when the CCSWDC is closed, the access lanes to the scales, the bypass lane and exits lanes include a powered access control arms that were voluntarily installed by the County. These gates are activated using HID cards issued to County and staff and other authorized users or can be activated by scale house and administration staff upon identification of visitors requesting access. These gates provide additional access control during the CCSWDC's operational hours.

K.6 LOAD CHECKING PROGRAM

At least three random loads of Class I Municipal Solid Waste (MSW) delivered to the landfill each week will be examined in accordance with the following procedure:

Mechanism for Inspections

(1) Specific locations within the active working face are to be dedicated to load examination. These areas should be relatively free from extraneous debris and capable of maintaining isolation of the material for one calendar week.

(2) The inspection of the load shall be controlled by a County or Contractor employee. In accordance with Rule 62-701.500(6)(a), FAC, a minimum of three random loads will be checked at the active working face(s) each week. The selected driver will be directed to discharge their load at a designated location adjacent to the working face. If any unauthorized waste (i.e., lead-acid batteries, used oil, yard trash, white goods, and whole tires) is found by the random inspection, or as part of routine operations, the waste will be segregated and removed from the site for recycling as described in Section K.2.c. These unauthorized wastes will be stored as described in Section K.2.c. and removed from the site within 30 days.

(3) The inspection form (see Attachment K-7) shall be filled out and signed off by the inspector. The inspector will identify and note all unauthorized waste found during random load inspection, estimated quantity, and the action taken. The inspector will sign the inspection form that will be retained at the CCSWDC. It shall be the County's responsibility to file/store/distribute the reports.

(4) The Sarasota County Solid Waste Operations Unit or the Solid Waste's Hazardous Waste Section will investigate violations found during the inspection process. The Contract Operator will remove or clean-up the disposed materials.

(5) Violations involving hazardous waste dumping will be handled by the Sarasota County Solid Waste's Hazardous Waste Section. Every attempt will be exhausted to place responsibility on the generator relative to having the hazardous waste in question removed from the landfill at the expense of the generator. In the event that generator responsibility cannot be determined and that the waste appears to be from a commercial source, it will be the Contract Operator's responsibility to segregate and secure the waste and pay all costs relative to safely disposing of said waste.

(6) A list of offenders will be compiled by the Solid Waste's Hazardous Waste Section and the list will be provided to Sarasota County with updates on a periodic basis.

K.7 PROCEDURES FOR SPREADING & COMPACTING WASTE AT THE LANDFILL

The following guidelines will provide an efficient and environmentally sound method of operation for the CCSWDC.

- Portable litter fencing will be placed at the working face where needed to reduce windblown litter.
- Cracks or eroded sections in the surface of any filled and covered area will be repaired and a regular maintenance program will be followed to eliminate pockets or depressions that may develop as waste settles.
- If 12 inches of intermediate cover (free of waste) has been placed over a partially filled area, it will be removed and either reused or stockpiled for later use prior to the placement of a new lift.
- The materials described in Attachment K-8 may be used for initial cover. Stormwater runoff will not be allowed from waste filled areas covered with tire chips or tarp. Runoff from outside of the bermed working face area will be considered stormwater only if the flow passes over areas that have no exposed waste and have been adequately covered with at least six inches of compacted soil (or a mixture of soil/mulch), free of waste, stabilized to control erosion, and the flow does not contact leachate.
- Sufficient cover material will be stockpiled near the working face to provide an adequate supply for initial cover operations. In some areas, daily stockpiling near the working face may not be necessary because of the proximity of the on-site soil stockpile area.

K.7.a Waste Layer Thickness and Compaction Frequencies

Waste will be spread in layers approximately two feet thick on the working face and compacted to approximately one foot in thickness before application of the next layer. The solid waste will be compacted with a minimum of three to five passes of a compactor.

K.7.b First Layer of Waste

Selected solid waste loads containing no large rigid objects will be used for at least the first four feet of the first lift of a new subcell in order to protect the liner and leachate collection system. The first lift will be a minimum of four feet deep to bring the daily cover grade to an elevation higher than the subcell's lined external containment berms in order to promote shedding of stormwater. The first 4 feet of select waste will be placed with a low ground pressure dozer and a spotter will be located on the sand layer during placement to remove any large, rigid objects. Waste will be deposited at the inside toe of the subcell's lined external containment berm on the south end of the subcell and spread to the north. For the initial lift, hauling vehicles will reach the working face by traveling on top of the previously deposited waste and depositing the loads at the top of the working face. The fill will be spread and compacted "down slope" to prevent vehicles from traveling on the protective sand layer. Also see Section K.2.f. in this Operations Plan.

K.7.c Slopes, Side Grades, and Lift Height

The typical height for each lift is 10 feet. All incoming solid waste will be directed to the working face and placed against the toe of the side slope of the previous day's refuse. The first row of waste in a new lift will be placed as shown in the Landfill Staging Plans provided in Attachment K-4. The toe of waste will be placed approximately 30 feet from the divider berm or on the lower portion of the divider berm, depending on if the operation is including a leachate containment area for leachate drainage. The leachate containment area at the toe of a subcell divider berm is discussed in subsequent sections. A maximum slope of 3H: 1V will be maintained on the working face. All top slope areas will be sloped to drain stormwater off of the landfill.

Waste will be placed within the limits of waste of Phase II. The edge of waste will be located by measuring seven feet inward from the edge of liner markers on the north and west sides of Phase II. The edge of waste will be located by measuring 14 feet inward from the edge of liner markers on the south side of Phase II. Periodic inspections will be made to ensure that the markers are in place and the edge of waste is located the required distance from the edge of the liner.

K.7.d Maximum Width of Working Face

Maximum width of the working face will be 200 feet. This will provide a sufficient area for maneuvering large private and commercial vehicles as well as minimize the exposed area and the unnecessary use of cover material.

K.7.e Initial Cover

For the Class I landfill, a minimum of six inches of compacted initial cover consisting of native sandy soils, top soil, soil-yard waste compost mixture, shredded tires, or other FDEP approved initial cover will be applied to the top of the lift and to the working face at the end of each day. Attachment K-8 provides a description and specification for initial cover materials previously approved for this facility.

A layer of shredded yard waste may be applied when needed to the top of the initial cover to minimize erosion during rainy weather and to prevent birds from pecking through the initial cover layer to the garbage. The shredded yard waste layer shall not exceed 12-inches and shall be removed prior to placement of additional waste. The application of initial cover over the landfilled waste will assure control of disease vector breeding/animal attraction, odors, waste combustion (fire), blowing litter, and moisture infiltration.

The initial cover material will be spread over the exposed waste and, with the exception of tarps, compacted by the equipment used to spread the cover (likely a bulldozer or scraper). The initial cover material will not be removed prior to placement of successive lifts of waste, with the exception of tarps, which would be removed prior to placement of successive lifts. To enhance the infiltration of leachate through the waste, the initial cover material may be broken up in place by a dozer blade or equipment traffic immediately prior to the placement of the subsequent lift of waste. As described in previous sections, other methods may be used during wet weather conditions to enhance infiltration of leachate as needed. Any remaining litter and cleanings from equipment will be placed at the bottom of the completed subcell and covered.

Before moving the working face, the area that will remain inactive will be covered with compacted cover soil (free of waste) or a mixture of 50 percent unscreened wood mulch and 50 percent soil, with sufficient thickness (minimum 6-inches) to prevent erosion and the mixing of leachate with stormwater.

K.7.f Application of Initial Cover

Initial cover will be applied at the end of each working day, except when solid waste will be placed on the working face within 18 hours. A temporary cover such as a tarpaulin may be used to cover the working face and removed before placement of additional waste. Initial cover alternative materials are listed in Attachment K-8.

K.7.g Intermediate Cover

Intermediate cover consisting of at least one foot of compacted native sandy soils or composted yard trash screened through ½-inch mesh mixed with 25 percent soil, by volume, will be applied within seven days if final cover or an additional lift is not to be applied within 180 days. Intermediate covered areas that will not be landfilled or covered with final cover within 6 months will have all external slopes sodded. Top slopes and internal areas will be either seeded and mulched or mulched only to avoid erosion. If only mulch is utilized, the mulch layer shall not exceed 12-inches in depth and shall be removed along with the intermediate soil cover layer prior to the placement of additional waste.

To conserve the intermediate cover material, a portion of the intermediate cover will be removed immediately before placement of additional solid waste on top of the lift or before placement of additional waste. The intermediate cover material (free of waste) will be stripped and reused as intermediate cover material. The stripped intermediate cover will be pushed ahead as needed for the perimeter containment berms constructed around the active working face area. The intermediate cover areas will be graded to promote drainage and seeded to prevent erosion.

Components of the landfill gas collection system may be installed in areas that receive intermediate cover. The locations of all underground piping associated with these systems will be marked to avoid damage to them during landfill operation and intermediate cover maintenance activities. Above ground structures

such as well heads, and valves, will be kept readily visible by such measures as clearing vegetation, painting components bright colors, and installing protective posts and flagging. These measures should protect the above ground structures from damage during routine intermediate cover maintenance activities such as mowing, grass repair, and washout repair.

K.7.h Final Cover

Following the receipt of a closure permit, final cover will be applied to the Class I landfill on the completed portions of Phase II. The perimeter side slopes of all completed subcells will have a slope of 3H:1V.

The cap and final cover will consist of a minimum of 12 inches of intermediate cover soil, a geomembrane layer that complies with FDEP rules, a geocomposite drainage layer, and 24 inches of local common soil of which the upper 6 inches will be capable of supporting vegetative cover. Specifications for the local common soil will be provided with the closure permit application.

Components of the landfill gas collection system may be installed in areas that receive final cover. The locations of all underground piping associated with these systems will be marked to avoid damage to them during landfill operation and final cover maintenance activities. Above ground structures such as well heads, and valves, will be kept readily visible by such measures as clearing vegetation, painting components bright colors, and installing protective posts and flagging. Protective posts shall be installed such that they do not damage the final cover system. These measures should protect the above ground structures from damage during routine final cover maintenance activities such as mowing, grass repair, and washout repair.

Additional information regarding final closure requirements, final cover design, closure and maintenance/long-term care of the Phase I Landfill area, which was closed in June 2013, except for the south slope which has a TPO geomembrane temporary final cover, is provided in the Phase I Closure and Long-term Care Plan provided in Attachment K-5.

K.7.i Scavenging and Salvaging Control Devices

Scavenging and salvaging is not allowed at CCSWDC. In the event spotters working in this area observe scavenging or salvaging activities, the Manager will be notified.

K.7.j Litter Control Devices

Litter will be controlled by requiring covered loads, efficient unloading and cover operations, litter fences, perimeter fencing, and routine clean-up. Litter outside the working area will be picked up within 24 hours.

A small litter fence will be placed at the limit of each landfill subcell area for the full length of the active working face.

K.7.k Erosion Control Procedures

Erosion control procedures at CCSWDC mainly consist of stormwater management for active working face areas and in areas surrounding the landfill phases. Stormwater management, for used portions of active subcells where initial or intermediate cover over the waste has been placed in accordance with FDEP requirements, is achieved by:

- Grading the waste-in-place with an adequate slope and adequately covering the waste to divert stormwater away from the working face.
- Use of terraces and letdown pipes.
- Maintaining internal and external berms.

The stormwater management system will be of critical importance during the filling sequence. As each lift is constructed, temporary stormwater diversion berms will be constructed.

A containment berm will isolate the working face from the remaining covered areas. Stormwater which accumulates behind the containment berm in the area of the working face is leachate and will be retained and allowed to percolate into the landfill where it will eventually be collected in the leachate collection system.

Other berms will divert stormwater from top slopes to letdown structures and will serve as erosion control to protect recently covered side slopes. These external berms will be sodded to minimize erosion and will be directly connected to the temporary letdown structures to facilitate proper management of stormwater runoff.

Sediments that reach the perimeter channels will collect behind the ditch blocks and will require periodic removal. Within 30 days after applying intermediate cover to side slopes that have reached designed dimensions, sod shall be applied. As filling progresses above the proposed first drainage terrace, the first set of temporary letdown structures will be constructed. This operating procedure will minimize the amount of erosion and sediment accumulation that must periodically be removed from the perimeter ditches.

Areas provided with intermediate cover, or other areas that discharge to the stormwater management system that exhibit significant erosion, will be repaired as follows:

- If greater than 50 percent of the soil cover material has eroded, then the area will be repaired within seven days.
- If waste or liner is exposed, then the area will be repaired by the end of the next working day.

K.8 PROCEDURE FOR LEACHATE MANAGEMENT

K.8.a Leachate Collection

The sump pumps located in Subcells 1 through 5 of Phase I will operate in an automatic mode based on the liquid level in the sump. Figure L-2 in Attachment K-3 shows the operation levels for the sump pumps. The pressure transducer located at the end of the pump housing accurately measures the level of liquid in the sump and provides a digital readout of this level at the control panel mounted on the valve box at the top of each subcell's lined external containment berm. As shown on Figure L-2, the high water alarm will result if leachate levels rise to cause 12 inches of head on the liner system adjacent to the sump area.

Two additional pump units are provided for backup of the Phase I sump pumps. This allows for removal of each pump on a regular scheduled basis to perform preventative maintenance. When a sump pump is removed for schedule maintenance and the pump will not be reinstalled within 24 hours, a spare pump will be reinstalled immediately while the maintenance is being performed. Each pump will receive preventative maintenance in accordance with the manufacturer's recommendations.

During normal operations, Subcells 1 through 4 of Phase II will drain by gravity to a duplex leachate pump station located north of Subcell 2. The pump station will operate in an automatic mode based on the liquid level within the wet well. Pump levels are set to keep the liquid level in the leachate collection sump below the inlet from the metering manhole and the pump off is set above the intake of the pumps to avoid air suction or running the pumps dry. The pressure transducers located at the end of the pump housing accurately measure the level of liquid within the wet well and provide a digital readout of this level at the control panel mounted adjacent to the pump station. The duplex pumps will operate on a lead/lag basis.

K.8.b Leachate Collection and Removal System

K.8.b.(1) Phase I Collection System

The Phase I Class I landfill leachate collection system consists of a geonet drainage layer and perforated collection pipe above the composite liner system to collect and convey leachate. The leachate that is conveyed to sumps will be pumped to an existing 1,800,000 gallon on-site leachate storage tank. A typical detail for the Phase I sumps is provided in Figure L-2 of Attachment K-3. The leachate collection piping system consists of 8-inch diameter perforated HDPE pipe sloped in such a manner that leachate flowing through the solid waste of the landfill will be collected and transported by gravity to a sump and leachate pump. The discharge line from the sump pump connects to a HDPE header line.

K.8.b.(2) Phase II Collection System

The Phase II Class I landfill leachate collection system consists of a geonet composite drainage layer and perforated collection pipe above the double synthetic liner system to collect and convey leachate. The leachate that is collected within the Phase II subcells will be pumped to the on-site leachate storage tank. The leachate collection piping system consists of 8-inch diameter perforated HDPE pipe sloped in such a manner that leachate flowing through the solid waste of the landfill will be collected and transported by gravity to a metering manhole located on the north perimeter berm of each subcell. The original design included measurement of leachate flows from each subcell using a Parshall flume and an ultrasonic water level sensor in the metering manholes. However, during periods of low flow below the measurement ability of the ultra-sonic level sensors or when methane gas interfered with operation of the ultrasonic flow sensor, flow was not registered at each subcell, but the total leachate collected was measured by the flow meter at the main Phase II pump station. This made the measurements at the metering manholes unreliable and unusable for leachate quantification. Therefore, in 2013, the County requested that flow from the Phase II Main Leachate Pump Station be recorded as well as flow from the leak detection manholes, but flow recording from the leachate metering manholes be discontinued since these measurements had considerable error associated with them. Each metering manhole drains by gravity to a duplex leachate pump station located adjacent to Subcell 2. The discharge from the leachate pump station is directed through a HDPE leachate forcemain installed along the north and west sides of Phase II, the

west and south sides of future Phase III and the south side of future Phase IV. Any stormwater accumulated in an unused subcell will be routed to the leachate collection manholes. The leachate collection manholes are fitted with a temporary stormwater piping that allows discharge of stormwater directly into the perimeter channel. Otherwise, the stormwater can be pumped out from the subcell using portable pumps and discharged to the perimeter channel. The valve connecting the leachate collection pipe within the subcell to the manhole will be in the closed position to prevent stormwater from draining to the leachate pump station. Prior to waste disposal within a subcell, the temporary stormwater diversion modifications will be removed. Immediately prior to solid waste being deposited into a new landfill subcell, the valve at the manhole will be opened to allow the free flow of leachate to the pump station.

Leachate collected within the geocomposite drainage layer of the leak detection system of Phase II will be drained by gravity to a leak detection manhole located on the north perimeter berm of each subcell. The discharge valve at the leak detection manhole will normally be closed to allow the quantity of leakage to be measured. An ultrasonic water level sensor calibrated to the storage volume within the manhole at a given level will be used to measure leakage rate. After the leakage rate has been determined, the leachate within the leak detection manholes will subsequently be drained by gravity to the leachate pump station and the valve closed for another measurement. The leak detection system has been designed such that a leak developing within the most remote part of a subcell will flow to the leak detection manhole within 12 hours. A Leakage Action Rate (LAR) of 100 gallons/acre/day has been established for the Phase II subcells, which corresponds to the Environmental Protection Agency guidance and FDEP experience with facilities containing similar liner systems. At this rate, the 470 gallon storage volume within the leak detection manhole will be exhausted within 8.75 hours. For leakage rates greater than 100 gallons/acre/day, measures should be initiated to find and repair or minimize leaks within the primary liner system.

The following procedures will be initiated if the LAR of 100 gallons/acre/day is exceeded:

1. Increase monitoring of the leakage quantity from the subcell(s) affected. This consists of increasing the frequency of monitoring liquid levels within the leak detection manhole(s) to determine the time required to fill the five-foot storage volume in the manholes. It is anticipated that readings will be made at least daily after the LAR is exceeded and the calculated leakage rates will be recorded.

2. Immediately notify FDEP once it is ascertained that the LAR is being exceeded and provide a plan on how Sarasota County intends to address the exceedance.

3. Attempt to locate and fix sources of leaks to the extent practical. Measures to locate leaks could include inspecting the leak detection manhole to determine whether groundwater is leaking into it, observing the surface of the subcell to determine if there are indications as to where leaks may be located such as large protrusions of waste that may have penetrated the liner system, and videotaping the leak detection pipe to determine where large inflows are occurring. If the location of a leak can be identified and excavation of waste is practical, then the liner will be exposed and repaired.

4. Adjust operational practices as needed to reduce the likelihood of future damage to the liner such as increasing the thickness of the initial layer of select waste on the subcell bottom.

5. If leaks cannot be specifically located or if it is not practical to find them, adjust operations to try to reduce the leakage to below the LAR. This could include measures to reduce the generation of leachate such as grading the landfill to promote runoff, installing drains and berms to direct runoff away from the landfill, the installation of additional intermediate or temporary cover, installing temporary geomembrane rain covers, or accelerating the placement of final cover in areas that have reached final elevation.

K.8.b.(3) **Phase I/Phase II Overlay Liner System**

The overlay liner system, located over the west side slope of Phase I, reduces the quantity of leachate entering the Phase I leachate collection system from the Phase II expansion areas by directing it to the Phase II leachate collection system. This will be accomplished by hydraulically separating the newer waste above it from the older waste beneath the overlay liner system.

The overlay liner system consists of (from the top down) two feet of protective cover material, a geonet composite drainage layer, a textured 60-mil HDPE liner, and a minimum of 12 inches of intermediate cover placed over the waste. The rain cover will be removed prior to the placement of waste against the overlay liner system.

Leachate percolating through the newer waste located above the overlay liner system will be captured by the liner and directed to the base of the overlay liner system by means of the geonet composite drainage layer. A stone-filled trench drain with an 8-inch diameter perforated HDPE pipe located at the Phase I/Phase II divider berm will collect the leachate and direct it to the low point within Subcell 1 of Phase II where it will flow out of the subcell with the rest of the leachate collected within Subcell 1. From there, the leachate will flow as previously described for the Phase II collection system.

K.8.b.(4) **Leachate Disposal System: General Description**

Leachate that is generated from the landfill subcells will be pumped to the existing 1.8 million gallon leachate storage tank. The leachate accumulated in the leachate storage tank will be removed by a leachate pumping station that will pump through a 4-inch PVC forcemain to a connection to the Sarasota County wastewater collection system south of the landfill on Knights Trail Road. The Sarasota County wastewater collection system in this area flows to the City of Venice Water Reclamation Facility (WRF) for treatment.

The leachate pumping and forcemain system is the primary disposal method for the CCSWDC leachate. Transfer pumps that discharge to tanker trucks for hauling to the Bee Ridge WRF will serve as a secondary emergency disposal location.

The following information provides a description of the above ground leachate storage tank in accordance with the requirements of 62-701.400(6)(c).

The existing leachate storage tank has a total capacity of 1.8 million gallons. The exposed plan area of the secondary containment system surrounding the existing leachate storage tank is 5,419 square feet. This will allow 27,000 gallons of water to accumulate after an 8-inch rainfall event. The liquid collected in the secondary containment area may be handled as leachate or discharged to the stormwater system. In the event the liquid in the secondary containment is pumped to the stormwater system then the liquid will be tested for specific conductance. Specific conductance of the stormwater in the secondary containment

shall not be more than 50 percent above the specific conductance of water in the nearest downstream stormwater pond (Stormwater Pond No. 6) or shall not exceed 1,275 *u*mhos/cm, whichever is greater. If the specific conductance is greater than these criteria or if a visible sheen is present, then the stormwater will be pumped directly into the leachate storage tank and managed as leachate. If the liquid collected in the secondary containment system is pumped back to the leachate storage tank to be handled as leachate then the liquid will not be tested for specific conductance.

A log of discharges from the secondary containment system will be maintained. The date, specific conductance measurements, and visual sheen observations shall be recorded.

An electronic water level sensor will automatically determine when the leachate storage tank reaches 90 percent capacity (1.62 million gallons) and a high water alarm will be activated. An electric actuated shutoff valve in the fill line will be activated to prevent overfilling the tank when the capacity reaches 1.8 million gallons in the tank. The electric actuated shutoff valve will be tested by inducing a false signal from the level sensor and confirming proper operation on a weekly schedule. The exposed tank exterior will be inspected weekly by visual observation. The inspection will include looking for leaks, corrosion, or other maintenance deficiencies. This will be accomplished by inspection from platforms at the top of the 20-foot high secondary containment wall, positioned 120 degrees apart around the circumference of the tank. The tank interior will be inspected annually when the tank is empty or at least once every three years. If any failures are detected, the tank construction company shall be contacted immediately and appropriate repairs conducted based on the nature of the problem. Leachate will be managed in accordance with the Contingency Plan (Section K.8.e) when the tank is out of service. Reports of the above inspections will be maintained by Sarasota County.

The leachate pumping station will have automatic controls with the following set points:

	Elevation (feet NGVD 1929)	Height from Bottom of Tank (feet)
High water alarm	40	18
Lag pump on	28	6
Lead pump on	27	5
Pumps off	26	4
Tank bottom	22	0

The set points can be modified by adjusting the pump control system. The duplex pumps will automatically alternate operation each time the pump is stopped by the level control system. The pumping station is equipped with a data logger to record flow.

K.8.c If Leachate Becomes Regulated as Hazardous Waste

Sarasota County will evaluate options for pre-treating the leachate and alternate disposal if it becomes regulated as a hazardous waste.

K.8.d Off-Site Treatment of Leachate

The primary disposal location for CCSWDC leachate is the City of Venice WWTP. A secondary disposal location is the Bee Ridge WRF. CCSWDC may use other secondary facilities for the offsite treatment or disposal of leachate; however, the County will notify FDEP of the change prior to use.

The CCSWDC will dispose of leachate at the primary treatment location provided the leachate meets the disposal quality requirements. Should leachate quality change such that it is no longer acceptable at the primary treatment location, the CCSWDC will dispose of leachate at the secondary facility.

K.8.e Contingency Plan for Leachate Management

Should one of the following events occur, the leachate contingency management plan shall be implemented.

- Any mechanical failure of the leachate management system that would prevent operation of the landfill leachate collection system pumps or the leachate transfer pumps for more than three consecutive days.
- Liquid accumulation in the leachate storage tank leak detection system in amounts greater than expected from rainfall.
- Rise of leachate levels inside the leachate storage tank greater than 46 feet NGVD (elevation represented by 24 foot mark on the external tank gauge).

Implementation of the contingency plan includes the following actions.

(1) The landfill manager shall notify the FDEP (within 24 hours) and leachate disposal facilities of the emergency event.

(2) If the problem is excess leachate in the detection system of the leachate storage tank, remedial measures shall be taken immediately to eliminate the leak. The detection system of the concrete leachate storage tank consists of a layer of gravel located between the bottom of the leachate storage tank and the top of the secondary containment slab that enables the detection of leaks at the bottom of the leachate storage tank. Additional tractor trailer tanker units and operators shall be called to the site to expedite transport of leachate to the receiving WWTP or additional quantities shall be pumped through the forcemain to the City of Venice lift station. The leachate storage tank shall be emptied completely, if required, to facilitate repairs. Leachate will be pumped to mobile tanks during repair periods.

(3) If the problem is excessive levels of leachate in the leachate storage tank (elevation exceeds the level listed above), the maximum amount of leachate shall be diverted from the tank by increasing the frequency or number of tanker trucks hauling leachate to the primary or secondary WWTPs, pumping additional quantities of leachate through the forcemain to the City of Venice lift station, or storing leachate in mobile tanks.

(4) Once the problem causing the implementation of the contingency plan has been resolved to an acceptable degree, the landfill manager shall notify FDEP (within three days) that the facility is ready to return to normal operating conditions.

(5) Inspections and repairs to the leachate storage tank will be scheduled during winter months to the extent possible in order to minimize the quantity of leachate that must be removed. While the leachate storage tank is out of service, leachate will be pumped directly to either tanker trucks, temporary storage tanks, or through the forcemain to the City of Venice lift station.

K.8.f Recording Quantities of Leachate Generated

K.8.f.(1) Phase I Leachate Pump Stations

A control panel for each sump pump in Cell Nos. 1 through 5 of Phase I is located near the pump station. Each pump station is equipped with a pump hour meter, level indicator, and flow meter.

A control panel for the Phase II duplex leachate pump station is mounted adjacent to the pump station. The control panel is equipped with a flow meter, water level indicator, and a pump hour meter.

The following information will be recorded once per operating day from each pump location.

Subcell No. or Phase
Flow Meter Reading
Hour Meter Reading
Sump or Wet Well Liquid Level

The above information is recorded on the form provided in Attachment K-6.

In the event a flow meter is not in operation, Sarasota County may record the run-time hours for the pump and convert time to flow using historical records, until the flow meter is returned to service.

K.8.f.(2) Phase II Leachate Metering Manholes and Leak Detection Manholes

Flow is not recorded from the separate leachate collection metering manholes at Subcells 1 through 4.

The level sensor reading at each leak detection manhole in Subcells 1 through 4 is recorded each operational day and the change in level converted to gallons/acre/day to compare to the allowable ALR as described in Section K.8.b.(2) above.

K.8.f.(3) Phase II Main Pump Station

The Phase II leachate collection manholes from Subcell 1 through 4 gravity drain to the main leachate pump station at Phase II where the leachate is pumped from the sump to the leachate storage tank. There are two sump pumps located in the pump station. The following information is recorded daily from the pump station location.

Flow Meter Reading
Hour Meter Reading (Both Pumps)

K.8.f.(4) Recording Methods

The leachate collection information included in the sections above for Phases I and II may be recorded visually at each pump station by recording the values directly from the pump station readouts or by the collection of the data via a telemetry system. Please note that the telemetry system, as of September 2013, is planned as a future installation. The telemetry system, when installed, will upload a minimum of one reading of the leachate pump station parameters per day. The readings can then be viewed by County staff via computer and recorded on the forms provided in Attachment K-6. The leachate data recorded on the individual pump station forms are used in the overall leachate generation form for the facility. These forms are provided in Attachment K-6.

K.8.g Precipitation and Leachate Generation Rates

Rainfall for each 24-hour period measured at an official gauge located on-site will be recorded and entered onto a spreadsheet (format included in Attachment K-6) to compare precipitation to leachate generation.

K.8.h Leachate Collection System Inspection and Cleaning

The County will water pressure clean or conduct a video inspection of the leachate collection systems in Phase I and Phase II at least once every five years in accordance with Rule 62-701.500 F.A.C. requirements. Leachate pumps, metering manholes, and leak detection manholes at CCSWDC will be inspected for operation failures at least daily. Control panels will be inspected and operational data recorded as described in Section K.8.f.

K.9 LANDFILL GAS MANAGEMENT AND MONITORING

K.9.a Landfill Gas Management

The CCSWDC is located near the center of over 6,000 acres of County-owned property. The minimum distance from the Class I landfill to the nearest property line is 1,800 feet. This distance represents a substantial buffer to allow for dispersion of odors normally associated with MSW landfill operations. Therefore, it is not anticipated that collection of landfill gas will be necessary for odor control.

In order to comply with air quality requirements, a Non-Methane Organic Compound (NMOC) emission report will be submitted to the implementing authority on an annual basis following the requirements of New Source Performance Standards (NSPS). Within 12 months after reporting NMOC emissions greater than or equal to 50 Mg/year (megagram per year), a detailed landfill gas collection and controls system design plan submittal shall be made to the NSPS implementing agency. Within 18 months after this submittal, the installation of the landfill gas collection and control system shall be completed. Based on current Tier 2 sampling and model projections, the CCSWDC Class I landfill has not exceeded the NMOC threshold at the time of this report and is not expected to exceed the threshold until 2015. Operation of the Landfill Gas System is provided in greater detail in Attachment K-9, LFGCCS Operation and Maintenance Plan.

K.9.b Landfill Gas Monitoring Program

A gas monitoring program will be implemented to prevent explosions and fires and to minimize off-site odors and damage to vegetation. The landfill gas monitoring program for CCSWDC will include monitoring of the landfill perimeter and enclosed on-site structures at the monitoring locations shown on Figure 1 in Attachment K-3. Monitoring will be conducted on a quarterly basis and a report submitted to FDEP within 15 days after the end of the quarter in which monitoring occurred. The outside monitoring locations, as shown on Figure 1 provided in Attachment K-3, will consist of gas monitoring probes as shown on Figure L-3 in Attachment K-3. All gas probes will be clearly labeled and easily visible at all times.

The CCSWDC gas monitoring locations include four gas monitoring probes as described above and numbered GP-2, GP-3, GP-7, and GP-9 and six gas monitoring locations GM-1, GM-2, GM-3, GM-4, GM-5, and GM-7 in structures as shown on Figure 1 provided in Attachment K-3.

These locations are summarized in the table below:

CCSWDC Landfill Gas Monitoring Points

MONITORING POINT	TYPE OF MONITORING	LOCATION
GP-2	Probe	North of Phase I
GP-3	Probe	East of Phase I
GP-7	Probe	North of C&D Processing Area
GP-9	Probe	West of Subcell 4, Phase II
GM-1	Monitoring Location	Contractor's Maintenance Bldg.
GM-2	Monitoring Location	C&D Processing Area
GM-3	Monitoring Location	County Maintenance Bldg.
GM-4	Monitoring Location	Administrative Bldg.
GM-5	Monitoring Location	Scale House
GM-7	Monitoring Location	Control Panel at Leachate Storage Tank

Low areas, base boards, floor drains, and floor mounted cabinets shall be monitored inside the structures. Other structures on the site are not monitored because their great distance from the landfill (over 3,400 feet) and the shallow groundwater table (5 to 7 feet below surface) at the site would cause any migrating gas, if it existed, to purge to the atmosphere before it would travel to these structures through the ground. Also, there are no connections via conduit pipes between these structures and the landfill area.

Please note that gas monitoring probes north of Phase II are not necessary due to the presence of Stormwater Pond No. 1 that will effectively cut off the migration route of landfill gas in that direction. Also, gas monitoring probes south of Phase II are not necessary due to the long distance between the edge of waste and the property line and structures that can be adversely affected by migrating landfill gas. The high water table at the site also makes it unlikely that gas will migrate significant distances.

The landfill gas probes and monitoring locations shown on Figure 1 will be sampled at least quarterly for concentrations of combustible gases determined as a percent of the lower explosive limit (LEL) calibrated to methane as described in FAC 62-701.530.(2).

A methane/combustible gas detector (meter) will be used to measure the LEL at the monitoring locations. No purging of the probe will be allowed. Once the meter is connected to the sampling port, the valve will be opened and the meter pump will be engaged and meter reading observed. The highest value observed is recorded as well as the steady state value observed.

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

K.9.c Odor Reporting Procedures

The CCSWDC shall be operated to control objectionable odors in accordance with Rule 62-296.320(2), F.A.C. After being notified by the FDEP that objectionable odors have been confirmed beyond the landfill property boundary, the CCSWDC shall:

(1) Immediately take steps to reduce the objectionable odors. Such steps may include applying or increasing initial cover, reducing the size of the working face, and ceasing operations in the areas where odors have been detected;

(2) Submit to the FDEP for approval an odor remediation plan for the gas releases. The plan shall describe the nature and extent of the problem and the proposed long-term remedy. The remedy shall be initiated within 30 days of approval;

(3) Implement a routine odor monitoring program to determine the timing and extent of any off-site odors, and to evaluate the effectiveness of the odor remediation plan.

K.10 STORMWATER MANAGEMENT SYSTEM

The landfill stormwater management system for CCSWDC is discussed in Section K.2.f – Stormwater System.

K.11 EQUIPMENT AND OPERATION FEATURE REQUIREMENTS

K.11.a Adequate In-Service Equipment

Equipment proposed for the CCSWDC will include the equipment listed in Table K-1 . The exact equipment complement may vary from time to time and additional equipment will be acquired if needed. One roll-off container will be placed at the Class I landfill area.

Emergency Electrical Generation Equipment is of adequate size to assure complete operation of the Leachate Disposal and Collection Systems.

TABLE K-1. EQUIPMENT USED AT THE CCSWDC

NUMBER	EQUIPMENT
2	Bulldozer
1	Compactor
1	Dump Truck
1	Front-end Loader or Hydraulic Excavator
1	Grader
1	Water Truck

K.11.b Reserve Equipment

Cooperative lending agreements with the Contract Operator's company and standing agreements with local equipment suppliers will provide a means for procuring additional back-up equipment within 24 hours of a need being identified.

K.11.c Communication Equipment

Radios and cell phones will be the primary communications devices to provide safe conditions for landfill personnel.

K.11.d Dust Control Methods

Dust from unpaved haul roads and construction areas within the Class I landfill area will be controlled through the use of a water spray truck. An alternate dust control measure that may be used in active cells of the Class I landfill area is leachate reuse (see Attachment K-10 for FDEP approval letter). The reuse of leachate involves spraying small quantities of leachate from a spray bar mounted on the rear of a tank truck onto active fill areas of the landfill. The landfill operation crew will monitor the rate of leachate application, soil moisture conditions, and the specific landfill areas used to prevent the generation of leachate runoff. Leachate will only be applied under the following conditions:

- Leachate may only be sprayed on interior active, bermed fill areas, including the working face, and areas with the required six inches of initial cover.
- Leachate may not be sprayed on areas with intermediate or final cover.
- The maximum grade leachate will be sprayed on is a 5H:1V slope. Areas within 150 feet of a 4H:1V or steeper side slope will not be sprayed on. At all times areas receiving leachate must be controlled to prevent run-off from entering the stormwater system
- Leachate will not be sprayed during a rainfall event, and when the application area is in a saturated condition.
- The application rate of leachate should be such that leachate does not accumulate on the landfill surface, and infiltrates quickly into the covered refuse.
- Leachate will not be sprayed at the end of the day on the initial cover of the active working face or other areas. Spraying should be done early in the morning after any dew evaporates and continue until early afternoon or until all available areas have been used.
- If a water truck that is normally used for dust control on areas outside the working face is used, the operator, following leachate spraying, will fill the truck tank with clean water and the load sprayed as if it were leachate. This will flush and decontaminate the truck tank so that it may be used again for dust control outside the working face.

Daily volume of leachate sprayed (gallons), per this method, will be recorded.

If needed, dust masks will be available to personnel working in excessively dusty areas.

In general the CCSWDC will employ multiple methods for dust control as described above; in addition, many of the CCSWDC's roads are paved for all-weather conditions, as described in Section K.12 below.

Reasonable dust control precautions may include, but are not limited to, the following:

- Paving and maintenance of roads, parking areas and yards.
- Application of water to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.

- Application of asphalt, water, or other FDEP-approved dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- Landscaping or planting of vegetation.
- Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

K.11.e Litter Control Devices

See Section K.7.j. in this Operations Plan.

K.11.f Signs Indicating Name of Operating Authority, Traffic Flow, Hours of Operations, and Charges for Disposal

Permanent signs at the facility identify the Sarasota County Central County Solid Waste Disposal Facility and indicate hours of operation and charges for different types of loads. The sign indicates materials that are not accepted for disposal in the landfill. Signs indicating approach and exit routes and one-way roads are strategically placed so traffic at the landfill will move smoothly and efficiently to and from the working face area.

K.12 ALL WEATHER ACCESS ROADS

A paved entrance from Knights Trail Road terminates at the landfill perimeter roadway. All weather access roads will be constructed within the Class I area to route traffic to the active working face. The all weather access roads will be constructed of earth, ground shingles, crushed rock, shell or any other stabilizing material, as appropriate.

K.13 ADDITIONAL RECORD KEEPING AND REPORTING

See Section K.3 of this Operations Plan for records and documents retained. Documents used for development, operations, construction, background water quality, and permitting of the CCSWDC will be kept for the design life of the CCSWDC. Weigh tickets shall be kept for five years. All monitoring information, including calibration and maintenance records, chart recordings, and all reports required by permit shall be kept for 10 years.

Records that are more than five years old may be archived at an off-site storage location. The archived records will be stored in a secure place where they will be protected from damage. Provisions will be made to retrieve records from storage as required within seven days. The County utilizes electronic archiving where a document is scanned and archived as an electronic document. The electronic files will be available and accessible within seven days as well.

ATTACHMENT K-1

TRAINING PLAN

TRAINING PLAN

As stated in 62-701.500(1), F.A.C., all landfills shall have at least one trained operator at the landfill during all times when the landfill receives waste. The operator training includes a 24-hour initial course and 16 hours of continuing education every 3 years. Spotter training includes an 8-hour initial course and 4 hours of continuing education every 3 years.

In accordance with Rule 62-701.320(15), the owner or operator of a landfill, or other solid waste management facility required by this chapter to have trained operators or spotters, shall not employ a person to perform, nor may any person perform, the duties of an operator or spotter at such a facility unless that person is a trained operator or trained spotter. Interim spotters, who do not have the formal spotter training, may be employed at the CCSWDC provided that the interim spotter is under the direct supervision of a trained operator or trained spotter. The interim spotter must receive training as an operator or spotter within 3 months of employment. An interim operator may be employed at the facility provided that it is for a period of no longer than 3 months from employment or if supervised by a trained operator, the interim operator must receive training within one year of employment.

Operator and spotter training courses are available at the University of Florida Center for Training, Research and Education for Environmental Occupations (UF/TREEO) and through other sources. A listing of the current year training courses available through TREEO can be found at the following website: http://www.treeo.ufl.edu/sw/. A listing of positions requiring training is provided in Section K.2.a.

ATTACHMENT K-2

SAFETY AND CONTINGENCY PLAN

The program shall consist of the following parts:

I. Training

A. General and safety training of all landfill and contractor personnel will be required.

B. Safety topics may include, but not be limited to the following: CPR, First Aid, Site Safety, Personal Protection Equipment (PPE), Lock Out / Tag Out, Weather Hazards, Heat Stress, and Fire Extinguisher training.

C. All staff shall receive training on the job-specific aspects of their position. This training will be provided by and is the responsibility of the employee's immediate supervisor, or their designee.

D. Special training shall be required for each employee on a job-specific basis. Each operator of a piece of equipment shall be trained in the operation of that piece of equipment by his immediate supervisor, or their designee. This training shall be given in accordance with the manufacturer's recommendations and operating manuals. This training will be provided by and is the responsibility of the immediate supervisor in charge of the employee, or their designee.

II. PPE

Special safety equipment such as rain gear including rubber boots, boots having steel toes and puncture resistant soles, work gloves, goggles, dust masks, protective eye glasses, rubber gloves, face guards, hearing protection, and rubber aprons shall be utilized as part of the day-to-day operational procedures where applicable. It shall be the responsibility of each individual employee and the immediate supervisor to assure that proper safety equipment is in use. All employees will be required to wear safety shoes or boots when working in an environment dictating the need for such equipment. Generally, safety shoes will be required except when working in the scalehouse or office. Safety shoes will be issued to all employees whose duties require the wearing of safety shoes.

III. Safety Meetings

A. Safety meetings shall be held periodically but no less than one meeting shall be held every month.

B. Safety meetings shall be the responsibility of the Solid Waste Operations Manager and all on-site contractors for their respectively personnel.

C. Safety meeting topics shall include a discussion of all incidents which have occurred since the last safety meeting was held along with topics of current importance and interest.

IV. Safety Officer

A. The Solid Waste Operations Safety Officer shall be appointed by the Manager of the Solid Waste Operations.

B. The position of Solid Waste Operations Safety Officer shall be held in conjunction with the regular duties of the position for which the person was hired. However, the Solid Waste Operations Safety Officer shall be given time during the regular working hours to perform the duties of the Safety Officer.

V. Emergency & Fire Safety

This section provides the standard operating procedures for all personnel in the event of an emergency or fire of any nature that may take place within the boundaries of landfill or transfer station.

A. Notification: CALL 911. As in any emergency, the first thing to do is to immediately notify the proper emergency response team. In the case of FIRE, immediately notify the Fire Department through the emergency phone number 911. Remember, if you are calling from a phone that is connected to the County phone system you must dial 9- 911 to reach the emergency operator.

B. Be sure to SPEAK SLOWLY, DISTINCTLY, DELIBERATELY, and remain as calm as possible. Briefly tell the person to whom you are reporting the emergency the following: the nature of the emergency, any injuries or persons involved, and where the emergency is located.

C. If there are injuries, you should render whatever assistance you can without endangering yourself. An Automatic Defibulator (AED) for CPR emergencies is located in the Landfill Administration Office.

D. If possible, evacuate any personnel or equipment that may be endangered.

E. In the event of small fires, the use of a fire extinguisher may be sufficient to contain the fire until the arrival of the Emergency Responders. Fire extinguishers can be found in every Solid Waste Operations vehicle, on every piece of heavy equipment, and in buildings located throughout the landfill site. Upon arrival of the Emergency Responders, you should take whatever steps necessary to assist.

F. In the event of fire in the landfill, it may be necessary to smother the fire using available dirt from the dirt stockpiles located at the landfill. In this case, the Manager of the landfill shall make immediate provisions to provide that earth cover. Also, the procedures described in Section K.2.b of the Operations Plan shall be followed.

VI. Waste Tire Storage Area

Refer to Waste Tire Storage Area Safety Plan included in this attachment.

VII. List of Emergency Response Equipment

A. In the event of a fire emergency, the following equipment may be available at the landfill and may be used as the situation dictates in the evolution of responding to a fire emergency, such as making berms, smothering with earth and materials, and then use of water in extinguishing fires:

- Front End Loaders.
- Tractors.
- Water Truck.
- Water Pumps.

B. It should be noted that from time to time the equipment available for fire emergency use may be changed, and it should be the responsibility of the persons in charge at the facility to be aware of those changes and respond accordingly with the appropriate equipment in the event of a fire emergency.

C. Dry hydrant connections are available as shown on the drawings for the purpose of supplying water in the event of a fire or other emergency. Upon arrival of the fire department, this water supply will be used under the direction of the officer in charge from the fire department.

VIII. Procedure to be Followed for Cleanup

Any residual from a fire shall be addressed as follows:

A. The County will conduct soil sampling as applicable of the area to confirm the absence or presence of contaminants.

B. If contaminants are found that exceed established clean-up target levels, then remedial actions may be taken that can include removal of soil.

CONTINGENCY PLAN

In the event an emergency should occur that would interrupt operations at the landfill, the emergency provisions of Section K.2.b. of the Operations Plan shall be followed and the following procedures shall be implemented:

The waste collection entities operating within the County shall be notified of the operational interruption and approximate time when operations will be restored.

If it is anticipated that the interruption of operations will be longer than 48 hours, an alternate disposal site shall be determined. The following alternate disposal sites are available and listed in order of preference. Should one facility also not be available the next facility on the list shall be contacted.

- Manatee County Lena Road Landfill
- Charlotte County Zemel Road Landfill
- Waste Management Landfill in Okeechobee County

SOLID WASTE OPERATIONS

CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX

SAFETY PLAN
WASTE TIRE STORAGE AREA

Updated June 1, 2012 as part of Waste Tire Processing Facility Permit Application

SAFETY

The program shall consist of the following parts:

I. Training

A. General & safety training of all landfill and contractor personnel will be required.

B. Safety topics may include, but not be limited to the following: CPR, First Aid, Site Safety, Personal Protection Equipment (PPE), Lock-out / Tag Out, Weather Hazards, Heat Stress, and Fire Extinguisher training.

C. All staff shall receive training on the job-specific aspects of their position. This training will be provided by and it the responsibility of the employee's immediate supervisor, or their designee.

D. Special training shall be required for each employee on a job-specific basis. Each operator of a piece of equipment shall be trained in the operation of that piece of equipment by his immediate supervisor, or their designee. This training shall be given in accordance with the manufacturer's recommendations and operating manuals. This training will be provided by and is the responsibility of the immediate supervisor in charge of the employee, or their designee.

II. PPE

A. Special safety equipment such a rain gear including rubber boots, boots having steel toes and puncture resistant soles, work gloves, goggles, dust masks, protective eye glasses, rubber gloves, face guards, hearing protection, and rubber aprons shall be utilized as part of the day-to-day operational procedures where applicable. It shall be the responsibility of each individual employee and their immediate supervisor to assure that proper safety equipment is in use.

III. Safety Meetings

A. Safety meeting shall be held periodically but no less than one meeting shall be held every other month.

B. Safety meeting shall be the responsibility of the Solid Waste Operations Manager and all on-site contractors for their respectively personnel.

C. Safety meeting topics shall include a discussion of all incidents which have occurred since the last safety meeting was held along with topics of current importance and interest.

IV. Safety Officer

A. The Solid Waste Operations Safety Officer shall be appointed by the Manager of the Solid Waste Operations.

B. The position of Solid Waste Operations Safety Officer shall be held in conjunction with the regular duties of the position for which the person was hired. However, the Solid Waste Operations Safety Officer shall be given time during the regular working hours to perform the duties of the Safety Officer.

V. Emergency & Fire Safety

This section provides the standard operating procedure for all personnel in the event of an emergency or fire of any nature that may take place within the boundaries of the landfill or transfer station.

A. Notification: Call 911. As in any emergency, the first thing to do is to notify the proper emergency response team. In the case of FIRE, notify the Fire Department through the emergency phone number 911. Remember; if you are calling from a phone that is connected to the County phone system you must dial 9-911 to reach an emergency operator.
B. Be sure to SPEAK SLOWLY, DISTINCTLY, DELIBERATELY, and remain as calm as possible. Briefly tell the person to whom you are reporting the emergency the following: the nature of the emergency, any injuries or persons involved, and where the emergency is located.
C. If there are injuries, you should render whatever assistance you can without endangering yourself. An Automatic Defibulator (AED) for CPR emergencies is located in the Landfill Administration Office.
D. If possible, evacuate any personnel or equipment that may be endangered.
E. In the event of small fires, the use of a fire extinguisher may be sufficient to contain the fire until the arrival of the Emergency Responders. Fire extinguishers can be found in every Solid Waste Operations vehicle, on every piece of heavy equipment and in buildings located throughout the landfill site.
F. Upon arrival of the Emergency Responders, you should take whatever steps necessary to assist.

Used Tire Storage Area Special Rules

In the event there is a fire or other emergency in the used tire storage area, the following rules shall apply:

A. After following the emergency procedure outlined above, personnel shall ensure that a berm is placed to the west of the waste tire pile area and the drain to the east is diked-off to assure that no oily material generated by the combustion of the tires escapes the designated Waste Tire area.
B. The State of Florida, Department of Environmental Protection shall be immediately notified by calling the South District Office at 239-332-6969. Within 7 days of any emergency involving potential impacts to the site, the Solid Waste Operations Manager shall submit to the Department a written report on the emergency, the results of the action taken and an action plan to mitigate future occurrences.
C. In addition, any special conditions as set forth by the jurisdictional Fire Department shall be met.

List of Emergency Response Equipment

A. In the event of a fire emergency, the following equipment may be available at the landfill and may be used as the situation dictates in the evolution of responding to a fire emergency, such

as making berms, smothering with earth & materials, and then use of water in extinguishing fires:

- Front End Loaders
- Tractors
- Water Truck
- Water Pumps

B. It should be noted that from time to time the equipment available for fire emergency use may be changed, and it should be the responsibility of the persons in charge at the facility to be aware of those changes and respond accordingly with the appropriate equipment in the event of a fire emergency.

C. Dry hydrant connections are available as shown on the drawings for the purpose of supplying water in the event of a fire or other emergency. Upon arrival of the fire department, this water supply will be used under the direction of the officer in charge from the fire department.

VI. Procedure to be Followed for Clean-up

Any residual from a fire at the tire storage area shall be addressed as follows:

A. The County will conduct soil sampling of the waste tire area to confirm the absence or presence of contaminants.

B. If contaminants are found that exceed established clean-up target levels, then remedial actions may be taken that can include remove of soil.

ATTACHMENT K-3

FIGURES

ATTACHMENT K-4

LANDFILL STAGING PLANS

ATTACHMENT K-5

PHASE I CLOSURE AND LONG-TERM CARE PLAN

3.0 CLOSURE PROCEDURES

The following section describes the procedures that were followed in accordance with 62-701.600, F.A.C., for closure of Phase I of the CCSWDC Class I Landfill.

3.1 Survey Monuments

Survey monuments were not required for Phase I of the CCSWDC Class I landfill since the final elevation of the landfill was more than 20 feet above the natural land surface.

3.2 Final Survey Report

A final survey report of the constructed Phase I closure was conducted in compliance with 62-701.600(6)(b), F.A.C. The final survey report was prepared by a registered land surveyor and was submitted to the FDEP to verify that the final contours and elevations were in accordance with the plans approved in the closure permit. The contours in the final survey were shown at no greater than 5-foot intervals.

3.3 Closure Construction Certifications

In accordance with 62-701.600(6), F.A.C., a signed, dated, and sealed Certificate of Closure Construction Completion by the engineer of record was submitted to the FDEP upon completion of Phase I closure construction. Deviations from the permitted closure plans were noted in the report. The FDEP approved the closure construction certification report in June 2013.

3.4 Declaration to the public

After final closure operations are inspected and approved for the entire CCSWDC Class I landfill by the FDEP, the Sarasota County Solid Waste Department will file a declaration to the public in the deed records of Sarasota County. The declaration will include a legal description of the property and a site plan specifying the area actually filled with solid waste. The declaration was not be submitted after closure of Phase I since the landfill will remain in operation.

3.5 Official date of closing

The requirements identified in Sections 3.2 and 3.3 will be submitted to the FDEP after closure of each phase. The declaration to the public described in Section 3.4 will be completed when all phases are closed and the CCSWDC ceases waste disposal operations. Upon receipt, the FDEP will notify the Sarasota County Solid Waste Department in writing that the notice of termination of operations and closure of the facility has been received. The official date of the landfill closing will be the date of the FDEP letter.

3.6 Closed Landfill use

No use has been designated for the closed Phase I landfill area. In accordance with 62-701.610(1), F.A.C., Sarasota County will consult with the FDEP before conducting activities at the closed landfill. Sarasota County acknowledges that the FDEP retains regulatory control over any activities that may affect the integrity of the environmental protection measures of the landfill.

ATTACHMENT K-6

LEACHATE PUMP DATA AND LEACHATE GENERATION FORMS

ATTACHMENT K-7

LOAD INSPECTION FORM

SARASOTA COUNTY SOLID WASTE DEPARTMENT
SOLID WASTE LOAD INSPECTION FORM

Florida Administrative Code 62-701 requires landfills to periodically inspect loads presented for disposal. If unauthorized wastes are found, the responsible party shall be required to cause removal of said waste and the Florida Department of Environmental Protection shall be notified. Inspection records shall be maintained for a period of three years.

Inspection Location _____

Date _____ Time _____ Truck No. _____

Hauler _____ Vehicle License Plate No. _____

Source of Waste _____

Driver (print name) _____

Driver (signature) _____

Inspector/Title _____

Waste Observed _____

Unauthorized Waste _____

FDEP Contacted _____ Name of Contact _____

What action was taken to properly dispose of the unauthorized waste?

(Use attachments if necessary)

ATTACHMENT K-8

INITIAL COVER SPECIFICATIONS

ATTACHMENT K-8

INITIAL COVER SPECIFICATIONS

Materials approved for use as initial cover shall include soils as well as the following:

- Waste tires that have been cut into sufficiently small parts, which means that 70 percent of the waste tire materials 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 within the bermed working area.
- Processed yard waste, unscreened, and then mixed in the ratio of 50 percent processed yard waste to 50 percent soil, and applied in a six (6) inch compacted layer may be used as initial cover within the bermed working area.
- Shredded asphalt roofing shingles, screened through a 1 inch mesh, and then mixed in the ratio of 50 percent shredded shingles to 50 percent soil, and applied in a six (6) inch compacted layer may be used as initial cover within the bermed working area.
- Ground-up construction and demolition debris, unscreened, and applied in a six (6) inch compacted layer, may be used as initial cover within the bermed working area. Ninety percent of the unscreened ground-up debris shall pass a 2 inch screen and 50 percent shall pass a ¼ inch screen.
- Processed yard waste, screened through ½ inch mesh, and then mixed in the ratio of 75 percent screened compost to 25 percent soil, and applied in a six (6) inch compacted layer may be used as initial cover, or applied in a one (1) foot compacted layer in addition to the six (6) inch initial cover may be used as intermediate cover.
- Street sweeping which is material consisting primarily of soil, rocks, asphalt, leaves and other vegetative matter generated during routine cleaning of roads and is not mixed with any Class I waste. It does not include material generated during the cleanup of an oil of hazardous chemical spill or material that is believed to be contaminated.

ATTACHMENT K-9

LFGCCS OPERATIONS AND MAINTENANCE PLAN

ATTACHMENT K-10

FDEP APPROVAL LETTER FOR LEACHATE REUSE

ATTACHMENT K-11

PHASE II TEMPORARY GAS VENT INFORMATION

REVISED WQMP SECTION 4.2

SECTION 4.0

REPORTING

4.1 WATER QUALITY MONITORING REPORTS

Results of all sampling events shall be submitted to FDEP within 60 days from completion of laboratory analyses, unless a different due date has been specified in the permit. Water quality data shall be provided to the FDEP in an electronic format, unless an alternate form of submittal is specified. Form 62-701.900(31) (Attachment B), Water Quality Monitoring Certification, shall be used to certify that the laboratory results have been reviewed and approved by the county. At a minimum, the report shall include the following:

1. The facility name and identification number, sample collection dates and analysis dates;
2. All analytical results;
3. Identification number and designation of all surface water and groundwater monitoring points;
4. Applicable water quality standards;
5. Quality assurance, quality control notations;
6. Method detection limits;
7. STORET code numbers for all parameters;
8. Water levels recorded prior to evaluating wells or sample collection;
9. Updated groundwater table contour map signed and sealed by a professional geologist or profession engineer;
10. A summary of any water quality standards or criteria that are exceeded.

4.2 EVALUATION OF WATER QUALITY MONITORING PLAN

An evaluation of the water quality monitoring plan for the Central County Solid Waste Disposal Complex shall be conducted every two and one-half years. The WQMP evaluation is required to include an assessment of the effectiveness of the existing landfill design and operation as related to the prevention of groundwater contamination. A report detailing the findings and recommendations to improve the WQMP shall be submitted to the Florida Department of Environmental Protection. The requirements of F.A.C. 62-701.510(8~~9~~)(b) include the following items that, at a minimum, must be included in the evaluation:

1. Tabular and graphical displays of any data which show that a monitoring parameter has been detected, including hydrographs for all monitoring wells.

2. Trend analyses of any monitoring parameters detected.

3. Comparisons among shallow, middle, and deep zone wells.

4. Comparisons between background water quality and the water quality in detection and compliance wells.

SECTION 4.0

REPORTING

4.1 WATER QUALITY MONITORING REPORTS

Results of all sampling events shall be submitted to FDEP within 60 days from completion of laboratory analyses, unless a different due date has been specified in the permit. Water quality data shall be provided to the FDEP in an electronic format, unless an alternate form of submittal is specified. Form 62-701.900(31) (Attachment B), Water Quality Monitoring Certification, shall be used to certify that the laboratory results have been reviewed and approved by the county. At a minimum, the report shall include the following:

1. The facility name and identification number, sample collection dates and analysis dates;
2. All analytical results;
3. Identification number and designation of all surface water and groundwater monitoring points;
4. Applicable water quality standards;
5. Quality assurance, quality control notations;
6. Method detection limits;
7. STORET code numbers for all parameters;
8. Water levels recorded prior to evaluating wells or sample collection;
9. Updated groundwater table contour map signed and sealed by a professional geologist or profession engineer;
10. A summary of any water quality standards or criteria that are exceeded.

4.2 EVALUATION OF WATER QUALITY MONITORING PLAN

An evaluation of the water quality monitoring plan for the Central County Solid Waste Disposal Complex shall be conducted every two and one-half years. The WQMP evaluation is required to include an assessment of the effectiveness of the existing landfill design and operation as related to the prevention of groundwater contamination. A report detailing the findings and recommendations to improve the WQMP shall be submitted to the Florida Department of Environmental Protection. The requirements of F.A.C. 62-701.510(8)(b) include the following items that, at a minimum, must be included in the evaluation:

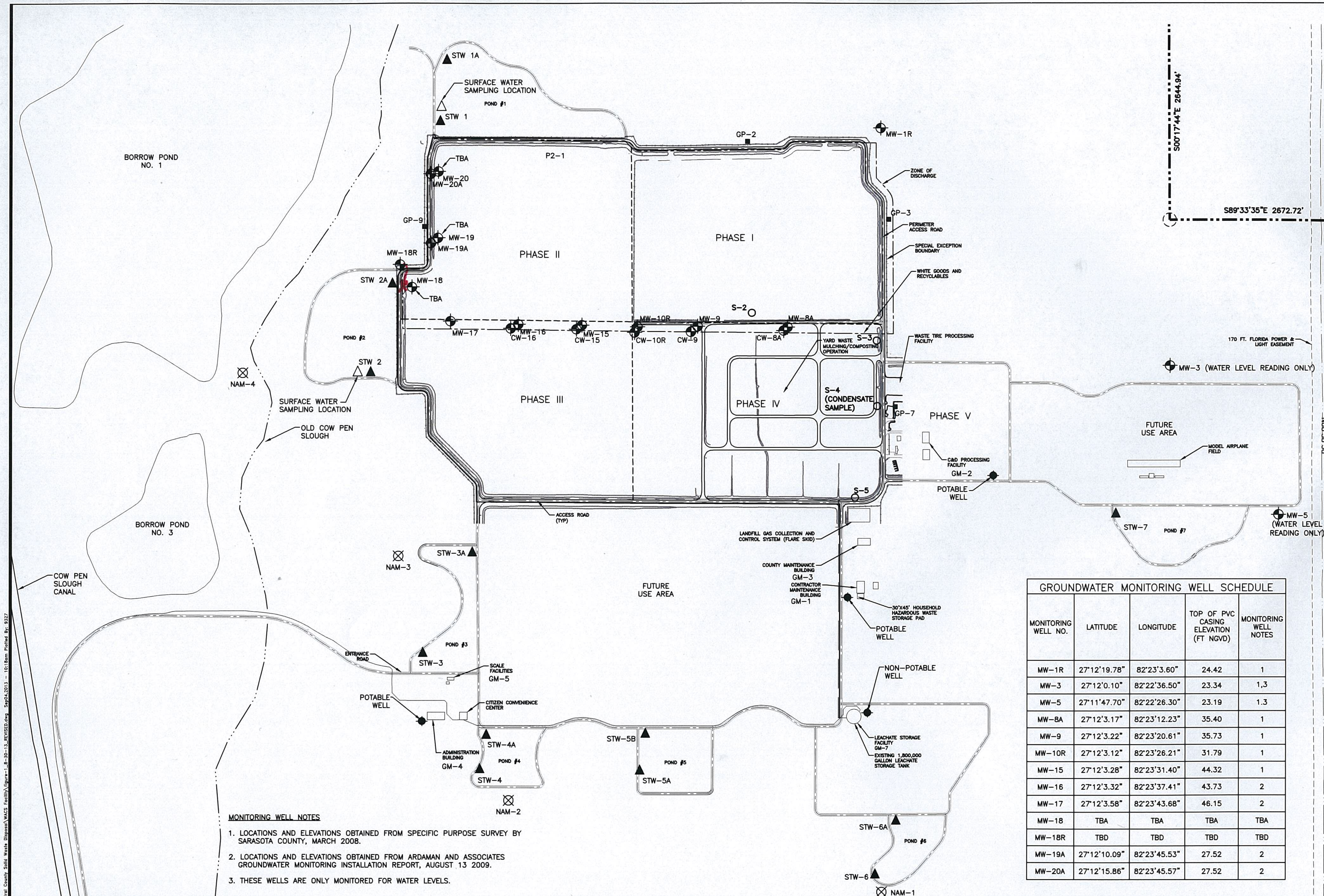
1. Tabular and graphical displays of any data which show that a monitoring parameter has been detected, including hydrographs for all monitoring wells.

2. Trend analyses of any monitoring parameters detected.

3. Comparisons among shallow, middle, and deep zone wells.

4. Comparisons between background water quality and the water quality in detection and compliance wells.

REVISED WQMP FIGURE 1



SITE PLAN NOTES

1. LOCATIONS OF EXISTING PIEZOMETERS, MONITORING WELLS AND STAFF GAUGES OBTAINED FROM SPECIFIC PURPOSE SURVEY BY SARASOTA COUNTY, MARCH 2008.
2. APPROXIMATE LOCATION OF PHASE I LEACHATE FORCEMAIN OBTAINED FROM RECORD DRAWINGS BY CAMP DRESSER & McKEE, INC. DATED APRIL 1998. VERIFY LOCATION IN FIELD.
3. APPROXIMATE LOCATION OF LEACHATE FORCEMAIN TO OFFSITE WWTP OBTAINED FROM CONFORMED DRAWINGS BY PBS&J DATED JULY 2005. VERIFY LOCATION IN FIELD.
4. LOCATION OF CONDENSATE SUMPS OBTAINED FROM PHASE I LFGCCS AS-BUILT DRAWINGS DATED AUGUST 2010.

Brad J. Byrne 61733 10-16-13

LEGEND

- S-2 — LANDFILL GAS CONDENSATE SUMP
- GP-1 — GAS PROBE
- MW-10R — GROUNDWATER MONITORING WELL
- GM-1 — GAS MONITORING LOCATION
- WATER SUPPLY WELL
- P-S-1 — PHASE II BORING/ PIEZOMETER LOCATION
- STW-1 — STORMWATER MONITORING STATION
- C-1 — LEACHATE MONITORING LOCATION
- POND 1 — SURFACE WATER MONITORING LOCATION
- ZONE OF DISCHARGE
- WATERWAY
- LIMITS OF EASEMENT
- EASEMENT CENTERLINE
- EXISTING ROADWAY
- PHASE BOUNDARY
- PROPERTY BOUNDARY
- NATURAL ATTENUATION MONITORING WELLS
- TBA = TO BE ABANDONED
- TBD = TO BE DETERMINED

GROUNDWATER MONITORING WELL SCHEDULE

MONITORING WELL NO.	LATITUDE	LONGITUDE	TOP OF PVC CASING ELEVATION (FT NGVD)	MONITORING WELL NOTES
MW-1R	27°12'19.78"	82°23'3.60"	24.42	1
MW-3	27°12'0.10"	82°22'36.50"	23.34	1,3
MW-5	27°11'47.70"	82°22'26.30"	23.19	1.3
MW-8A	27°12'3.17"	82°23'12.23"	35.40	1
MW-9	27°12'3.22"	82°23'20.61"	35.73	1
MW-10R	27°12'3.12"	82°23'26.21"	31.79	1
MW-15	27°12'3.28"	82°23'31.40"	44.32	1
MW-16	27°12'3.32"	82°23'37.41"	43.73	2
MW-17	27°12'3.58"	82°23'43.68"	46.15	2
MW-18	TBA	TBA	TBA	TBA
MW-18R	TBD	TBD	TBD	TBD
MW-19A	27°12'10.09"	82°23'45.53"	27.52	2
MW-20A	27°12'15.86"	82°23'45.57"	27.52	2

MONITORING WELL NOTES

1. LOCATIONS AND ELEVATIONS OBTAINED FROM SPECIFIC PURPOSE SURVEY BY SARASOTA COUNTY, MARCH 2008.
2. LOCATIONS AND ELEVATIONS OBTAINED FROM ARDAMAN AND ASSOCIATES GROUNDWATER MONITORING INSTALLATION REPORT, AUGUST 13 2009.
3. THESE WELLS ARE ONLY MONITORED FOR WATER LEVELS.

FIGURE 1

ATKINS
482 SOUTH KELLER ROAD
Orlando, Fl 32810-6101
TEL. (407) 647-7275
FAX. (407) 647-0624
www.atkinsglobal.com
5300 W. BOY SCOUT BOULEVARD
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTHORIZATION NO.24

CLIENT: SARASOTA COUNTY

PROJECT: CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX CLASS I LANDFILL

TASK: WATER QUALITY MONITORING PLAN

ORIGINAL 8/01/2012
REVISIONS:
1. 8/19/2013
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.

Name:
Florida P.E. No.:
Address: ATKINS 482 S. Keller Road Orlando, FL 32810-6101
Signature Date

JOB NO. 00-000.00
DRAWN GG
DESIGN RS
CHECKED
Q.C.
SHEET 1/1