



Permit SW-10/01
Permit Type: Sanitary Landfill

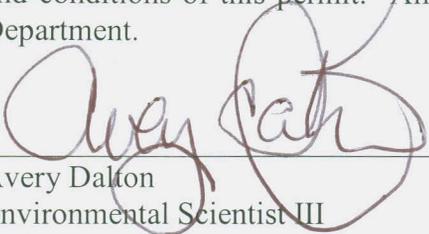
Effective Date: March 31, 2010

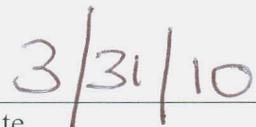
Date Issued: March 31, 2010

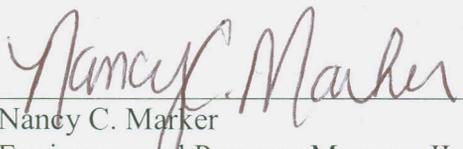
Expiration Date: March 31, 2020

Permittee: Delaware Solid Waste Authority
P.O. Box 455
1128 S. Bradford Street
Dover, Delaware 19901

Pursuant to 7 Del. C., Chapter 60, Section 6003 and the *Delaware Regulations Governing Solid Waste*, approval of the Department of Natural Resources and Environmental Control is hereby granted to operate the Central Solid Waste Management Center sanitary landfill located at 1107 Willow Grove Road, Felton, Delaware 19943, (near) Sandtown, Delaware, subject to the terms and conditions of this permit. All terms and conditions of this permit are enforceable by the Department.


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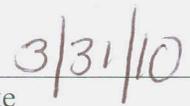

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I. GENERAL CONDITIONS

A. Permit Replaced

Pursuant to Sections 4.1.1.1 and 5 of the *Delaware Regulations Governing Solid Waste* (DRGSW), the Department of Natural Resources and Environmental Control (Department) hereby issues Permit SW-10/01 to the Delaware Solid Waste Authority (DSWA), 1128 S. Bradford Street, Dover, DE 19901 for the continued operation of the sanitary landfill located at the Central Solid Waste Management Center (CSWMC) Sandtown, Delaware. This permit incorporates the requirements of, and replaces permit SW-03/01.

B. Applicability

This permit applies to:

1. Construction of Area F.
2. Operation and maintenance of the CSWMC, including areas (cells) A/B, C, D, E, and F.
3. Environmental monitoring, recordkeeping, and reporting for CSWMC.
4. The Area F cap and final cover.
5. Operation of a leachate treatment system of Area A/B

C. Application Documents

This permit was issued in accordance with the following documents submitted by the DSWA:

1. DSWA letter of intent dated September 15, 2008.
2. Two volume *Application to Construct and Operate Sanitary Waste landfill for Area F Disposal Area Central Solid Waste Management Center, Kent County, Delaware*, prepared by Camp, Dresser and McKee and dated May 8, 2009.
3. *Area F Disposal Area, Permit Drawings*; prepared by Camp Dresser & McKee Inc. containing drawings G-1 through G-6, C-1 through C-10, D-1 through D-12, GC-1 through GC-14, OP-1 through OP-11, and E-5; dated September 2008 with revisions submitted on March 2009, and final submittal May 2009.
4. Secretary's Order No. 2009-A-0003, issued by the Department on February 5, 2010.
5. Other plans, policy or procedures specifically referenced in this permit.

D. General Conditions

This permit is issued subject to the following general conditions:

1. Construction and operations at CSWMC shall be conducted in compliance with all federal, state, county, and municipal environmental statutes, ordinances, and regulations, including, but not limited to: *Delaware Regulations Governing Solid Waste, Delaware Regulations Governing Hazardous Waste, Delaware Regulations Governing the Control of Water Pollution, the Delaware Surface Water Quality Standards, and the Delaware Regulations Governing the Control of Air Pollution.*
2. Access to the CSWMC site by unauthorized persons shall be prevented by barriers, fences, and gates, or other suitable means. Access for the purpose of disposal of solid waste shall be limited to those times when an attendant is on duty and to those persons authorized to use the site for the disposal of solid waste. The Department may, at any reasonable time, enter the CSWMC to verify compliance with the permit and the DRGSW.
3. This Permit may be revoked upon violation of any condition of the permit or any requirement of the DRGSW after notice and opportunity for hearing in accordance with 7 Del. C., Chapter 60.
4. Permit SW-10/01 shall expire no later than March 31, 2020.
5. A copy of the most current version of this permit shall be maintained in both the scalehouse and the on-site office at CSWMC.
6. Yard waste diversion
 - a. DSWA shall ban disposal of all yard waste from the CSWMC effective no later than January 1, 2011.
 - b. The DSWA shall advertise the CSWMC yard waste ban in a manner that successfully educates the public and the waste haulers of:
 - (1) the effective date of the ban,
 - (2) the fact that yard waste can no longer be commingled with trash as a means of disposal,
 - (3) the reasoning behind prohibiting the landfilling of yard waste,
 - (4) alternatives to manage yard waste as a result of the ban and,
 - (5) consequences of failing to comply with the ban.

This shall be accomplished using technical support from academic extension and composting experts, holdings public meetings regarding the yard waste ban and employing the use of print and electronic media.

- c. DSWA shall provide yard waste drop off for residents at all of its permitted solid waste facilities throughout Kent County and New Castle County south of the Chesapeake and Delaware Canal where home owners would be permitted to drop off their yard waste.
- d. "Yard Waste" means plant material resulting from lawn maintenance and other horticultural gardening and landscaping activities and includes grass, leaves, prunings, brush, shrubs, garden materials, Christmas trees, and tree limbs up to 4 inches in diameter.

II. CONSTRUCTION OF AREA F

A. Planning, Design and Construction

The planning and design of Area F shall be consistent with the DRGSW and the application package and drawings prepared by Camp, Dresser and McKee dated July and May 8, 2009.

B. Standards for Construction

1. Engineering Report: DSWA shall construct Area F in accordance with the Engineering Report which encompasses *the Engineering Report for Area F Disposal Area*, dated May 2008, including the *Technical Specifications*, *Construction Quality Assurance Plan* and *Area F Disposal Area and Related Facilities Permit Drawings*. Revisions to these documents related to leachate or landfill gas collection, transmission, storage or recirculation systems; construction within the limits of the landfill cell; or the stormwater management systems shall require Department approval in writing or by documentation of Department approval in the minutes of the construction progress meetings.
2. Additional Construction Requirements: DSWA shall construct Area F in accordance with the following additional requirements:
 - a. DSWA should not engage in clearing of the land between April 1st and July 31st. DSWA may continue ongoing clearing operations so long as significant disturbance, resulting in at least 50 percent of the targeted land area being cleared, is performed prior to April 1st.
 - b. Prior to clearing or construction activities, DSWA shall delineate the adjacent wetlands in a manner that identifies them for field staff and shall protect these wetlands from sediment and site activity throughout the construction of Area F.
 - c. Prior to the receipt of geomembrane, geosynthetic clay liner, filter fabric, fabric cushion, or composite drainage net on-site, DSWA shall provide the Department with the manufacturer's recommendations for storage and handling of these materials. DSWA shall also provide the manufacturer's installation instructions

prior to the installation of these materials.

C. Final Report

1. After construction has been completed and prior to the placement of solid waste, DSWA shall submit a final report for the Department's approval. The final report shall certify that the construction of the cell was completed in accordance with the Engineering Report including the *Technical Specifications, Construction Quality Assurance Plan and Area F Disposal Area and Related Facilities Permit Drawings*. The DSWA shall not place solid waste into Area F until the Department has provided its written notification that the construction and the final report meet the requirements of the permit and the *Delaware Regulations Governing Solid Waste*. The final report shall include:
 - a. A cover letter presenting the final report and signed by the permittee after their review and concurrence.
 - b. Title page to include date, facility, project name, responsible party (DSWA), and preparing firm.
 - c. Signature page (in accordance with the DRGSW, Section 4.2.2.2).
 - d. Table of contents, to include a detailed list of the contents of the appendices.
 - e. Introductory narrative with project overview.
 - f. Qualifications and responsible parties. The engineer shall make a determination if specified qualifications were met throughout the project for Quality Assurance Laboratories, the general contractor, the master seamer(s), all CQC and CQA staff, and the manufacturers and installers. This section shall also include a listing of key personnel involved with the project with business contact information to include the DSWA project engineer, the design engineer, the CDM project engineer, the general contractor's representative(s) on-site, the installers representative(s) on-site, master seamer(s), surveyor, and all staff providing CQC and CQA oversight including those responsible for off-site conformance sampling.
 - g. The engineer's discussion and certification or other determination for each major component of the Area F construction. The engineer shall certify if the component was completed in accordance with the permit requirements; if materials were manufactured/mined, tested, transported, stored on site, installed and protected in accordance with the permit requirements; and whether the work achieved the performance standard intended by the design. Major components include:

- (1) Earthwork and Subgrade, including materials, lines/grades, and the installation and status of instruments installed to monitor foundation settlement.
 - (2) Installation and quality of liner systems and materials.
 - (3) Installation and quality of leachate collection/detection, transport and recirculation systems, and materials, including pipes, drainage materials, composite drainage net, pumps, controls and alarms.
 - (4) Installation and quality of gas collection systems and materials.
 - (5) Installation and quality of sand drainage layer.
 - (6) Installation and quality of stormwater management systems, controls and materials.
- h. Site topographic drawing showing property boundaries, outlines of landfill cells, stormwater controls, stormwater flow directions and all environmental monitoring locations required by this permit.
- i. Supporting documents for Construction Quality Assurance to include manufacturer's quality control program manuals, manufacturer's installation recommendations (as required by the technical specifications), site visits to manufacturing facilities, CQA forms, logs, daily reports, record drawings, field quality control testing results, laboratory results, manufacturer's certifications and warranties, and project meeting minutes. The Permittee shall provide this information on compact disc(s) only, in a format acceptable to the Department and bookmarked by section to allow for easy retrieval and review.
- j. Record drawings including detail drawings for control components. The permittee shall provide this information on compact disc only, in a format acceptable to the Department and bookmarked to allow for easy review and retrieval.
- k. Project photographs. The permittee shall provide project photographs on compact disc(s) only. Images shall be sorted by date and labeled to include a description of the material or activity pictured.
2. DSWA shall provide one paper copy of the final report with compact disc(s) included as appendices (for supporting information, record drawings and photographs). Additionally, the DSWA shall provide one complete, web-ready copy of the final report on compact disc(s) in a format acceptable to the Department. The web-ready copy shall be organized by section in accordance with the table of contents and bookmarked to allow for easy review and retrieval.

D. Area F Phased Capping

1. A report for each phase or area capped shall be provided to the Department within 60 days of completion. The report shall certify that the phase was capped in accordance with the Technical Specifications and the Construction Quality Assurance (CQA)

plan. The DSWA may choose to cap the landfill with PVC or LLDPE geomembrane liner.

- a. Poly Vinyl Chloride (PVC) Geomembrane Technical Specifications and the Construction Quality Assurance (CQA) plan was originally provided in Appendices B and C of Section 5, Volume I of the two volume *Application to Construct and Operate Sanitary Waste landfill for Area E and C/D Valley Disposal Areas Central Solid Waste Management Center, Kent County, Delaware*, dated July and August, 1997 and prepared by Camp, Dresser and McKee and revised on December 4, 2000, under the submittal of DSWA's letter dated March 9, 2001.
 - b. Linear Low Density Polyethylene (LLDPE) Geomembrane Technical Specifications and the Construction Quality Assurance (CQA) plan was provided in Appendices B and C of Section 5, Volume I of the two volume *Application to Construct and Operate Sanitary Waste landfill for Area E and C/D Valley Disposal Areas Central Solid Waste Management Center, Kent County, Delaware*, dated May, 2009 and prepared by Camp, Dresser and McKee and PVC to LLDPE joint design criteria outlined in CDM's response letter (page 8) to DNREC application comments, letter dated March 16, 2009.
2. Upon closure of the landfill or landfill cell, a capping system shall be installed that will control emissions of gas, promote vegetative cover, and minimize infiltration and percolation of water into, and prevent erosion of, the waste throughout the post-closure care period.
 3. The capping system shall be designed in accordance with the DRGSW.
 4. At the conclusion of all phases of capping on Area F (which may/will include previously capped sections of Area D and Area E capped in accordance with criteria in II.D.1.) the DSWA shall provide the Department a Certification Final Report. The Certification Final Report shall be completed by a third party CQA Consultant and submitted for Department review within 60 days after all phases of capping on Area F have been completed.

III. OPERATIONS

A. General Operations

DSWA shall operate the CSWMC in accordance with this permit and the *Operations Plan*, (the Operations Plan) dated March 2010 and the *Leachate Treatment Utilizing Wetlands and A Landfill Phyto-cap Operations and Maintenance Manual*, (the Manual) dated August 2008. CSWMC shall be operated in a manner that will preclude degradation of adjacent land, air, surface water, or groundwater.

B. Protection of Control Systems

1. The DSWA shall operate the CSWMC in a manner that will protect landfill liner systems, gas control systems, landfill cap systems, and leachate collection, storage, and distribution systems.
2. The DSWA shall take special precautions while placing the first two feet of the first lift of solid waste. Incoming waste shall be screened to identify preferential loads to be used for the initial lift. Waste that contains materials that may be detrimental to the liner system shall be diverted to an active area where the initial first two feet of waste are already in place. A spotter shall be present during initial lift placement to identify and remove objects that may cause damage to the liner system.
3. The DSWA shall limit the height of the waste placed over tire chips in Area F (installed as part of the protective cover on the liner system) to 67 feet.

C. Staffing

Sufficient numbers and types of personnel, as specified in the Operations Plan, shall be available at the site to insure capability for operation in accordance with the DRGSW, the Operations Plan and the Manual.

D. Equipment

Equipment necessary to ensure the operations of the landfill in accordance with the Operations Plan, the Manual and the requirements of the DRGSW shall be maintained at the site by the DSWA. This shall include at least one backup pump for each cell. Backup pumps must be compatible with the existing control and alarm systems and capable of withdrawing leachate from the leachate collection system and leak detection system.

E. Acceptable Wastes

CSWMC is permitted to accept the following wastes for disposal at the facility in accordance with the DRGSW:

1. Municipal solid waste defined as household waste and solid waste that is generated by commercial, institutional, and industrial sources and is similar to household waste.
2. Non-hazardous industrial wastes or sludges, oil spill debris or other related wastes not included in the municipal solid waste stream which have been accepted in accordance with *the Delaware Solid Waste Authority Policy on Special Solid Wastes*, approved by the Board of Directors on December 7, 1995 and revised on October 27, 2005.

3. Dry Waste.

F. Prohibited Wastes

The DSWA shall exercise reasonable care to ascertain whether waste accepted at the facility is prohibited waste, and shall not accept the following prohibited waste.

1. Hazardous waste.
2. Regulated infectious waste.
3. Licensed radioactive material (as described in the Delaware Radiation Control Regulations), and any radioactive material considered source, special nuclear, or by-product material as defined by Atomic Energy Act of 1954.
4. Liquid waste as restricted by 40 CFR Part 258.28.

G. Asbestos

The DSWA shall not accept asbestos containing material for disposal into any landfill cell at the CSWMC. Asbestos containing materials may be accepted and placed into designated rolloff containers for transfer to and disposal at an approved disposal facility. Asbestos receipt, storage, handling, and transfer shall be done in accordance with the DSWA's letter (Asbestos Procedure for CSWMC) dated July 12, 1996 and the DNREC response letter (Re: Asbestos Procedure for CSWMC) dated July 24, 1996.

H. Disposal of Tires

The DSWA shall not accept for disposal at CSWMC, whole tires in quantities greater than ten (10) per truckload or as allowed by the *Delaware Regulations Governing Solid Waste*, whichever is more restrictive.

I. Waste Inspections/Waste Screening

Waste inspection of all incoming loads as well as random waste screening shall be in accordance with the Operations Plan. All landfill personnel responsible for waste inspection (including scale operators, bulldozer operators, compactor operators, and spotters) shall comply with these procedures.

J. Scavenging

Scavenging on the landfill is prohibited.

K. Salvaging

1. Salvaging shall be conducted in accordance with the Operations Plan and in a manner protective of human health and the environment.
2. Salvaging operations shall not interfere with the proper disposal of wastes at the facility.

3. DSWA shall inspect stockpile areas at least once each operating day to insure that unwanted materials (such as trash) have not been deposited. Such materials shall be removed for proper disposal no later than the next business day. DSWA shall record the results of these inspections.
4. Loads of dry waste may be diverted to a designated area on the lined area of the landfill for salvaging. Salvaged dry waste shall not include materials prohibited by condition III.F. of this permit, special wastes or asbestos.

L. Daily Cover

1. The DSWA shall place daily cover consisting of a six-inch layer of suitable material over all disposed solid waste by the end of each working day. Daily cover shall control odors, disease vector breeding, animal attraction, blowing litter, scavenging; as well as reduce the potential for fires. DSWA shall ensure that daily covers left in place under waste do not preclude leachate flow downwards towards the leachate collection system.
2. At least weekly, DSWA shall inspect exposed daily covers that remain in place for more than two days and shall record the results of these inspections. DSWA shall maintain these daily covers as necessary to control odors, disease vector breeding, animal attraction, blowing litter, scavenging and fires. DSWA shall maintain adequate surface water management controls to prevent erosion of the cover. DSWA shall maintain these daily covers to prevent wastes from being exposed.
3. Department approved alternative daily covers may be used only if those covers perform as well as standard daily cover soil and are used and maintained in a manner that does not present an increased threat to human health or the environment. Additionally, the DSWA shall store, use, and maintain alternate daily cover material in accordance with the Operations Plan. DSWA shall not use an alternative daily cover without the written approval of the Department's SHWMB, and the DSWA shall maintain written approvals for all alternative covers used at the landfill in accordance with Section VI.C of this permit.
4. DSWA may use tarps as daily cover in accordance with the Operations Plan. When tarps are used, DSWA shall deploy them in a manner that ensures that all solid wastes on that day's working face are covered and remain covered until the next operating day. DSWA shall use soil or other approved daily covers as necessary to supplement tarps if needed to ensure coverage of solid wastes.

M. Intermediate Cover

1. DSWA shall apply intermediate cover to any area that receives daily cover and is not expected to receive either additional solid waste or a capping system within six months. Intermediate cover shall consist of at least 12 inches of compacted soil (total), or an alternative material approved by the Department for use as an

intermediate cover. Intermediate cover shall control odors, disease vector breeding, animal attraction, blowing litter, scavenging and reduce the potential for fires. Intermediate cover shall prevent leachate from entering stormwater management systems or surface waters. If the intermediate cover has been placed to reduce infiltration of water into the landfill, DSWA shall remove or otherwise modify it to allow leachate to move downwards towards the leachate collections system prior to placement of additional solid waste on the intermediate cover.

2. At least weekly, DSWA shall inspect intermediate covers and shall record the results of these inspections. DSWA shall maintain all intermediate covers as necessary to control odors, disease vector breeding, animal attraction, blowing litter, scavenging and fires. DSWA shall maintain adequate surface water management controls to prevent erosion of intermediate covers. DSWA shall maintain these covers to prevent wastes from being exposed.
3. Department approved alternative intermediate covers may be used only if those covers perform as well as standard intermediate cover soil and are used and maintained in a manner that does not present an increased threat to human health or the environment. Additionally, the DSWA shall store, use, and maintain alternate intermediate cover material in accordance with the Operations Plan. DSWA shall not use an alternative intermediate cover without the written approval of the Department's SHWMB, and the DSWA shall maintain written approvals for all alternative covers used at the landfill in accordance with Section VI.C of this permit.
4. Geomembrane used in addition to 12 inches of intermediate soil cover shall be surveyed and plotted on a drawing showing final capped areas and intermediate capped areas. Normal QC/QA procedures and technical specifications are not required for these intermediate capping phases.

N. Stormwater Management

1. The goal of DSWA's stormwater management program shall be to prevent the generation or discharge of contaminated stormwater. For the purposes of this permit, contaminated stormwater means stormwater which comes in direct contact with landfill wastes or landfill wastewater. Landfill wastewater means all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater and groundwater from monitoring or production wells on-site. Landfill wastewater includes leachate, gas collection condensate, laboratory derived wastewater, contaminated stormwater and contact washwater used to wash solid wastes from equipment.
2. In accordance with the Plan of Operation and the conditions of this permit, DSWA shall properly operate, inspect and maintain all conveyances and ponds designed to manage stormwater. DSWA shall inspect stormwater conveyances and ponds at least monthly and shall record the results of the inspections. DSWA shall maintain records of these inspections and of their findings and actions taken to correct deficiencies

observed. DSWA should coordinate stormwater pond cleanout or maintenance involving structural repair of the ponds with the DNREC Sediment and Stormwater Program.

3. The DSWA shall take all reasonable steps to identify and prevent the discharge of stormwater contaminated from landfilling activities, including equipment maintenance, and salvage operations, into surface water, primarily the Choptank River and Cow Marsh Branch. In areas where waste is handled or stored off the landfill cells, and in areas where the permittee conducts equipment maintenance, washing or refueling DSWA shall use Best Management Practices to eliminate or reduce the contact of waste materials and petroleum products with stormwater.
4. The DSWA shall maintain a stormwater management system on the landfill to prevent erosion of the waste and cover, prevent the accumulation of standing water, and minimize stormwater runoff into the waste. DSWA shall ensure that contaminated stormwater from operation on the landfill is directed to the leachate collection system. DSWA shall provide for, and maintain a permanent, long-lived vegetative cover on the final cover soils of the landfill. DSWA shall repair disturbed areas of final cover as soon as practical to prevent erosion. DSWA shall inspect the stormwater management system on the landfill each operating day and shall record the results of the inspections. DSWA shall maintain records of these inspections and of their findings and actions taken to correct deficiencies observed.
5. DSWA shall inspect for leachate seeps at least once each operating day and shall take all practical steps to prevent leachate from contaminating surface water, including stormwater ponds and conveyances located off the lined areas of the landfill. DSWA shall maintain records of the inspections and of their findings and actions taken to prevent leachate from contaminating surface water. If leachate is found to be contaminating surface water DSWA shall report this in accordance with Section V.D. of this permit and shall initiate immediate corrective measures to stop the contamination and to manage the contaminated surface water as landfill wastewater. Until the DSWA has completed necessary corrective measures, they shall conduct daily visual inspections of impacted/potentially impacted surface waters. DSWA shall also initiate additional environmental sampling in accordance with Section IV.A.4 of this permit.
6. To ensure that stormwater has not been contaminated, DSWA shall inspect accumulated stormwater in secondary containment structures prior to releasing it. DSWA shall visually inspect the accumulated liquid for color, sheen, and odor. If the visual inspection indicates that the stormwater could be contaminated, DSWA shall conduct additional testing of the liquid to determine if it is wastewater, and DSWA shall not release wastewater to surface waters at the CSWMC. If field instruments are used during the monitoring, DSWA shall ensure that these instruments are maintained and utilized in accordance with manufactures instructions. DSWA shall maintain records of these inspections and of their findings and actions taken to manage the accumulated liquids.

7. To ensure that stormwater held in unused portions of Area F has not been contaminated, each operating day DSWA shall inspect adjacent landfill slopes for leachate seeps. As part of this inspection, DSWA shall also inspect stormwater accumulating in the unused portions of Area F for color, sheen, and odor. If the visual inspection indicates that the stormwater could be contaminated, DSWA shall conduct additional testing of the liquid to determine if it is wastewater, and DSWA shall not release wastewater to surface waters at the CSWMC. If field instruments are used during the monitoring, DSWA shall ensure that these instruments are maintained and utilized in accordance with manufactures instructions. DSWA shall maintain records of these inspections and of their findings and actions taken to manage the accumulated liquids.

O. Gas Extraction and Odors

1. The DSWA shall operate and maintain the gas extraction system and flares to control odors. Malodorous gaseous emissions from the landfill shall be controlled to the extent that there is no perceivable landfill odor beyond the property boundary. DSWA shall maintain a permit for the operation of the extraction system and flares in accordance with the *Regulations Governing the Control of Air Pollution*.
2. The DSWA shall record all odor complaints they receive concerning the CSWMC and shall investigate complaints in a timely manner. DSWA shall maintain records of the odor complaints as well as DSWA findings and any actions taken to preclude landfill odors from moving beyond the property boundary.

P. Leachate Management

1. The DSWA shall operate and maintain the leachate collection, transmission, storage and recirculation system, including all alarm systems in accordance with this permit, the Operations Plan and the Manual. The DSWA shall clean-up all leachate spills immediately or within a time frame approved by the Department on a case-by-case basis.
2. The DSWA shall inspect secondary containment systems under leachate storage tanks each operating day and shall remove stormwater or other liquids as needed to maintain the holding capacity necessary to contain leachate from a tank rupture. DSWA shall release stormwater only in accordance with condition III.N.7 of this permit.
3. Leachate recirculation shall be allowed only with prior and annual written approval of the Department in accordance with the DRGSW, Section 5.4.3.7.
4. Leachate recirculation is prohibited on any landfill cell which does not contain an operable, permitted, landfill gas collection system.

Q. Litter Control

DSWA shall provide for litter removal and general cleanliness of the entire site to include litter controls cited in the Operations Plan. DSWA shall implement the following minimum controls:

1. DSWA shall use effective operational controls to minimize wind-blown litter from the working faces, cleanout areas, the dry waste salvage area and the small load collection station. Controls shall include daily inspections for litter, compaction of waste upon receipt, use of fences and other barriers, and routine litter collection.
2. DSWA shall inspect for litter on the facility, including the entrance road, daily (each operating day) and ensure that litter is collected quickly and properly disposed. DSWA shall record the results of the inspections.
3. DSWA shall not allow litter to migrate from the landfill site.
4. The DSWA shall collect any off-site litter attributable to landfill operations.

R. Dust Control

1. DSWA shall provide for dust controls at the CSWMC to include dust controls cited in the Operations Plan.
2. DSWA shall operate the landfill in a manner to prevent dust emissions from causing a condition of air pollution (injurious to human, plant, or animal life or unreasonably interfering with the enjoyment of life and property).
3. DSWA shall operate the landfill to minimize soil or daily cover material from being tracked onto public roads. DSWA shall inspect facility egress points each operating day to identify if materials are being tracked off-site and to gauge the extent of the problem. DSWA shall record the results of the inspections. In the event that the daily inspection finds that materials are being tracked onto public roads, at a minimum DSWA shall provide for street cleaning that same day.

S. Health and Safety

1. Employees at the site shall work under appropriate health and safety guidelines established by the Occupational Safety and Health Administration.
2. Use of personal protective equipment shall be in accordance with 29 CFR Part 1910.132 as a minimum.
3. First aid equipment shall be maintained and available in the scale house and in the maintenance building.

4. Emergency telephone numbers of nearby ambulance, hospital, police and fire services shall be prominently displayed by at least one telephone in each of the following on-site locations: the maintenance office, the scale house and the administrative office.
5. Any confined space entry done by employees or contractors shall be done in accordance with 29 CFR Part 1910.146.

T. Contingency

1. Fire prevention and control shall be in accordance with the Operations Plan and the Manual.
2. There shall be one Emergency Coordinator and at least one alternate Emergency Coordinator appointed at the CSWMC to ensure that at least one Emergency Coordinator will be available at all times. The Emergency Coordinator shall be responsible for directing all emergency response measures necessary to protect human health and the environment in the event of fire, severe weather, explosion, or release of hazardous materials.
3. The Permittee shall maintain a current Spill Prevention, Control and Countermeasures Plan.

U. Training

DSWA shall conduct training in accordance with Section 8.6 of the Plan of Operation.

V. Operation of the Area A/B Leachate Treatment System

1. Area A/B Leachate Treatment System shall be used to treat Area A/B leachate.
2. The operation of the Wetlands Biofilter System shall not lead to the recirculation of treated effluent or leachate into Area A/B.
3. Spray irrigation of the treated effluent shall not:
 - a. discharge outside of the lined area of Area A/B.
 - b. create liquid run-off outside of the lined area of Area A/B.
 - c. cause saturation of soil cover of Area A/B.
 - d. be performed during precipitation events.
4. The DSWA shall monitor and record the amount of; leachate treated, effluent used for spray irrigation, and untreated leachate from Area A/B sent for disposal off-site.
5. Operational controls shall be in place to maintain compliance with this permit condition.

IV. MONITORING

A. Surface Water Monitoring

1. DSWA shall monitor surface water in accordance with the *Monitoring Plan for the Central Solid Waste Management Center*, March 2010, (the Monitoring Plan) and the requirements of this permit.
2. DSWA shall maintain surface water gauges; CMT-SG#1 (Cow Marsh Tributary Upstream), CMT-SG#2 (Cow Marsh Tributary Downstream), CMB-SS#1 (Cow Marsh at 208 Bridge), CMB-SG#3 (Cow Marsh Downstream of Area A/B), CR-SS#2 (Choptank River Upstream of Area A/B), CR-SS#3 (Choptank River Downstream of Area A/B), CDE-SMB (Stormwater Management Basin), D-SMB#2-SG (Area D Stormwater Basin #2), and BP-SG#1, BP-SG#2, and BP-SG#3 (Facility Borrow Pit). Quarterly, during January, April, July, and October, coincident with the measurement of groundwater levels in monitoring wells, the DSWA shall measure water levels at surface water gauges: CMT-SG#1, CMT-SG#2, CMB-SS#1, CMB-SG#3, CR-SS#2, CR-SS#3, CDE-SMB, D-SMB#2-SG, and BP-SG#1, BP-SG#2, and BP-SG#3.
3. DSWA shall monitor stormwater ponds CDE-SMB (Stormwater Management Basin), D-SMB#2-SG (Area D Stormwater Basin #2) and BP-SG#1, BP-SG#2, and BP-SG#3 (Facility Borrow Pit) quarterly during January, April, July, and October. This quarterly monitoring shall include environmental sampling as well as visual monitoring of water being discharged from the stormwater ponds at the time of the sampling.
 - a. Visual monitoring shall document water elevation as well as the results of a visual inspection for obvious indicators of stormwater pollution. In the event there is no stormwater being discharged at the time of the quarterly environmental sampling, DSWA shall document that and shall repeat the visual monitoring as soon as practical after the next rain event(s) until discharge is observed, inspected and documented.
 - b. Environmental sampling shall consist of grab water samples of pond discharge taken at the outlet structures of the ponds or at the point in the pond where the water enters the outlet. DSWA shall estimate the flow rate at the pond outlets each time a sample is collected. DSWA shall measure and record field parameters and collect samples for indicator parameters in accordance with the *Monitoring Plan for the Central Solid Waste Management Center*, March 2009. Additionally, DSWA shall monitor for biological oxygen demand, and hardness.
4. In the event a leachate seep is found to be contaminating surface water, DSWA shall sample the impacted surface water and the downstream stormwater pond at both the inlet and the outfall (if discharging). DSWA shall record their visual observations and sample in accordance with the *Monitoring Plan for the Central Solid Waste Management Center*, March 2009 to include the parameters cited in Exhibit B, Table F of that plan.

B. Groundwater Monitoring

1. DSWA shall monitor groundwater in accordance with the *Monitoring Plan for the Central Solid Waste Management Center*, March 2010, (the Monitoring Plan) and the requirements of this permit.
2. DSWA shall maintain and protect all monitoring wells in accordance with the *Delaware Regulations Governing the Construction and Use of Wells*. Abandonment of any monitoring well due to construction activities shall be performed in accordance with the *Delaware Regulations Governing the Construction and Use of Wells*.
3. Groundwater Sampling:
 - a. Quarterly, during January, April, July, and October, the DSWA shall measure water levels in the groundwater monitoring wells in accordance with Exhibit B, Table D of the Monitoring Plan.
 - b. DSWA shall monitor groundwater wells in accordance with the schedule in Exhibit B, Table D of the Monitoring Plan. DSWA shall measure field parameters, and indicator parameters in accordance with Exhibit B, Table D of the Monitoring Plan.
 - c. All samples shall be collected in a manner that minimizes sample turbidity. All wells to be sampled shall be maintained as necessary so that they will produce low turbidity samples. Samples shall be collected, prepared, and shipped in accordance with the Monitoring Plan.

C. Leakage Detection System Monitoring

1. The DSWA shall monitor all leak detection system flowmeters, pumps, controls, and recording devices each operating day to ensure proper functioning and to record flows. The DSWA shall inspect for leakage from valves, flowmeters, and connections at riser locations each operating day. The results of the inspections shall be recorded in the facility log.

2. Cleaning and Assessment of the system:

The DSWA shall monitor the quality of the detection water per the requirements in paragraph IV.C.5. Should it be determined that the detection water is leachate, the detection system of the affected area shall be cleaned initially and at least once every two years with a self-propelled, high pressure jetting system. The DSWA shall be responsible for the identification, assessment, and reporting of all blockages encountered as well as identification of any areas found to be inaccessible during the annual cleanings. The Department may, at its discretion, waive the annual cleaning event for any particular year if, after demonstration by the DSWA, it determines that cleaning is not required.

3. The leak detection system shall be capable of measuring the rate and quantity of flow from each sump area on a daily basis, and shall be capable of sampling the liquid

from each sump area.

4. The DSWA shall comply with the Action Leakage Rate (ALR) and Exceedance Plan for Areas D, E, and F contained in paragraph 12.4 of the Operations Plan. If the ALR for any cell is exceeded the DSWA shall notify the Department in writing and shall follow the procedures in the leak detection system exceedance plan for the affected area.

5. Quarterly Sampling:

DSWA shall monitor liquids in the leakage detection system in accordance with the Monitoring Plan dated March 2010 including the schedule and list of parameters in Exhibit B, Table B of that plan. In the event that liquid was too low to be sampled during the monitoring event, DSWA shall document that and shall report it in both the quarterly and annual reports of monitoring results.

D. Leachate Collection, Treatment, Disposal and Monitoring:

1. The DSWA shall monitor all leachate collection system flowmeters, pumps, controls, recording devices and storage tanks each operating day to ensure proper functioning and to record flows. The DSWA shall inspect for leakage from valves, flowmeters, connections at riser locations, and storage tanks each operating day. The results of the monitoring and inspections shall be recorded in the facility log.

2. Cleaning and Assessment of the System:

The DSWA shall ensure that collection pipes are cleaned at least once every two years with a self-propelled, high pressure jetting system. The DSWA shall be responsible for the identification, assessment, and reporting of all blockages encountered as well as identification of any areas found to be inaccessible during the annual cleanings. The Department may, at its discretion, waive the annual cleaning event for any particular year if, after demonstration by the DSWA, it determines that cleaning is not required.

3. Leachate recirculation shall be allowed only with prior written approval of the Department and only if it can be reasonably demonstrated that it will not result in significant increase in odors, contamination of groundwater, or release of methane or other landfill gases to the environment.
4. The DSWA shall maintain all necessary permits and approvals for leachate storage and disposal management.
5. The leachate collection system shall be capable of measuring the rate and quantity of leachate flow from each sump area on a daily basis, and shall be capable of sampling the leachate from each sump area.

6. DSWA shall monitor leachate in accordance with Exhibit B, Table A of the Monitoring Plan. DSWA shall provide the results of the monthly monitoring quarterly along with sampling results from the quarterly monitoring.
7. The DSWA shall measure and record the quantity of leachate pumped from each leachate sump on a weekly basis. The DSWA shall also record weekly the quantity of leachate recirculated in each cell and the quantity of leachate shipped.

E. Landfill Gas:

1. The operation, maintenance, and monitoring of the gas extraction and flare systems shall be done in accordance with the current permit(s) issued pursuant to the *Delaware Regulations Governing the Control of Air Pollution*.
2. Gas migration monitoring (Section 5.5.1.3, DRGSW) shall be performed at least quarterly and shall be done in accordance with the *CSWMC Landfill Gas Migration Monitoring Plan*, dated March 2010. The concentration of landfill gas in facility structures (except gas recovery systems) and at the facility boundary shall not exceed 25% of the Lower Explosive Limit (LEL). Gas monitoring shall be performed:
 - (1) in structures within 1000 ft of the landfill as noted on the monitoring plan.
 - (2) outside the landfill in the monitor wells which have screen intervals above the water table (SP-2, SP-4, SP-5, SP-7, SP-8, SP-9, SP-10, SP-11, SP-21, SP-22, SP-23). Upon installation of PGP's 1-17, gas monitoring of these monitoring wells shall cease.
 - (3) outside the landfill in the perimeter gas piezometers (PGP-1 through PGP-17), upon installation.
3. Perimeter Gas Piezometers (PGP-1 through PGP-17) shall be maintained to ensure that the piezometers design features allow for landfill gas monitoring to be performed for the requirements in *CSWMC Landfill Gas Migration Monitoring Plan*, dated September 2008.

F. Monitoring of the Area A/B Leachate Treatment System

1. Monitoring of the Area A/B Leachate Treatment System shall be completed in accordance with the *Leachate Treatment Utilizing Wetlands and a Phyto-Cap - Monitoring Plan*.
2. Any reduction in monitoring frequency referenced in the Monitoring Plan will require Department approval.

G. Analytical Procedures

All leachate, leak detection system liquid, groundwater and surface water analysis required by this permit shall be done in accordance with the most current legal edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication Number SW-846, or other tests approved in writing by the Department. All samples shall be taken using quality assurance and quality control procedures that ensure samples are representative of actual field conditions.

V. REPORTING

A. Financial Assurance

No later than December 31st of each year, the DSWA shall submit their financial statements for the most recently completed fiscal year along with an updated and reasonably accurate cost estimate of closure and post-closure care for the CSWMC. Cost estimates shall be adjusted for inflation except for new cost estimates not previously made. DSWA shall provide a detailed listing of all projected costs used to estimate the closure and post-closure care costs for the CSWMC. DSWA shall provide the document in one paper copy plus one copy on electronic storage media acceptable to the Department.

B. Annual Report

No later than April 30th of each year, the DSWA shall submit an annual report and include the following information. DSWA shall provide the document in one paper copy (unless otherwise specified below) plus one copy on electronic storage media acceptable to the Department.

1. The weight and types of wastes landfilled, and the weight of asbestos received for off-site disposal.
2. The weights (or volumes) and types of daily and intermediate landfill cover materials.
3. A list of transporters that hauled waste to or from the facility. The list shall include only those transporters with at least one vehicle having a gross vehicle weight of over 26,000 pounds.
4. The weight (or volume) and types of materials salvaged.
5. The estimated remaining landfill capacity.
6. Any deviations from the Operation Plan.
7. All construction or corrective work conducted on the site in accordance with approved plans or to achieve compliance with the DRGSW and this permit.
8. A discussion of landfilling activities during the past year relevant to operation of the leak detection system, the leachate collection system and the gas collection system

including the date of first waste placement in each drainage area or sump area and:

- (1) Modifications to the leachate collection, leak detection, or gas collection systems.
 - (2) Cleanings and inspections (with assessment) of the leachate collection and leak detection system.
9. A combined hydrogeological, gas monitoring, leak detection system monitoring, and leachate collection system monitoring report including the following information:
- a. Gas monitoring data from the past year to include:
 - (1) Gas migration monitoring done in accordance with condition IV.E of this permit.
 - (2) A summary of the facility's compliance with the permit issued pursuant to the *Delaware Regulations Governing the Control of Air Pollution*.
 - b. Tabulation of all data listed below from the past and all preceding years. All data should be submitted on paper and/or magnetic media or a combination of both in a format that is acceptable to the Department. Data submitted shall include:
 - (1) Leachate flow and quality including field parameters.
 - (2) Leak detection system flow and quality including field parameters.
 - (3) Groundwater elevation and quality data including field parameters.
 - (4) Surface water elevation and quality data including field parameters.
 - (5) Rainfall data from the site weather station.
 - c. Graphical presentations (quality versus time plots) of leachate, groundwater, surface water, and leak detection system liquid quality parameters pH, TDS, COD, TOC, chloride, sulfate, ammonia-nitrogen, and iron.
 - d. Graphical presentations (flow rate or volume versus time plots) of leachate collected, leachate recirculated, and leak detection system flows. Rainfall data shall also be plotted on each graph.
 - e. Potentiometric maps for each aquifer for each quarter for the past year.
 - f. A discussion of any problems encountered during field work, any deviations from the sampling procedures and of any problems with QA/QC procedures. Copies of field notes, laboratory data sheets, and chain-of-custody forms shall be maintained by the DSWA and made available to the DNREC within a reasonable time upon request.
 - g. A discussion of the ground and surface water monitoring results, including whether the results indicate a contaminant release from the landfill to groundwater or surface water.

- h. A discussion of the leak detection system monitoring results, including whether the results indicate that the liner is performing within design specifications.
- i. A discussion of the leachate collection system monitoring results, including whether the results indicate that the system is performing within design specifications.
- j. Recommendations for future monitoring and for maintenance or modifications needed in the monitor wells, groundwater control collection system, gas collection system and/or the leachate collection system.

C. Additional Reports

- 1. The results of groundwater, surface water, leak detection system liquid, and leachate samples analyzed per Section IV of this permit shall be submitted to the Department within sixty (60) days of the sampling date except for the monthly leachate monitoring (permit condition IV.D.6), which shall be provided quarterly. Electronic files on magnetic media containing the results of all required analysis for groundwater, leachate, secondary detection systems, and surface water shall accompany this submittal. The electronic files will be in a format amenable for use by both DSWA and the Department.
- 2. The results of the potentiometric head elevations and the maps prepared for each aquifer per Section IV. of this permit shall be submitted to the Department within sixty (60) days of the date of sampling.
- 3. Year-to-date weekly flow measurements for the leak detection and leachate collection systems and rainfall data shall be submitted to the Department quarterly along with the results of the quarterly ground and surface water analyses.
- 4. A project specific annual monitoring report for Area A/B Leachate Treatment Utilizing Wetlands and A Landfill Phyto-Cap shall be submitted to the Department. This report shall contain summary and analysis of all monitoring data required in the Manual, Monitoring Plan, the Major Permit Modification Application package and data required in this permit which relates to this project. The effectiveness of all areas (i.e. soil cover, leachate treatment, etc.) of the project shall be evaluated using the Monitoring Plan. Conclusions shall be drawn regarding the effectiveness of the project, and recommendations on how to improve upon the current treatment system shall be made if deemed necessary. In addition, data from leachate, effluent, and soil sampling that is collected throughout the year shall be made available to the Department upon request. Whenever possible, submittals shall be in electronic format on magnetic media. The electronic files will be in a format amenable for use by both DSWA and the Department.
 - a. Tabulation of monitoring data.

- b. The volume of leachate treated.
 - c. The volume of effluent spray irrigated.
 - d. A discussion of vegetative crop growth and removal for the Landfill Phyto-Cap.
 - e. Project specific weather data versus irrigation events with graphical presentations of irrigation flow rate or volume versus precipitation, and irrigation flow rate or volume versus wind velocity.
 - f. A discussion of irrigation system manual or automated shut down events. Information should include date, time, the reason for shut down, and any corrective action taken. Automated shut down events may be non-specific due to the system limitation and may require operator interpretation whenever possible.
 - g. System construction or corrective work during the year.
 - h. Deviations from Manual or facility Operations Plan.
 - i. Other applicable data as required.
5. The DSWA shall inform the Department in writing if it is unable to comply with any of the reporting requirements.
 6. Upon discovery, the DSWA shall report to the Department any intentional or accidental deviation from any approved plan.

D. Emergency Reporting

1. The DSWA shall notify the Department immediately in the event of the following emergencies. If any of these emergencies occur during business hours, DSWA should report to the Department's Solid and Hazardous Management Branch by telephone to 302.739.9403. At all other times report the emergency to the Division of Air and Waste Management's TOLL-FREE 24-HOUR LINE 1.800.662.8802.
 - a. Fire (including receipt of hot loads) or explosion involving the landfill or its control systems.
 - b. Receipt of prohibited waste in the cell.
 - c. Leachate spills exceeding ten gallons.
 - d. Gas levels of 25% LEL or greater detected at the facility boundary or within any structures (as required by Condition IV.E of this permit).
 - e. Damage to the landfill liner system.
 - f. Landfill leachate found to be contaminating surface water.
 - g. Any discharge of leachate or treated effluent in violation of Condition III.V. of this permit.
2. The DSWA shall submit a written notification to the Department within five business days following any event requiring "Emergency Reporting". The notification shall include the following:
 - a. Date and time of occurrence/discovery.

- b. Date and time of reporting.
- c. Agencies notified.
- d. Materials and quantities involved.
- e. Narrative describing how the incident occurred and the actions taken by the DSWA and other response personnel.
- f. Report of injuries/damage.
- g. Proposal for follow-up or remedial actions required and schedule.

E. Assessment of Corrective Measures

1. DSWA shall notify DNREC within seven (7) days after verified analytical data has confirmed that a release has taken place. Confirmation samples shall be collected from the appropriate monitoring points within 14 days of receipt of written approval by the Department. These samples shall be analyzed under a priority schedule for the indicator parameters and DNREC Table 1 analytes (Table 1 listed in Section 5.7.3.2 of the DRGSW) and any other parameters deemed appropriate by DSWA and DNREC. DSWA shall notify DNREC of the results of the confirmation sampling within seven (7) days of receipt of the results.
2. If confirmation sampling does not indicate that a release has taken place, another round of sampling shall take place to determine whether the results of analysis from the first or second sampling events were anomalous. This re-sampling sampling event shall take place within two (2) weeks of DSWA sending written notification to the Department of their intent to re-sample. The samples shall be analyzed under a priority schedule. DSWA shall notify DNREC of the results of the re-sampling within seven (7) days of receipt of the results.
3. If the re-sampling indicates that no release has taken place, no further action shall be taken by the Department, and monitoring of the sampling location(s) shall be returned to its/their normal monitoring schedule. If the confirmation or re-sampling round of sampling does indicate that a release has taken place, DSWA shall perform an assessment of corrective measures within ninety (90) days of confirmation of the release. This assessment shall include:
 - a. Identification of the nature and extent of the release (which may require construction and sampling of additional wells, geophysical surveys or other measures).
 - b. Re-assessment of contaminant fate and potential contaminant receptors (wells and/or receiving streams).
 - c. Evaluation of feasible corrective measures to:
 - (1) Prevent exposure to potentially harmful levels of contaminants (exceeding performance standards).
 - (2) Reduce, minimize or prevent further contaminant releases.

- (3) Reduce, minimize or prevent the off-site migration of contaminants.

VI. RECORDKEEPING

A. General Recording and Maintenance

The following information must be recorded and maintained by the DSWA until the end of the post-closure period. This information must be available for inspection, with reasonable notice, by representatives of the Department:

1. Monitoring, testing, and analytical data required by this permit and the DRGSW.
2. Copies of field notes, laboratory data sheets and chain of custody forms for each sample analyzed.
3. The quantity and type of wastes received quarterly.
4. Locations of monofilled wastes.

B. On-site records

The following information shall be kept on-site or made available to the Department within a reasonable period of time after being requested by the Department:

1. Records of odor, dust, and litter complaints received by the facility manager concerning the landfill during the last 3 years.
2. Records that document that required training has been provided to all staff.
3. Records of DSWA's periodic inspections of the facility during the last three years to include inspections of the leachate and gas systems, leachate seeps, landfill gas migration, and the salvaging stockpile areas.
4. A record of the transporters (company name, address, and telephone number) hauling wastes to and from the facility. Records shall include only those transporters with at least one vehicle having a gross vehicle weight of over 26,000 pounds. DSWA shall retain these records for a period of three years.
5. Records that document the operation, maintenance, and monitoring of the Area A/B Leachate Treatment System. Records shall include; field monitoring logs, system component inspections, and other data collected in accordance with the Manual and the Monitoring Plan. DSWA shall retain these records for the duration of the project.

C. Department Approvals for Alternate Covers

Department approvals for alternate covers (daily and intermediate) shall be incorporated

into the Operations Plan at least two days prior to the cover material first arriving at the facility. Incorporation shall be accomplished by inserting approvals into Appendix B of the Operations Plan. Approvals which have been replaced or which have expired are invalid and shall be removed from Appendix B no later than close of business on the date of expiration, or receipt of the revised Approval.

VII. LANDFILL CAPPING SYSTEM

A. Capping Requirements

1. Upon closure of the landfill or landfill cell, a capping system shall be installed that will control emissions of gas, promote vegetative cover, and minimize infiltration and percolation of water into, and prevent erosion of, the waste throughout the post-closure care period.
2. The capping system shall be designed in accordance with the DRGSW.
3. All components of the cap, including the gas control system, shall be constructed in accordance with a Construction Quality Assurance Plan, Closure Plan, and Closure Schedule approved by the Department. A Certification Final Report shall be completed by a third party CQA Consultant and submitted for Department review within 60 days after the landfill or subcell has been completed.
4. In order to enhance controls for odors and reduce leachate generation, DSWA may install landfill cap in phases as part of their Cap-As-You-Go Program on portions of Areas D, E, and F as long as the work does not interfere with landfill operations or control systems and the Department has approved the design and construction quality control measures. In order for the permittee to use Cap-As-You-Go caps for final closure, at the time of landfill closure, DSWA will need to demonstrate that these portions of the landfill were installed in accordance with the DRGSW and were protected from damage between installation and time of landfill closure. This must include the DSWA's documentation in the final report required by Section 5.10.4.7 of the DRGSW certifying the proper construction and the protection of the Cap-As-You-Go portions of the cap.

B. Final Slopes

1. The grades of the final slope shall be constructed in accordance with the following minimum standards:
 - a. The final grades of the top slope, after allowing for settlement and subsidence, shall be designed to promote run-off.
 - b. The final grades of the side slopes shall be a maximum three horizontal to one vertical (3:1).

2. The top and side slopes shall be maintained to prevent erosion of the capping system, and to ensure complete vegetative cover.

VIII. CLOSURE AND POST-CLOSURE CARE

A. Closure in Accordance with the DRGSW

The DSWA shall close the completed landfill or landfill cells in accordance with the DRGSW.

B. Notification

Notification of intent to close the landfill shall be submitted to the Department at least 180 days prior to projected date when waste will no longer be accepted in the landfill.

C. Post-closure Care

Post-closure care shall be in accordance with the DRGSW. Post-closure care shall be in accordance with the post-closure care permit and the approved post-closure care plan approved by the Department.

D. Post-closure Land Use

The DSWA shall implement the post-closure land use plan approved by the Department.

E. Deed Notice

The DSWA shall record an environmental covenant, per Delaware Code Title 7, Chapter 79, Subchapter II, with the deed of the facility property that will in perpetuity notify a potential purchaser of the property the land has been used as a solid waste disposal site and the use of the land is restricted under the DRGSW

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Attachments: Table 1 Groundwater Supplemental Parameters
Table 2 Leachate Supplemental Parameters

Table 1. Ground Water Supplemental Parameters

1) Antimony	32) trans-1,4-Dichloro-2-butene
2) Arsenic	33) 1,1-Dichloroethane; Ethylidene chloride
3) Barium	34) 1,2-Dichloroethane; Ethylene dichloride
4) Beryllium	35) 1,1-Dichloroethylene; 1,1-Dichloroethene
5) Cadmium	36) cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene
6) Chromium	37) trans-1,2-Dichloroethylene
7) Cobalt	38) 1,2-Dichloropropane
8) Copper	39) cis-1,3-Dichloropropene
9) Lead	40) trans-1,3-Dichloropropene
10) Nickel	41) Ethylbenzene
11) Selenium	42) 2-Hexanone; Methyl butyl ketone
12) Silver	43) Methyl bromide; Bromomethane
13) Thallium	44) Methyl chloride; Chloromethane
14) Vanadium	45) Methylene bromide; Dibromomethane
15) Zinc	46) Methylene chloride; Dichloromethane
16) Acetone	47) Methyl ethyl ketone; MEK
17) Acrylonitrile	48) Methyl iodide; Iodomethane
18) Benzene	49) 4-Methyl-2-pentanone; Methyl isobutyl ketone
19) Bromochloromethane	50) Styrene
20) Bromodichloromethane	51) 1,1,1,2-Tetrachloroethane
21) Bromoform; Tribromomethane	52) 1,1,2,2-Tetrachloroethane
22) Carbon disulfide	53) Tetrachloroethylene; Tetrachloroethene
23) Carbon tetrachloride	54) Toluene
24) Chlorobenzene	55) 1,1,1-Trichloroethane; Methylchloroform
25) Chloroethane; Ethyl chloride	56) 1,1,2-Trichloroethane
26) Chloroform; Trichloromethane	57) Trichloroethylene
27) Dibromochloromethane; Chlorodibromomethane	58) Trichlorofluoromethane; CFC-11
28) 1,2-Dibromo-3-chloropropane; DBCP	59) 1,2,3-Trichloropropane
29) 1,2-Dibromoethane; Ethylene dibromide; EDB	60) Vinyl acetate
30) o-Dichlorobenzene; 1,2-Dichlorobenzene	61) Vinyl chloride
31) p-Dichlorobenzene; 1,4-Dichlorobenzene	62) Xylenes

TABLE 2. Leachate Supplemental Parameters

1) Antimony	59) Methyl chloride (Chloromethane)	117) 3/4 Methylphenol (m/p-Cresol)
2) Arsenic	60) Methylene chloride (Dichloromethane)	118) 4-Chloro-3-methylphenol
3) Barium	61) Methyl iodide (Iodomethane)	119) 2-Naphthylamine
4) Beryllium	62) 4-methyl-2-pentanone	120) N-Nitrosodi-n-propylamine
5) Cadmium	63) Styrene	121) N-Nitrosodimethylamine
6) Chromium (Total)	64) 1,1,2,2-Tetrachloroethane	122) N-Nitrosodiphenylamine
7) Cobalt	65) 1,1,1,2-Tetrachloroethane	123) Naphthalene
8) Copper	66) Tetrachloroethene	124) Nitrobenzene
9) Lead, Total	67) Tetrahydrofuran	125) Benzo (b) fluoranthene
10) Magnesium	68) Toluene	126) 2-Nitrophenol
11) Mercury	69) 1,1,1-Trichloroethane	127) 4-Nitrophenol
12) Molybdenum	70) 1,1,2-Trichloroethane	128) Pentachlorophenol
13) Nickel	71) Trichloroethene	129) Phenanthrene
14) Silver	72) Trichlorofluoromethane	130) Phenol
15) Selenium	73) 1,2,3-Trichloropropane	131) Pyrene
16) Thallium	74) Vinyl Acetate	132) Pyridine
17) Tin	75) Vinyl chloride	133) 1,2,4-Trichlorobenzene
18) Vanadium	76) Tot. Xylenes	134) 2,4,6-Trichlorophenol (2,4,6 T)
19) Zinc	77) 3,3'-Dichlorobenzidene	135) Acrolein
20) Cyanide (Total)	78) 1,2-Diphenylhydrazine	136) o,p'-DDD
21) Sulfides	79) Acenaphthene	137) p,p'-DDD
22) Phenols (Total)	80) Anthracene	138) 4,4'-DDE
23) Acetone	81) Benzidine	139) 4,4'-DDT
24) Acetophenone	82) Benzo (a) anthracene	140) 2,4,5-T
25) Acrylonitrile	83) Benzo (a) pyrene	141) 2,4,5-TP (Silvex)
26) Benzene	84) Benzo (g,h,i) perylene	142) 2,4-D
27) Benzyl Alcohol	85) Benzo (k) fluoranthene	143) Aldrin
28) Bromochloromethane	86) 4-Bromophenyl phenyl ether	144) alpha-BHC
29) Bromoform	87) Butylbenzyl Phthalate	145) delta BHC
30) Bromomethane	88) Ideno (1,2,3-cd) pyrene	146) beta-BHC
31) Dibromochloromethane	89) Bis (2-chloroethoxy) methane	147) gamma BHC (Lindane)
32) Dichlorobromomethane	90) Bis (2-chloroethyl) ether	148) alpha Endosulfan
33) 2-Butanone	91) Bis (2-chloroisopropyl) ether	149) beta Endosulfan
34) Carbon disulfide	92) 2-Chloronaphthalene	150) Endosulfan Sulfate
35) Carbon tetrachloride	93) 2-Chlorophenol	151) 2,4,5 Trichlorophenol
36) Chlorobenzene	94) 4-Chlorophenyl Phenyl Ether	152) Chlordane
37) Chloroethane	95) Chrysene	153) Dieldrin
38) Chloroform	96) Di-n-Butylphthalate	154) Dimethoate
39) 1,2-Dibromo-3-chloropropane	97) Di-n-octyl Phthalate	155) Heptachlor
40) 1,2-Dibromoethane	98) Dibenz (a,h) anthracene	156) Heptachlor epoxide
41) 1,2-Dichlorobenzene (ortho)	99) 2,4-Dichlorophenol	157) Endrin
42) 1,3-Dichlorobenzene (meta)	100) Diethylphthalate	158) Endrin Aldehyde
43) 1,4-Dichlorobenzene (para)	101) 2,4-Dimethylphenol	159) Methoxychlor
44) trans-1,4-Dichloro-2-butene	102) Dimethylphthalate	160) PCB-1016
45) 1,1-Dichloroethane	103) 2-Methyl-4,6-Dinitrophenol	161) PCB-1221
46) 1,2-Dichloroethane	104) 2,4-Dinitrophenol	162) PCB-1232
47) 1,1-Dichloroethene	105) 2,4-Dinitrotoluene	163) PCB-1242
48) 1,2-Dichloroethene	106) 2,6-Dinitrotoluene	164) PCB-1248
49) cis-1,2-Dichloroethene	107) Bis(2-ethylhexyl)phthalate	165) PCB-1254
50) trans-1,2-Dichloroethene	108) Fluoranthene	166) PCB-1260
51) 1,2-Dichloropropane	109) Fluorene	167) Toxaphene
52) 1,3-Dichloropropane	110) Hexachlorobenzene	168) 2-Chloroethyl vinyl ether
53) cis-1,3-Dichloropropene	111) Hexachlorobutadiene	169) 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
54) trans-1,3-Dichloropropene	112) Hexachlorocyclopentadiene	
55) Diethyl Ether	113) Hexachloroethane	
56) Ethylbenzene	114) Isophorone	
57) 2-Hexanone (Methyl butyl ketone)	115) 2-Methylnaphthalene	
58) Methylene bromide (Dibromomethane)	116) 2-Methylphenol (o-Cresol)	

Permit SW-10/01

Modification Synopsis

March 31, 2010: Permit SW-10/01 was issued for the construction, operation and monitoring of Area F. This new permit includes; a ban on Yard Waste accepted for disposal at the landfill (permit condition I.D.6.), updated criteria for the final report submitted for landfill construction (permit condition II.C.), revised stormwater management requirements (permit condition III.N.), and other minor revisions the operation, monitoring, maintenance, and recordkeeping of the landfill. Permit SW-10/01 applies to Area F and the previously permitted landfill areas A, B, C, D, and E.