STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF WASTE AND HAZARDOUS SUBSTANCES
SOLID AND HAZARDOUS WASTE MANAGEMENT SECTION

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DOVER, DELAWARE 19901

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September 11, 2013

Ms Robin Roddy
Senior Facility Manager
Delaware Solid Waste Authority
1128 S. Bradford Street
P.O. Box 455
Dover, Delaware 19903-0455

Subject: Modification of the Cherry Island Landfill Permit
Reference: Solid Waste Facility Permit SW-06/01, File Code 02-B

Dear Ms Roddy:

I have attached a copy of permit SW-06/01 which we have modified in accordance with Secretary's Order 2013-WH-0034. If you have any questions concerning this letter or the permit, please contact Robert Hartman or me at 739-9403.

Sincerely,

Nancy C. Marker
Environmental Program Administrator
Solid & Hazardous Waste Management Section

RH13020

Enclosure

cc: Mark Lyon, Environmental Compliance Specialist, SHWMS (electronic copy only)
Frank Gavas, Hydrologist, SHWMS (electronic copy only)
Ting Guo, Engineer, SHWMS (electronic copy only)
Daniel Fluman, DSWA (electronic copy only)

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DOVER, DELAWARE 19901

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Permit SW-06/01
Permit Type: Sanitary Landfill

Effective Date:	January 6, 2006
Last Revised:	September 11, 2013
Expiration Date:	January 6, 2016
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*, Delaware Solid Waste Authority (DSWA) is hereby granted approval to operate the Cherry Island Landfill (CIL) located at the Northern Solid Waste Management Center-2 (NSWMC-2), Cherry Island, Wilmington, Delaware, subject to the terms and conditions of this permit. All terms and conditions of this permit are enforceable by the Department of Natural Resources and Environmental Control (Department).

Scanned

Robert Hartman
Environmental Scientist IV
Solid & Hazardous Waste Management Section
(302) 739-9403

9/11/13
Date

Scanned

Nancy C. Marker
Environmental Program Administrator
Solid & Hazardous Waste Management Section
(302) 739-9403

9/11/13
Date

Delaware's good nature depends on you!

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I. GENERAL CONDITIONS:

A. Pursuant to Sections 4.A and 5 of the Delaware *Regulations Governing Solid Waste* (DRGSW), the Department of Natural Resources and Environmental Control (Department) hereby issues Permit SW-06/01 to the Delaware Solid Waste Authority (DSWA), 1128 S. Bradford Street, Dover, DE 19901 for the continued operation of the Cherry Island Landfill (CIL) located at the Northern Solid Waste Management Center-2 (NSWMC-2), Cherry Island, Wilmington, Delaware. This permit incorporates the requirements of, and replaces permit SW-01/01.

B. This permit applies to:

1. Operation and maintenance of NSWMC-2, including Phases I through Va.
2. Environmental and geotechnical monitoring, recordkeeping, and reporting for the NSWMC-2.
3. Disposal requirements for asbestos containing materials in Phase IA.
4. Cherry Island Landfill Expansion Project to stabilize Phase III, IV and V using a mechanically stabilized earthen (MSE) berm.
5. Solid waste management, including waste diversion and recycling.

C. This permit was issued in accordance with the following documents:

1. Secretary's Order No. 2006-A-0002, issued by the Department on January 6, 2006.
2. DSWA letter, *Major Modification Request for the Cherry Island Landfill…*, dated June 15, 2004 and supplemental information provided by the DSWA as follows:
   a. *Responses to Comments to Permit Application Cherry Island Landfill Expansion Project, Wilmington, Delaware*, dated May 12, 2005.
   b. *Responses (Addendum) to Comments to Permit Application Cherry Island Landfill Expansion Project, Wilmington, Delaware*, dated June 20, 2005.
3. Other plans, letters, procedures, and policy specifically referenced in this permit.
4. Secretary's Order No. 2004-A-0051, issued by the Department on October 21, 2004.
5. *Permit Modification Application for Temporary Exposed Geomembrane Cover* dated May 2004 and revised November 10, 2004 in accordance with Secretary's Order No. 2004-A-0051.

D. This permit is issued subject to the following general conditions:

1. Operations at NSWMC-2 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,* Delaware *Surface Water Quality Standards*, and Delaware air quality regulations.

2. Access to NSWMC-2 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 NSWMC-2 to verify compliance with the permit and DRGSW.

3. This Permit may be revoked upon violation of any condition of the permit or any requirement of DRGSW after notice and opportunity for hearing in accordance with 7 Del. C., Chapter 60.

4. A copy of the most current version of this permit shall be maintained in the scale houses and the on-site administrative office of NSWMC-2.

5. Permit SW-06/01 shall expire no later than January 6, 2016.

6. Solid Waste Management Plan responsibilities:

   a. Outreach: Within 3 months of issuance of this permit, DSWA shall establish a Citizens Advisory Board (CAB) composed of residents who live near (preferably within 5 miles) the NSWMC-2.

      (1) Members of the CAB shall be selected by (a) the Senator representing the district adjacent to NSWMC-2 (currently Senatorial District #2); (b) the Representative representing the district adjacent to the NSWMC-2 (currently Representative District #2); (c) Wilmington City Council; (d) Wilmington Mayor's Office; (e) New Castle County Executive; (f) New Castle County Council Chair; and (g) the Governor of Delaware.

      (2) The Department and DSWA shall provide a regular "ex-officio" (i.e. non-voting) member.

      (3) DSWA shall meet with this board at least quarterly, prepare meeting minutes and post the minutes on the DSWA web site, and present the issues discussed at these meetings to the DSWA Board of Directors for their consideration.

      (4) Annually, the DSWA Chief Executive Officer or Chief Operating Officer shall present to the CAB an overview of the status of solid waste management in Delaware and the status of NSWMC-2 operations.

      (5) The CAB will establish and abide by a charter for providing advice to DSWA and related state agencies and private sector companies on issues related to the operation of the NSWMC-2, minimizing impacts resulting from landfill operations and capacity, the role of NSWMC-2 in the overall state-wide Solid Waste Management Plan, and recycling and resource recovery options.

b. Yard waste diversion: DSWA shall ban disposal of all yard waste from the NSWMC-2 effective no later than January 1, 2007. The NSWMC-2 yard waste ban shall be advertised in a manner to effectively educate the public and waste haulers, using technical support from academic extension and composting experts, regarding the ban's effective date and alternatives for yard waste management. To the extent no private sector alternatives for the sustainable management of the banned yard waste becomes available, DSWA will provide for a yard waste composting and mulching facility(ies) and operation(s) capable of managing diverted yard waste to that extent. If it is necessary for the DSWA to manage any yard waste generated as a result of the ban, the DSWA shall determine and implement a competitive tipping fee for the management of this material. The tipping fee shall be set at a rate to encourage recycling and discourage disposal, and not compete with private sector alternatives. "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.

c. Removal of household hazardous waste (HHW) from the waste steam: Beginning immediately, DSWA shall provide at least quarterly HHW collection events in New Castle County. The DSWA will coordinate these events to ensure they are done safely, in compliance with applicable regulatory requirements, and with a frequency and user-friendliness that maximizes the amount of HHW collected.

d. Pine Tree Corners Transfer Station Waste: Within 6 months of issuance of this permit, wastes collected at the Pine Tree Corners Transfer Station (PTCTS) shall not be delivered to the NSWMC-2 for disposal, and DSWA shall not accept solid wastes from PTCTS for disposal at the NSWMC-2 after this date.

e. DSWA shall provide funding to the Department for hiring and retaining an Environmental Compliance Specialist for inspecting operations at the NSWMC-2. The DSWA shall reimburse the Department for these costs within 30 days of the date of each itemized statement submitted by the Department.

II. OPERATIONS:

A. Operations at NSWMC-2 shall be conducted in accordance with this permit and the *Cherry Island Landfill Plan of Operations,* dated January 2005 (the Operations Plan). Operations shall be conducted in a manner protective of human health and the environment.

B. DSWA shall operate the NSWMC-2 in a manner that will protect the landfill liner system, the gas extraction system, the leachate collection and disposal system, the geotechnical installations, and the exposed temporary geomembrane cover. The DSWA shall take special precautions while placing the first lift of waste over areas lined with membrane liner to ensure that the liner is not damaged by operations or by waste placement.

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 this permit.

D. Equipment necessary to ensure the operations of the landfill in accordance with the Operations Plan and the requirements of DRGSW shall be maintained at the site by DSWA. All NSWMC-2 pump stations shall include one main pump and one back-up pump. DSWA shall rely on the capacity of the landfill collection system for the short-term power outages. For long-term power outages, DSWA shall use portable generators. Permitting of these generators shall be in accordance with the Delaware air quality regulations.

E. Landfilling Plan:

1. DSWA shall fill and grade the landfill in accordance with the *Permit Drawings For Landfill Expansion* dated April 2003 and revised May 2005, by GeoSyntec Consultants, Project MEO250, including drawing 78 of 89 (*Landfill Final Development and Grading Plan,* June 2004) which limits the maximum elevation of the landfill to no higher than 195 feet msl. DSWA shall incorporate the grading required for the installation of the temporary exposed geomembrane in accordance with the *Proposed Grading Plan (Phases III – V)*, File No. 0250F1211-2, Figure 2 of the *Permit Modification Application for Temporary Exposed Geomembrane Cover* dated May 2004, by GeoSyntec Consultants Project ME0250.

2. Reserved.

3. DSWA may allow the placement of dredge spoils by the U.S. Army Corps of Engineers over existing intermediate cover in expanded Wilmington North Spoils Basin on toe of slopes of Phase I, II, and V (reference DSWA letter dated August 19, 2003). The DSWA shall not allow placement of dredge spoils above elevation 67 feet msl in this area.

F. Stormwater Management, Erosion and Sediment Control. DSWA shall provide for stormwater management, erosion and sediment control at the facility to include those controls cited in the Operations Plan (including Appendix E, *Stormwater/Surface Water Monitoring Plan…*) and the *Erosion and Sediment Control Plan for Cherry Island Landfill Expansion Project* (prepared by GeoSyntec Consultants and dated May 2005). DSWA shall implement the following minimum controls:

1. DSWA shall take all necessary steps to identify and prevent the discharge of pollutants from the waste and cover into surface water, particularly the Delaware and Christina Rivers, and the DSWA shall initiate corrective actions to confirm, quantify and remediate such discharges. DSWA shall inspect for leachate seeps at least once each operating day and take all practical steps to prevent leachate from contaminating surface water. 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 stormwater discharging from the lined area of the landfill, DSWA shall report this in accordance with Section IV.D.1 of this permit and shall initiate immediate corrective measures to stop the contamination and to manage the contaminated stormwater as landfill wastewater. Until 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 III.A.4 of this permit.

2. DSWA shall maintain a surface water management system on the landfill to prevent erosion of the waste and cover, prevent the collection of standing water, prevent run-off from the waste and minimize run-on into the waste. Run-off from active landfill areas where waste is exposed shall be directed to the leachate collection system.

3. DSWA shall properly operate, manage, and maintain all devices, structures and ponds designed to monitor or manage stormwater.

4. The stormwater conveyance and discharge system (SCDS) shall be kept free of leachate (including condensate from the gas collection system), debris, waste, and sediment buildup. DSWA shall inspect the SCDS at a minimum frequency of once per month, and immediately after severe rainfall (e.g. rainfall capable of destroying SCDS components or causing significant erosion or sediment run-off). SCDS Inspection/Maintenance forms shall be completed for each inspection and included in the facility log. DSWA shall provide for the inspection of the SCDS as well as the correction of problems identified and inspections shall include:

   a. Berms and swales shall be inspected for erosion, sedimentation and debris.
   b. Silt fences shall be inspected for damage, accumulated debris and to ensure that fencing is firmly anchored.
   c. Culverts and pipes shall be inspected for siltation, blockage and debris.
   d. Control structures, including drop inlets 1A, 1B, 2, 3, 4, and 5, shall be inspected for siltation, debris, and damage. Note: Monthly SCDS inspections are required at drop inlets and at outlets from drop inlets once these structures begin to receive stormwater runoff from the landfill.
   e. Outfalls from drop inlets 1A, 1B, 2, 3, 4, and 5. If stormwater is flowing at the time of the inspection, DSWA shall visually inspect that discharge for color, sheen, floating debris and sediment laden stormwater. DSWA shall record their observations from the visual inspection, describing any odor noted as well. Note: Monthly SCDS inspections are required at drop inlets and at outlets from drop inlets once these structures begin to receive stormwater runoff from the landfill.
   f. Stormwater outfall SW6 (on the northwest corner of the site). If stormwater is flowing from this outfall, DSWA shall visually inspect that for color, sheen, floating debris and record any odor as well.

5. DSWA shall maintain automated stormwater monitoring systems designed to measure the flow of stormwater during precipitation events.

6. Additional stormwater management requirements and inspections for the temporary stormwater holding areas at the toe of the MSE berm within the landfill expansion area. DSWA shall monitor and operate these areas as part of the SCDS until waste placement and leachate generation commence in each area. While these stormwater holding areas are being used as part of the SCDS, DSWA shall take all practical steps to prevent sediment laden stormwater from discharging from these areas. If sediment-laden stormwater is observed reaching the Delaware or Christina Rivers from the outfalls from these areas, DSWA shall implement additional sediment controls such as increased settling times, additional filtration, or flocculants. Inspections in these areas shall include:

   a. Toe drains (if visible) LP1, LP2, LP3, LP4, LP5, LP6, and LP-8 as well as any stormwater accumulated at the toe drain. If there is stormwater standing at the toe drain, DSWA shall visually inspect that for color, sheen, floating debris and record any odor.

   b. Outfalls from toe drains LP1, LP2, LP3, LP4, LP5, LP6 and LP8. If stormwater is flowing at the time of the inspection, DSWA shall visually inspect that discharge for color, sheen, floating debris and signs of sediment laden stormwater. DSWA shall record any odor as well.

   c. The pumping pit on the northeast corner of the landfill where stormwater will be accumulated temporarily. DSWA shall inspect any accumulated stormwater prior to pumping it from this area. DSWA shall visually inspect that accumulated stormwater for color, sheen, floating debris and record any odor. If there is any indication that the accumulated stormwater may be contaminated with landfill wastewater, DSWA shall conduct additional testing to determine if it is wastewater, and DSWA shall not release wastewater to surface waters.

   d. While the stormwater holding areas are being used as part of the SCDS, DSWA shall inspect the temporary membrane in-place over protective cover soils along the inside of the MSE Berm to determine if the membrane continues to provide the intended coverage and that erosion of the protective cover soils is not occurring. DSWA shall maintain these temporary membranes for as long as they are needed to prevent the erosion of protective cover soils in order to preclude sediment laden stormwater from discharging to the Delaware or Christina Rivers.

7. If field instruments are used during SCDS monitoring or inspecting, DSWA shall ensure that these instruments are maintained, calibrated and utilized in accordance with manufacturer's instructions.

G. Acceptable Wastes. NSWMC-2 is permitted to accept the following wastes for disposal at the facility in accordance with 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*, Revised 10/27/05.
3. Only Phase IA is permitted to accept asbestos containing wastes for disposal. Asbestos containing wastes shall be managed in accordance with the "Asbestos Policy revised April 15, 2002, and in accordance with the *Delaware Regulations Governing the Control of Air Pollution.* Asbestos containing wastes from DSWA's Central Solid Waste Management Center (CSWMC) and Southern Solid Waste Management Center (SSWMC) are permitted to be disposed in Phase IA of NSWMC-2.

H. Prohibited wastes: 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. Regulated hazardous waste.
2. Infectious waste (Regulated medical 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

I. Waste inspection of all incoming loads as well as random waste screening shall be in accordance with the *Delaware Solid Waste Authority Solid Waste Screening Program*, dated September 19, 1997 and the Operations Plan. All landfill personnel responsible for waste inspection, including weigh masters, heavy equipment operators, and inspector/spotters, shall comply with these procedures.

J. Scavenging on the landfill is prohibited.

K. Salvaging operations. Salvaging shall be conducted in accordance with the Operations Plan in a manner protective of human health and the environment and shall not interfere with the proper disposal of wastes at the facility. Conditions for salvaging operations include:

1. C&D Salvaging: Construction and demolition (C&D) debris consists of the materials generated during the construction, renovation, and demolition of buildings, roads and bridges. Acceptable C&D debris includes that portion of the C&D waste stream that is acceptable for the process where it is to be beneficially used.
   a. The DSWA shall maintain adequate fire prevention measures for the C&D stockpile area.

b. The DSWA shall take adequate measures to prevent the migration of wind-blown wastes from the C&D stockpile and shall remove litter and windblown trash from the salvaging area daily.
c. Loads of acceptable C&D debris that are free from unacceptable materials may be diverted to the C&D stockpile. Prior to sending loads to the C&D stockpile, DSWA shall exercise reasonable care to ascertain whether the C&D materials are acceptable.
d. The DSWA shall inspect all loads delivered to the C&D stockpile and shall reject or remove and properly dispose of unacceptable materials. Unacceptable materials, for the purpose of this permit, include: the contents of buildings, appliances, asbestos, liquids, garbage, municipal solid waste, batteries, mercury switches, lighting ballasts, loose paper, gas cylinders, mercury lamps, infectious waste, special waste, radioactive waste, explosives, and all hazardous waste. Unacceptable materials also include those materials specifically deemed by the processor or user as unacceptable.
e. DSWA shall stage and manage the C&D stockpile as specified in the Operations Plan. DSWA shall manage the size of the C&D stockpile to limit the threat of fire, to enable adequate litter control, to limit visual impact to adjacent residences and to prevent stormwater runoff from the waste.

L. Daily Cover:

1. The DSWA shall place a six-inch layer of suitable material over all solid waste by the end of each working day. The material shall control odors, disease vector breeding, animal attraction, blowing litter, scavenging, and reduce the potential for fires. No solid waste shall remain exposed after the end of an operating day.

2. DSWA shall ensure that the daily cover layer which remains in place under waste shall not preclude leachate flow downwards towards the leachate collection system.

3. At least weekly, the DSWA shall inspect exposed daily covers that remain in place for more than two days and shall maintain daily covers as necessary to control odors, disease vector breeding, animal attraction, blowing litter, scavenging and fires. The DSWA shall implement adequate surface water management controls to prevent erosion of the cover and shall maintain cover soils to prevent wastes from being exposed.

4. Tarps may be used as alternate daily cover in accordance with the Operations Plan. DSWA shall ensure that adequate litter controls are used when the tarps are removed from wastes.

5. The DSWA may use alternate daily cover 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, DSWA shall store, use, and maintain alternate daily cover material in accordance with the Operations Plan and conditions specified in the written approval required from the

Department's Solid & Hazardous Waste Management Section. DSWA shall not use an alternative daily cover without the written approval of the Department, and the DSWA shall maintain written approvals of all alternative covers used at the landfill in accordance with condition V.C. of this permit.

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 appropriate 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 storm water management systems or surface waters.

2. DSWA shall ensure that intermediate cover layer which remains in place under waste shall not preclude leachate flow downwards towards the leachate collection system.

3. DSWA shall inspect intermediate covers weekly and shall maintain all intermediate cover as necessary to control odors, disease vector breeding, animal attraction, blowing litter, scavenging and fires. The DSWA shall implement adequate surface water management controls to prevent erosion of the cover and shall maintain cover soils to prevent wastes from being exposed.

4. Tarps:
   a. DSWA may use tarps for alternative intermediate cover as long as they are properly anchored, comply with the requirements of DRGSW, and their use controls odors, disease vector breeding, animal attraction, blowing litter, scavenging, fires, and prevents leachate from entering storm water management systems or surface waters.
   b. In the event that the use of tarps for intermediate cover results in a violation of the permit or DRGSW, the Department may require that DSWA terminate the use of tarps for intermediate cover. DSWA shall, within 30 days of such notification, install standard intermediate cover in those areas.

5. The DSWA may use alternate intermediate covers 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, DSWA shall store, use, and maintain alternate intermediate cover material in accordance with the Operations Plan and conditions specified in the written approval required from the Department's Solid & Hazardous Waste Management Section. DSWA shall not use an alternative intermediate cover without the written approval of the Department's Solid & Hazardous Waste Management Section, and the DSWA shall maintain written approvals of all alternative covers used at the landfill in accordance with condition V.C. of this permit.

N. DSWA shall operate and maintain the gas extraction system, flares, and landfill gas processing and distribution project 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 limit the concentration of landfill gas in facility structures and at the facility boundary in accordance with the requirements of section 5.5.1.3 of the DRGSW and shall report exceedances in accordance with Condition IV.D of this permit. DSWA shall maintain a permit for the operation of the extraction system and the landfill gas processing and distribution project in accordance with the Delaware air quality regulations.

O. DSWA shall operate and maintain the leachate collection and disposal system, including the alarm system in accordance with this permit and the Operations Plan. DSWA shall clean-up all leachate spills immediately or within a time frame approved by the Department on a case-by-case basis.

P. DSWA shall protect, maintain and properly utilize the geotechnical monitoring instruments at the facility.

Q. Dust Control. 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).

1. DSWA shall provide for dust controls at the facility to include dust controls cited in the Operations Plan.

2. DSWA shall operate the landfill to minimize soil/alternate cover material from being tracked onto public roads. DSWA shall inspect facility egress points at least daily to identify if materials are being tracked off-site and to gauge the extent of the problem (e.g. how far is mud/etc being tracked). In the event that soil/alternate cover material is tracked onto public roads, at a minimum, DSWA shall provide for street cleaning of that area on the day the problem is identified.

R. 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 inspect for litter on the facility daily (each operating day) and ensure that litter is picked up quickly and properly disposed.
2. DSWA shall collect any off-site litter attributable to landfill operations.
3. DSWA shall inspect 12th Street (from Hay Road to Northeast Boulevard) and the on/off ramps to/from I-495 at 12th Street daily. DSWA shall remove litter along these roads as frequently as necessary to keep these areas clean. At minimum, DSWA shall remove litter daily (each operating day) from the I-495 on/off ramps, and from along 12th Street from Hay Road to the westernmost on/off ramps. At a minimum, DSWA shall remove litter at least two times per week along 12th Street, from the westernmost on/off ramps to Northeast Boulevard.

S. Health and Safety:

1. The DSWA shall operate in accordance with the Health and Safety Plan (Revision October 25, 2000) attached to the Operations Plan (Appendix J).
2. Employees at the site shall work under appropriate health and safety guidelines established by the Occupational Safety and Health Administration.
3. Use of personal protective equipment shall be in accordance with 29 CFR Part 1910.132 as a minimum.

4. First aid equipment shall be maintained and available in the scale house(s), in the administrative office and in the maintenance building.
5. 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 scale houses and the administrative office.
6. Any confined space entry done by employees or contractors shall be done in accordance with 29 CFR Part 1910.146.

T. Contingency:

1. The DSWA shall provide for fire prevention and controls to include those measures cited in the Operations Plan.
2. The DSWA shall appoint and maintain at least one Emergency Coordinator and at least one alternate Emergency Coordinator at NSWMC-2. The Emergency Coordinator shall be responsible for directing all emergency response measures necessary to protect human health and the environment, and DSWA shall ensure that at least one Emergency Coordinator is available at all times.

U. Training: All personnel (except the secretary) assigned duties at NSWMC-2 shall receive, as a minimum, the training listed below. Unless otherwise specified by a nationally recognized training provider (for example, the American Red Cross as a training provider for First Aid), training shall be required initially and annually thereafter. Initial training for waste screening shall be completed within 60 days of hiring and all other initial training shall be completed within 180 days of hiring:

1. Operational and contingency procedures
2. Waste screening
3. Health and safety procedures
4. Fire prevention and protection
5. Emergency first aid
6. CPR training

V. Temporary Exposed Geomembrane Cover shall be installed and maintained in accordance with *Permit Modification Application for Temporary Exposed Geomembrane Cover* dated May 2004 and revised).

1. The DSWA shall install temporary geomembrane cover in Phases III, IV, and V as shown in the *Permit Modification Application for Temporary Exposed Geomembrane Cover* dated May 2004, Figure 3 (*Exposed Geomembrane Details*, File 0250F1217-2) and Figure 10 (*Exposed Geomembrane Installation Plan*, File 0250F1218-2). Sandbags or other anchoring devices shall be installed and maintained to prevent wind uplift from winds up to 78 mph (60 mph with no landfill gas vacuum applied) while not exceeding allowable strain on the geomembrane (as shown in Task 7 of the *Permit Modification Application for Temporary Exposed Geomembrane Cover* dated May 2004).

2. The temporary geomembrane cover shall be installed and maintained to minimize infiltration of precipitation, minimize soil erosion, and provide effective suppression of fugitive landfill gas emissions. The DSWA shall install the temporary geomembrane cover, landfill gas surface collectors, bird protection and replacement geotechnical instruments in accordance with the *Procedures for Temporary Exposed Geomembrane Cover Installation* described in Section 3.2 and *Implementation Sequence and Schedule* described in Section 3.3 of the *Permit Modification Application for Temporary Exposed Geomembrane Cover* dated May 2004.

3. DSWA shall install and repair the temporary geomembrane cover in accordance with manufacturer's recommendations.

4. DSWA shall inspect the temporary geomembrane cover monthly for mechanical damage, signs of distress, UV damage, and tears or punctures. Within 7 days of discovery, DSWA shall repair damaged geomembrane or replace missing geomembrane.

III. MONITORING:

A. Surface Water Monitoring:

1. The DSWA shall conduct surface water and stormwater monitoring in accordance with the *Monitoring Program for the Northern Solid Waste Management Center at Cherry Island*, Revision 1, dated October 10, 2012 (the CIL Environmental Monitoring Program).

2. Quarterly, during January, April, July, and October surface water elevations shall be obtained from the USGS gauge on the Delaware River, immediately south of the mouth of the Christina River.

3. Reserved.

4. In the event leachate is found to be contaminating surface water discharging from the lined area of the landfill, DSWA shall, as soon as practical, sample that surface water at the point of discharge from the landfill and downstream prior to outfall to the river.

DSWA shall analyze the samples for parameters specified for spills in Attachment B, Table 6 of the CIL Environmental Monitoring Program. DSWA shall also document their visual observations of the waters sampled.

B. Groundwater Monitoring:

1. The DSWA shall maintain and protect all monitoring wells in accordance with the Delaware *Regulations Governing the Construction and Use of Wells.*

2. Installation of new wells and 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. Prior to the initial sampling event, DSWA shall determine the locations and elevations of new groundwater monitoring wells. The location of each well shall be tied into the Delaware State Coordinate Plane and the elevation of each well shall be tied into the National Geodetic Vertical Datum.

4. Groundwater Sampling:

   a. DSWA shall conduct groundwater monitoring, including the quarterly and annual sampling events, in accordance with the CIL Environmental Monitoring Program.

   b. Quarterly, during January, April, July, and October, the DSWA shall measure water elevations in the monitoring wells as specified in Attachment C, Table 1 of the CIL Environmental Monitoring Program. Equi-potential showing maps shall be prepared for each aquifer showing the location of each well, the contoured potentiometric surface and the directions of groundwater flow in each zone. These maps shall include an outline of the site boundaries and each active and closed landfill areas.

   c. Reserved.

   d. Reserved

   e. 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.

   f. Samples shall be collected, prepared, and analyzed in accordance with the CIL Environmental Monitoring Program.

C. Leachate Collection, Treatment, Disposal and Monitoring:

1. The DSWA shall monitor leachate in accordance with the CIL Environmental Monitoring Program.

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

3. Cleaning and Assessment of the system:

   a. DSWA shall ensure that all accessible collection pipes are cleaned at least annually with a self-propelled, high pressure jetting system. 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.

   b. At least once every four years, all accessible leachate collection pipes shall be inspected by camera to assess their condition. This shall include a written assessment of the condition of the leachate collection pipes to include an assessment of clogging of pipe perforations and the location, cause, and effect of blockages encountered. In the event that such an assessment supports the DSWA claim that less frequent cleanings are needed, the DSWA may initiate a request for a permit modification to reduce the cleaning frequency.

4. Reserved.
5. Reserved.

6. DSWA shall maintain all necessary permits and approvals for leachate storage and disposal.

7. The leachate collection system shall be capable of measuring the rate and quantity of leachate flow from the Main Pump Station and North-Central Pump Station on a daily basis, and shall be capable of sampling the leachate from these two pump stations.

8. DSWA shall measure and record the quantity of leachate pumped to the City of Wilmington's wastewater treatment plant (WWTP) on a weekly basis.

9. DSWA shall record the quantities of leachate being transferred from CSWMC and SSWMC to NSWMC-2 for disposal in the City of Wilmington's WWTP.

D. Analytical Procedures: All leachate, groundwater and surface water analysis required by this permit shall be collected, prepared, shipped and analyzed in accordance with the most current legal edition of EPA Publication Number SW 846. If SW 846 does not contain a test method for a required parameter, DSWA shall follow the *Analytical Methodology* specified by the CIL Environmental Monitoring Plan.

E. Landfill Gas Monitoring:

1. The operation, maintenance, and monitoring of the gas extraction system and the landfill gas processing and distribution project shall be done in accordance with the current permit(s) issued pursuant to the Delaware air quality regulations.

2. Gas migration monitoring shall be performed at least quarterly and shall be done in accordance with Cherry Island Landfill, Landfill Gas Migration Monitoring Plan, dated June 13, 2012.

F. Geotechnical Monitoring:

1. DSWA shall conduct a geotechnical monitoring program under the direction of a Professional Engineer registered in the State of Delaware who specializes in geotechnical engineering.

2. DSWA shall carry out the geotechnical monitoring plan in accordance with *Geosyntec Consultants Geotechnical Monitoring Plan for Cherry Island Landfill*, last revised February 2012 (the GMP). DSWA shall monitor the structural integrity and stability of the landfill and MSE berm foundation in accordance with the GMP and shall take all necessary measures to identify and preclude unintended slope movement.

IV. REPORTING:

A. Financial Assurance: No later than December 31st of each year, 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 NSWMC-2. 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 NSWMC-2. DSWA shall provide the document in one paper copy plus one copy by way of electronic media acceptable to the both the DSWA and the Department. The electronic media copy shall be provided as a single electronic document such as a Portable Document Format (.pdf) file.

B. No later than April 30th of each year, DSWA shall submit an Annual CIL Operations Report. The DSWA shall provide this report in one paper copy plus one copy by way of electronic media acceptable to both the DSWA and the Department. The electronic media copy shall be provided as a single electronic document such as a Portable Document Format (.pdf) file. The Annual CIL Operations Report shall include the following information:

1. The weight and types of wastes landfilled.
2. The weights 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 (volume and time), showing calculations used.
6. Any deviations from the Operations Plan.
7. All construction or corrective work conducted on the site in accordance with approved plans or to achieve compliance with DRGSW and this permit.
8. A discussion of landfilling activities during the past year relevant to operation of the leachate collection system, the gas collection system, the exposed geomembrane and including:
   a. Modifications, if any, to the leachate collection, or gas collection systems.
   b. Cleanings and inspections (with assessment) of the leachate collection system.
   c. A drawing showing the location and extent of the surface collectors and exposed geomembrane.
   d. A discussion of the general procedures used for repair of the exposed geomembrane, and identification and discussion of all significant repairs or replacements required during the year.
9. A discussion of the leachate collection system monitoring results, including whether the results indicate that the system is performing within design specifications.

C. Additional Reports:

1. Quarterly Environmental Monitoring Report package. DSWA shall submit the results of the quarterly groundwater monitoring within 60 days of the sampling event. The Quarterly Environmental Monitoring Report package shall be provided on electronic media in a format acceptable to both the DSWA and the Department and shall include:

   a. A single electronic file such as a Portable Document Format (.pdf) file containing:

      (1) The DSWA's cover letter for the report. The cover letter shall include a statement confirming that the accompanying data submittal, the *Historical Environmental Monitoring Database for CIL*, has been provided with no changes to previously submitted data or, in the event that administrative corrections must be made to previously submitted data, the DSWA must document the details of such changes in the cover letter. The DSWA shall also include a table of contents for the *Historical Environmental Monitoring Database for CIL* in the cover letter. The DSWA shall also summarize the results of the gas migration monitoring conducted during the quarter reported, if that summary has not been included in the Quarterly Environmental Monitoring Report.

      (2) The Quarterly Environmental Monitoring Report. The narrative portion of report shall summarize the results of the groundwater, surface water, and stormwater monitoring done at NSWMC-2 during the quarter reported. As part of this report, DSWA shall include drawings showing potentiometric surface elevations and drawings showing sampling locations for all groundwater, surface water, stormwater, leachate, and gas migration

monitoring required by this permit. This report shall also include field data sheets, laboratory reports, and chain of custody forms for the quarter reported as well as a discussion of any problems encountered during fieldwork, any deviations from the sampling procedures and of any problems with QA/QC procedures.

b. The *Historical Environmental Monitoring Database for CIL* which shall contain DSWA's historical environmental monitoring at the NSWMC-2, updated with the quarterly monitoring data for groundwater, surface water, stormwater, gas migration, and leachate and include the following:

(1) Tabulation of the following data from all preceding years, updated with the latest quarterly monitoring results:

(a) Leachate flow and quality including field measurements.
(b) Groundwater elevation and quality data including field measurements.
(c) Surface water elevation, flow rate, and quality data including field measurements.
(d) Storm water flow and quality data including field measurements.

(2) Graphical presentations (quality versus time plots) of leachate, groundwater, stormwater and surface water quality measurements and analytes.

(3) Graphical presentations (flow rate or volume versus time plots) of leachate collected from all preceding years, updated with the latest quarterly monitoring results. Rainfall data shall also be plotted on each graph.
(4) Potentiometric maps for each aquifer for each quarter.
(5) Gas migration monitoring results.
(6) Meteorological data from the on-site weather station, updated through the quarter being reported.

2. Annual Environmental Monitoring Report package. No later than April 30th of each year, DSWA shall submit an Annual Environmental Monitoring report package. DSWA shall provide the Annual Environmental Monitoring Report package in one paper copy and one copy on electronic media. The copy on electronic media shall consist of a single electronic file such as a Portable Document Format (.pdf) file which contains both the DSWA cover letter and the Annual Environmental Monitoring Report. The Annual Environmental Monitoring Report package shall consist of:

a. The DSWA's cover letter for the report.

b. The Annual Environmental Monitoring Report, which shall include:

(1) Discussions of the groundwater, stormwater, surface water, leachate and gas migration monitoring results with reference to the data provided in the *Historical Environmental Monitoring Database for CIL*.

(2) An evaluation of the significance of the results including whether they indicate a contaminant release has occurred and any recommendations for corrective measures, if appropriate.
(3) Recommendations for future monitoring, maintenance and modifications needs for the groundwater monitoring wells, gas migration monitoring system, the surface water/stormwater monitoring systems, and the leachate collection system.

3. Within sixty days of the end of each quarter, the DSWA shall submit a Geotechnical Monitoring Report to the Department. The Geotechnical Monitoring Report shall be provided on electronic media in a format acceptable to both the DSWA and the Department. The Geotechnical Monitoring Report shall be provided as a single electronic file document such as a single Portable Document Format (.pdf) file and contain both the DSWA's cover letter and the full monitoring report. The Geotechnical Monitoring Report shall also include a discussion of any in-situ shear strength assessments completed or determinations made regarding updating shear strength parameters during the quarter reported (Reference Section 3.5 of the GMP).
4. If DSWA is unable to comply with any of the reporting requirements listed within the permit, DSWA must provide written notice and justification to the Department two weeks prior to the reporting deadline.
5. Upon discovery, 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:

   a. Fire or explosion involving the landfill or its control systems.
   b. Receipt of prohibited waste at any CIL disposal area.
   c. Leachate spills exceeding ten gallons.
   d. Gas levels exceeding the limits established by section 5.5.1.3 of the DRGSW.
   e. Damage to the landfill liner system.
   f. Landfill leachate found to be contaminating surface water.

2. If any event listed in Section IV.D.1 of this permit occurs during business hours, DSWA should report to the Department's Solid and Hazardous Management Section by telephone to 302-739-9403. At all other times the report is to be made to the Department's TOLL-FREE 24-HOUR LINE 1-800-662-8802.

3. DSWA shall submit a written notification to the Department no later than 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, repair, or remedial actions required and a schedule.

E. Assessment of Corrective Measures:

1. DSWA shall notify the Department 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 field measurements and analytes listed in Attachment B, Table 5 of the CIL Environmental Monitoring Plan, and any other measurements or analytes deemed appropriate by the DSWA and the Department. DSWA shall notify the Department 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 the Department 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.

V. RECORDKEEPING:

A. The following information must be recorded and maintained by 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 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.
5. Drawings showing the locations and extent all intermediate covers and of daily covers left in-place.
6. Surveys showing the lines and grades of the landfill and indicating remaining capacity.

B. 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 complaints received by the facility manager concerning the landfill during the last 3 years.
2. Records that document that required training have 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, the salvaging stockpile areas, daily and intermediate covers, and the temporary exposed geomembrane cover.
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 begin generating these records on May 1, 2001. DSWA shall retain these records for a period of three years.
5. Current environmental permits, including the wastewater discharge permit.

C. DSWA shall incorporate Department approvals for alternate covers (daily and intermediate) 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 K of the Operations Plan. Approvals which have been replaced or which have expired are invalid and shall be removed from Appendix K no later than close of business on the date of expiration, or receipt of the revised Approval. For the purpose of the issuance of Permit SW-06/01, DSWA shall replace all missing or expired approvals in Appendix K no later than July 6, 2006 and may continue to use alternative cover materials previously cited in conditions II.P.2 and II.Q of permit SW-01/01 until that date.

VI. LANDFILL CAPPING SYSTEM:

A. Capping Requirements:

1. Upon closure of NSWMC-2 or part thereof, 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 in place 180 days following final waste disposal activity.
3. The capping system shall be designed in accordance with DRGSW and must be approved by the Department prior to installation.
4. 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 has been completed.

VII. CLOSURE AND POST-CLOSURE CARE:

A. The DRGSW limit the duration of an operating permit for a landfill to 10 years. Since the NSWMC-2 expansion will result in landfill operations at this facility in excess of 10 years, the following conditions are hereby imposed for any renewal of this permit. If the Department determines that the DSWA is operating the landfill protective of public health and the environment, the permit shall be renewed subject to the requirements of the DRGSW (or successor). The Department will grant no further permit renewals for expansion of the landfill greater than the lines and grades shown on the Final Grading Plan, (GeoSyntec Consultants *Landfill Final Development and Grading Plan*, drawing 78 of 89, Project ME0250, dated June 2004) which limits the elevation of the landfill to 195 feet msl. If the DSWA wishes to renew this permit they shall submit the following to the Department no later than July 6, 2015.

1. A permit application form for renewal including a detailed summary of all violations, enforcement actions, and corrective actions completed or ongoing at the facility.
2. The latest annual environmental monitoring report showing the results of surface water and groundwater monitoring. This report shall include an assessment of the landfill's impact on groundwater and surface water and whether current waste containment measures and stormwater controls are adequate to protect public health and the environment.
3. The latest annual geotechnical monitoring report showing the results of the geotechnical monitoring. This report shall include an assessment of the stability of the landfill, and whether current stability measures and monitoring are adequate to protect public health and the environment.
4. Landfill capacity estimate as compared to the Final Grading Plan.

B. One year prior to the anticipated closure of the facility, the DSWA shall provide a written notice of intent to close the landfill, anticipated post-closure use of the facility and a proposed schedule. At least 180 days prior to the expected date when wastes will no longer be accepted for disposal at the NSWMC-2, DSWA shall submit a comprehensive closure plan to the Department.

C. DSWA shall close the landfill in accordance with the requirements of the DRGSW in a manner that will minimize the need for further maintenance and that will minimize the post-closure escape of solid waste constituents, leachate, and landfill gas. The DSWA shall close the facility in accordance with the approved closure plan and the approved closure schedule. The DSWA shall include in the closure plan:

1. A description of the methods, procedures, and processes that will be used to close the landfill in accordance with the performance standard listed above (condition VII.C.)
2. Construction and material technical specifications and design drawings.
3. A construction quality assurance plan.
4. A closure schedule.
5. A description of the capping system to be used and the construction and installation methods.
6. A plan for control or recovery of landfill gas.
7. Stormwater controls.
8. A post-closure care plan. The DSWA shall include the following in the post-closure care plan:
   (a) A detailed description of the monitoring and maintenance activities required including maintenance of the landfill gas and leachate management system, maintenance of the vegetation, and maintaining the environmental monitoring systems on the site.
   (b) An environmental sampling plan with performance criteria to demonstrate when the post-closure care period should be allowed to end.
   (c) Contact information for all parties responsible for post-closure care at the facility.
   (d) A description of the planned uses of the facility during the post-closure care period.
   (e) Description and plan for corrective actions, if applicable.

D. The DSWA shall not commence closure activities before receiving the necessary permit modification to the solid waste permit.

E. DSWA shall close the landfill in accordance with the lines and grades shown on the Final Grading Plan which limit the elevation of the landfill to 195 feet msl (GeoSyntec Consultants *Landfill Final Development and Grading Plan*, Project ME0250, dated June 4, 2004; Drawing 78 of 89 of the Permit *Drawings for Landfill Expansion, contract SO1445NC;* and also contained in Volume 8, Appendix VIb-A of the permit application package).

F. When closure is completed, DSWA shall submit a final report for the Departments approval. The final report shall certify that the closure of the landfill was completed in

accordance with the closure plan. The final report shall be certified correct by the construction quality assurance engineer who must be a Professional Engineer registered in Delaware. The landfill will not be considered closed until the Department has provided its written notification that the closure has met the requirements of the solid waste permit and the DRGSW.

G. DSWA shall record a notation on the deed to the facility property, or on some other instrument that is normally examined during the title search, that will in perpetuity notify any potential purchaser of the property that the land has been used as a solid waste disposal site, and the use of the land is restricted under DRGSW.

H. Any permit renewal for the operation of the NWMC-2 shall include specific conditions for the closure of the facility to include all the items listed in conditions VII.B. through VII.G. above.

VIII. LANDFILL EXPANSION CONSTRUCTION:

A. The planning, design, and construction of the landfill expansion shall be consistent with the requirements of the DRGSW.

B. The expansion shall be constructed in accordance with the *Design Report Permit Document Revisions for Cherry Island Landfill Expansion Project*; dated June 2004 and revised May 2005, the approved *Technical Specifications* and the approved *Construction Quality Assurance Plan.* Revisions to these documents related to leachate or landfill gas collection and transmission, waste containment systems, foundation improvements, stormwater management systems, environmental monitoring systems or devices, or geotechnical monitoring systems or devices, shall require Department approval in writing or by documentation in the minutes of the construction progress meeting or similar record approved by the Solid and Hazardous Waste Management Section.

C. DSWA shall submit a final report for the Department's approval, after construction has been completed and prior to the placement of solid waste outside of the current limit of disposal as shown on GeoSyntec Consultants, *Site Plan-Existing Conditions*, (Project ME0250, Drawing 3 of 89, dated April 3, 2003, and part of the *Permit Drawings for Landfill Expansion, contract SO1445NC,* and also contained in Volume 8, Appendix VIb-A of the permit application package). The final report shall certify that the construction of the cell was completed in accordance with the *Design Report Permit Document Revisions for Cherry Island Landfill Expansion Project*; dated June 2004 and revised May 2005, the approved *Technical Specifications*, *Construction Quality Assurance Plan*, and the Permit Drawings for Landfill Expansion (dated April 2003 and Revised May 2005). The final report will include conclusions regarding the structural stability the landfill. The final report shall be certified correct by the construction quality assurance engineer, who must be a Professional Engineer registered in Delaware. The DSWA shall not place wastes outside the current limits of disposal until the Department has provided its written notification that the construction and the final report meet the requirements of the permit and the DRGSW.

PERMIT SYNOPSIS

January 6, 2006. Permit SW-06/01 was issued to the Delaware Solid Waste Authority for the continued operation of the NSWMC-2. This permit incorporates the requirements of, and replaces permit SW-01/01 and limits the height expansion of the landfill to 23 feet above the limits imposed by that permit.

September 11, 2013. Permit Modification: The Department modified section I.D.6.a. of the permit to allow Citizen Advisory Board (CAB) sponsors more flexibility with selection of CAB members and to accommodate the CAB Charter. Section I.D.6. was also modified to account for Delaware's Universal Recycling, now in effect. Other modifications include more definitive stormwater management requirements in section II.F incorporation of revised monitoring plans including the Geotechnical Monitoring Plan (condition III.F), the Gas Migration Monitoring Plan (condition III.E), and the revised Monitoring Program for the Northern Solid Waste Management Center at Cherry Island (condition III.A, B, and C.). The Department modified section IV of the permit to clearly define the requirements for providing reports and data electronically. Condition IV.E was also modified in this section of the permit to remove two geotechnical reporting requirements (now covered in the Geotechnical Monitoring Plan), and to add a new requirements for reporting damage to the landfill liner and leachate contamination of surface water. Additionally, the Department removed the Air Quality reports required by section IV.B.8. of this permit, since the information is already reported to the Division of Air Quality by DSWA. Other administrative changes included spelling corrections, changing references to the Solid & Hazardous Waste Management Branch (from "Branch" to "Section"), and the addition of I495 "on ramps" (from 12th Street) as areas where DSWA inspects for/removes litter (condition II.R.3). The Department considers this a major modification of the permit in accordance with section 4.1.7. of the Delaware *Regulations Governing Solid Waste*.

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