

PERMIT MODULE I

GENERAL PERMIT CONDITIONS

I.A. EFFECT OF PERMIT

The permittee is allowed to dispose solid waste on-site in accordance with the conditions of this permit. Any disposal of solid waste not authorized by this permit is prohibited. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Sections 10.1-1402(18), 10.1-1402(19), or 10.1-1402(21) of the Virginia Waste Management Act (Chapter 14, Title 10.1, Code of Virginia (1950), as amended); or any other law or regulation for protection of public health or the environment. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. For purposes of this permit, terms used herein shall have the same meaning as those in the Virginia Waste Management Act, and Part I and other pertinent parts of the Virginia Solid Waste Management Regulations (VSWMR, 9VAC20-81), unless this permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by the generally accepted scientific or industrial meaning of the term or a standard dictionary reference. "Director" means the Director of the Department of Environmental Quality, or his designated or authorized representative.

I.B. DUTIES AND REQUIREMENTS

The permittee shall comply with all conditions of this permit and 9VAC20-81. The effect of this permit is detailed in 9VAC20-81-490, and it shall be the duty of the permittee to ensure the applicable requirements are met. Additionally, the permittee is subject to the recording and reporting requirements detailed in 9VAC20-81-530. The facility will be designed and constructed per the requirements of Permit Module IV, operated and maintained per the requirements of Permit Module II, closed and maintained in post-closure per Permit Modules XII and XIII, and subject to a groundwater monitoring program per Permit Module X or XI and Permit Attachment X-1 and X-2. In addition to these requirements, the following additional conditions are invoked per 9VAC20-81-430, and shall be complied with:

I.B.1. Noncompliance may be authorized by a schedule of compliance [9VAC20-81-490.D. and 9VAC20-81-490.H.]. Any other permit noncompliance constitutes a violation of Virginia Waste Management Act

and is grounds for enforcement action, or for permit revocation, revocation and reissuance, or modification [9VAC20-81-570 and 9VAC20-81-600].

- I.B.2 The permittee shall comply with the requirements of this permit and any provisions of RCRA Subtitle D (Title 40, Code of Federal Regulations, Section 258) requirements as they become applicable upon their effective date. This permit may not act as a shield against compliance with any part of RCRA or any other applicable federal regulation, state regulation or state law.
- I.B.3. In an enforcement action, it shall not be a defense for the permittee that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- I.B.4. In the event of noncompliance with this permit, the permittee shall take all reasonable steps to minimize releases of solid wastes or waste constituents to the environment and shall carry out measures to prevent substantial adverse impacts on human health or the environment.
- I.B.5. The permittee shall at all times properly operate and maintain all units (and related appurtenances) which are installed or used by the permittee to achieve compliance with the operations manual and the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing, and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary equipment only when necessary to achieve compliance with the conditions of this permit.
- I.B.6. The permittee shall furnish to the Director, within a reasonable time, any relevant information that the Director may request to determine compliance with this permit, regulations or the Act. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit by the date specified in the request.
- I.B.7. The permittee shall allow the Director, or an authorized representative, at a reasonable time, upon the presentation of appropriate credentials, to:
 - I.B.7.a. Enter the permitted facility where a regulated unit or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - I.B.7.b. Have access to and copy any records that must be kept under the conditions of this permit;

- I.B.7.c. Inspect any unit, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
- I.B.7.d. Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by Virginia Waste Management Act, any substances or parameters at any location within his control.
- I.B.8. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample to be analyzed must be the appropriate method from the latest edition of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846, if available.
- Laboratory samples shall be analyzed in accordance with 1 VAC 30-45, Certification for Noncommercial Environmental Laboratories, or 1 VAC 30-46, Accreditation for Commercial Environmental Laboratories.
- I.B.9. This permit is not transferable to any person, unless approved by the Director. The Director may require modification or revocation and reissuance of the permit pursuant to 9VAC20-81-490.G. Before transferring ownership or operation of the facility during its operational life, the permittee shall notify the new owner or operator in writing of the requirements of Parts III and V, of the Virginia Solid Waste Management Regulations, the Financial Assurance Regulations, 9VAC20-70, and this permit.
- I.B.10. In accordance with § 10.1-1408.2, all facilities must have a Certified Operator as required by the Board of Waste Management Facility Operators-Licensing Regulations, 18 VAC 155-20.
- I.B.11. Specifications for all drainage media should specify that the material shall contain no greater than 15% calcium carbonate equivalent. Department literature regarding research on leachate collection media indicates that weight loss greater than 15% results in an unacceptable loss of performance. If a greater percentage is specified or allowed, a demonstration that performance is not adversely affected must be provided to the Department for review and approval.
- I.B.12. The closure cost estimate must reflect the maximum cost of closure at all times. The owner has the responsibility to maintain the closure and post closure cost estimate and associated financial assurance funding as conditions change.

I.B.13. Land-clearing, excavation, and construction activities that involve the disturbance of wetlands or streams shall not commence without authorization from the Virginia Water Protection (VWP) Program and/or Army Corps of Engineers.

I.C. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The permittee shall maintain the following documents at the facility, or another location approved by the director, until post-closure is complete and certified by a professional engineer, and shall maintain amendments, revisions, and modification to these documents:

I.C.1. Design Plans

I.C.2. Operations Manual with annual certification by Responsible Official

I.C.3. Gas Management Plan

I.C.4. Groundwater Monitoring Plan

I.C.5. Leachate Management Plan

I.C.6. Closure and Post-Closure Plan

I.C.7. Detailed, written estimate, in current dollars, of the cost of closing the facility, post-closure care and corrective action measures

I.C.8. All other documents/records required and applicable from the following:

I.C.8.a. Monitoring records from leachate, gas, and groundwater monitoring.

I.C.8.b. Inspection records as required from construction/installation, operational, closure, post-closure inspection requirements.

I.C.8.c. Personnel training records

I.C.8.d. Daily operational records (i.e., solid waste received and processed, fill area records, records of special wastes accepted, a logbook which is a daily narrative account of the activities at the landfill).

I.C.8.e. Construction quality assurance reports, record drawings and engineers certifications for all new liner and/or final cover construction

I.C.9. An approved copy of the complete Part A permit

I.C.10. Documentation of the authorization to discharge leachate into the publicly/privately owned treatment works, leachate volumes sent to the POTW, and periodic leachate sampling analytical results

I.D. DOCUMENTS TO BE SUBMITTED

In addition to the documents/records/reports to be submitted per the requirements of this permit or 9VAC20-81, the permittee shall also submit the following documents to the Director according to indicated schedules:

I.D.1. Prior to expansion into each new phase, the permittee shall submit all required certification documents per 9VAC20-81-490.A., and:

I.D.1.a. Authorization from the publicly/privately owned treatment works to discharge the increased volume of leachate and wastewater to the sewerage system and treatment works.

I.D.1.b. Report and supporting documents resulting from quality control/quality assurance activities performed during construction and installation of the liner/drainage systems, including the installation contractor's written acceptance of the surfaces to be lined, synthetic liner manufacturer and installer warranties, laboratory test results of the permeability of the clay liner and the drainage media overlying the liner, and representative copies (sufficient to demonstrate responsible control) of the accumulated inspection schedules resulting from the professional engineer's oversight of the construction.

I.D.2. In accordance with 9VAC20-81-490.A., certification from a design engineer, who must be a professional engineer licensed to practice in the Commonwealth, that the construction of the facility has been completed in accordance with the permit, approved plans and specifications and is ready to begin operation. A certification will be required for each lined phase of development.

I.D.3. Certification (separate from I.D.2, above) from the Construction Quality Assurance (CQA) officer that the approved CQA plan has been successfully carried out and that the constructed unit meets all

requirements of the permitted CQA plan, in accordance with 9VAC20-81-130.Q. A certification will be required for each lined phase of development. The CQA officer must be a professional engineer licensed to practice in Virginia.

- I.D.4. The as-built plans of all new groundwater and gas monitoring wells shall be submitted as these wells are installed. Information to be included on the as-built plans shall include, but is not limited to, the total depth of the well, the surveyed elevations of the top of casing and ground surface (or apron), and the length and location of the screened interval and annular space seal. All dimensions are to be shown on well construction schematics.
- I.D.5. Following construction of the final cover system for each unit, certification, signed by a registered professional engineer, shall be submitted verifying that closure has been completed in accordance with the permit, approved plans, and specifications. A certification will be required for each capped landfill phase and shall include the results of the CQA/QC requirements under 9VAC20-81-130.Q.1.b.(6).
 - I.D.5.a. The certification shall include verification that closure has been completed in accordance with the requirements of 9VAC20-81-160.D.5.a. through 5.c., which require posting a sign at the facility entrance and erecting suitable barriers to prevent access; submitting a survey plat to the local land reporting authority; and recording a notation on the deed to the facility property.
- I.D.6. Not less than 180 days prior to the completion of the post-closure monitoring and maintenance period as prescribed by the Board's regulations or by the Director, the owner or operator shall submit to the Director a certificate, signed by a professional engineer licensed in the Commonwealth, that post-closure monitoring and maintenance have been completed in accordance with the facility's Post-Closure Care Plan, Permit Attachment XIII-1.
 - I.D.6.a. The certificate submitted under I.D.6, shall be accompanied by an evaluation prepared by a professional engineer licensed in the Commonwealth, and signed by the owner or operator, which assesses and evaluates the landfill's potential for harm to human health and the environment in the event that post-closure monitoring and maintenance are discontinued.
 - I.D.6.b. If the Director determines that continued post-closure monitoring or maintenance is necessary to prevent harm to human health or the environment, he shall extend the post-closure period for such

additional time as the Director deems necessary to protect human health and the environment and shall direct the owner or operator to submit a revised post-closure plan and to continue post-closure monitoring and maintenance in accordance therewith. Requirements for financial assurance shall apply throughout such extended post-closure period.

I.E. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DIRECTOR

All reports, notifications, or other submissions which are required by this permit to be sent or given to the Director should be sent to:

Virginia Department of Environmental Quality
Solid Waste Permitting/Compliance
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060

I.F. SITE SPECIFIC CONDITIONS

The provisions of this section are in addition to the permit conditions and regulatory requirements and are specifically developed for this facility. The permittee shall comply with all conditions of this section, as follows:

I.F.1. The final permit is based on permit application submittals (drawings and reports) that may contain the word "proposed" and similarly tentative language. The documents that are incorporated into Permit No. 270 have been evaluated for administrative and technical adequacy and have been approved as proposed. Therefore, any references to a design, construction, operation, monitoring or closure criteria are considered to be approved as proposed.

I.F.2. The facility is subject to the conditions listed in the Part A approval letter dated February 9, 2006.

I.G. PERMIT AMENDMENTS

Taylor Road Landfill (Solid Waste Permit 270) originally permitted to operate, July 6, 1979, has been amended as followed:

I.G.1. The permit was amended March 25, 1996 per a major permit amendment request (Major Amendment 1) dated May 9, 1994. The amendment was to incorporate 16.2 acres of new lined disposal footprint designated Cells C,

D, and E, adjacent and contiguous to the existing closed landfill designated Cells A and B. A portion of the liner in Area C is proposed to be located on the west slope of Cell B. Refer to Permit Attachment IV-6 for the design details of Cells C, D, and E.

- I.G.2. The permit was amended August 28, 1999 per a minor permit amendment request (Minor Amendment 1) dated August 3, 1997. The minor modifications are as follows:
- I.G.2.a. Drawing No. 2 – Master Site Plan was modified to illustrate the location of the proposed facility office building.
 - I.G.2.b. Drawing No. 2 – Master Site Plan was modified to illustrate the location of the proposed wood mulching and concrete crushing operation.
- I.G.3. This permit amended July 21, 2001 per a major permit amendment request (Major Amendment 2) dated April 20, 2000. The major modifications are as follows:
- I.G.3.a. The engineering modification grades for Area D have been vertically increased approximately 2.5 feet eliminating the need for the previously proposed underdrain piping required to maintain a five foot separation between the waste and the seasonal high groundwater table.
 - I.G.3.b. The final cover design was revised to incorporate diversion berms in lieu of terracing to control storm water runoff.
 - I.G.3.c. The final elevation grade was vertically increased by 10 feet increasing the capacity of the landfill.
 - I.G.3.d. The provisions for a 12-inch soil liner were incorporated in addition to a flexible membrane liner (or FML) giving the facility two alternatives for liner construction. For details of these liner system options refer to Permit Module V.
- I.G.4. This permit was amended March 9, 2005 per a major permit amendment request (Amendment No. 4) dated May 24, 2004. This permit amendment was to approve raising the base grade by 2.5 ft in Area E, eliminating the underdrain piping system, modifying the leachate collection piping, and incorporation of necessary engineering modifications.
- I.G.5. This permit was amended July 16, 2007 in accordance with a major permit amendment request (Amendment No. 5) dated January 2006. This permit

amendment is for a landfill expansion that incorporates 104 acres of new disposal footprint (Cells F through S) and is anticipated to extend the life of the facility by 75 years. The proposed expansion area is adjacent and contiguous to the existing landfill.

- I.G.6. This permit was amended January 29, 2010 in accordance with a minor permit amendment request (Amendment No. 6) dated February 23, 2009. The minor modifications were as follows:
- I.G.6.a Changes in the leachate lagoon construction phasing schedule. Leachate Lagoon 2 will be constructed during Cell F construction. Leachate Lagoon 3 will be constructed during Cell G construction.
- I.G.6.b The use of crushed concrete in the Protective Cover Layer/Cap Drainage Layer (Section 02406) and Leachate Collection Drainage Layer (Section 02408).
- I.G.6.c The use of rain flaps in open areas to isolate storm water and prevent it from infiltrating to the leachate collection system.
- I.G.7 The permit was modified on April 28, 2011 to allow the facility to use alternate weekly cover. This approval was to use FFCP's from the demolition of the Kohl's Shopping Center located at 11331 Midlothian Turnpike, Richmond, VA 23235. All conditions of the May 20, 2010 BUD letter apply.
- I.G.8 This permit modification revises the cell limits (G through K and re-phases the cell construction sequence which consequently the groundwater well installation sequence. The development of Leachate Lagoon 3 will occur during construction of Cell Q. Also included in this modification were updates to the groundwater monitoring plan and changes to the monitoring network.

END OF MODULE I