



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

4949-A Cox Road, Glen Allen, Virginia 23060

(804) 527-5020 Fax (804) 527-5106

www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

SOLID WASTE FACILITY PERMIT PERMIT NUMBER 270

Facility Name: Taylor Road Landfill

Facility Type: Construction/Demolition/Debris Landfill

Latitude: 37°19'47"N

Site Location: Chesterfield County

Longitude: 77°45'41"W

Location Description: The Taylor Road Landfill is located on State Route 646 (Taylor Road) approximately 0.7 miles north of the intersection of State Route 602 (River Road) and State Route 646 (Taylor Road), in western Chesterfield County.

Background: Permit Number 270 was originally issued to H.H. Hines in July 1979. The permit was transferred to the present owner, S.B. Cox, Inc., on May 29, 1987. The Taylor Road Landfill serves as a construction/demolition/debris landfill and is subject to compliance with the Virginia Solid Waste Management Regulations (VSWMR, 9 VAC 20-80-10, *et. seq.*). The facility primarily serves the local area, and is open to the general public to accept the wastes described in Section IV.B.1, "Types of Wastes," located in Module II (Permit Attachment II-1) of this permit. No hazardous wastes or household wastes may be accepted. The facility is located on a parcel of land owned by S.B. Cox, Inc. which consists of approximately 257 acres. Within the perimeter of the 257 acre facility boundary, the waste management unit boundary (including waste footprint and surface impoundments) comprises approximately 157 acres, with an additional 18 acres used for ancillary features and the remaining 82 acres as buffer areas. There exists approximately 21.2 acres of waste disposal footprint consisting of 5 cells (A through E). Cells A and B consists of approximately 6.7 acres, are unlined and are closed. Cells C through E are active, have a liner and leachate collection system and consist of approximately 14.5 acres. Cells F through S were permitted with Amendment 5. All cells form one single contiguous unit. With the incorporation of Cells F through S, having a design volume of approximately 18.7 million cubic yards, it is estimated that the site life is approximately 74

years. This site life is based on an average daily intake rate of 391 tons per day, a cover/waste ratio of 5%, 312 days of operation per year, and an in-place density of 0.5 tons per cubic yard.

Permit Limits: The daily intake rate is limited to a maximum daily design tonnage of 1,000 tons per day, based on the design capacity in the Design Report/Operations Manual in this permit.

Permit Highlights: The permit includes seven permit modules and associated permit attachments which are, in general, based on information submitted in the permit application. Permit Module I includes general permit conditions, and Permit Modules II and IV stipulate requirements for the operations and design of the landfill. Permit Modules X and XI contain groundwater monitoring requirements. Requirements regarding closure and post-closure of the landfill are addressed in Permit Modules XII and XIII.

Disposal areas shall be constructed using either a synthetic or soil liner system. Cells C, D, and E have been constructed using a synthetic 60-mil HDPE liner. There is a leachate collection and removal system situated above the liner. The components of the liner and leachate collection and removal systems are described in detail in the design report in Permit Attachment IV-1 and illustrated in the design plans in Permit Attachment IV-2.

Leachate generated by Cells C through E is collected in a sump at the western edge of Cell E and flows by gravity through a pipe penetration in the sump to a manhole and pump station. From the manhole, the leachate is pumped through a two inch force main to a leachate holding basin at the southwest corner of Cell E. Leachate generated in Cells F and G is to flow to a sump at the western end of Cell F and exit the sump through a pipe penetration and flow by gravity into Leachate Lagoon 2 located at the western edge of Cell F. Leachate generated in Cells H through S is to be collected in one of two sumps situated at the northern edge of Cell H and will flow by gravity through pipe penetrations in the two sumps and into the proposed Leachate Lagoon 3 located at the northern edge of Cell H. Leachate from the holding basins will be pumped and hauled to a wastewater treatment plant.

The final cover/closure cap system for the facility, from top to bottom, consists of the following layers; a 24-inch soil layer comprised of local soil compacted to an unspecified permeability with the top six inches consisting of seeded top soil, native soil, or soil suitably amended to support vegetation; a 6oz/sy filter geotextile; a 6-inch drainage layer with a permeability greater than or equal to 1.0×10^{-1} cm/sec; a 14 oz/sy cushion geotextile; a textured 40-mil linear low density polyethylene (LLDPE) geomembrane; a 14 oz/sy cushion geotextile; a 6-inch drainage/gas transmission layer with a permeability greater than or equal to 1.0×10^{-1} cm/sec; 12 inches of local soil placed as an intermediate cover during filling operations. A geonet geocomposite with geotextile heat bonded to both sides may be installed in place of one or both of the 6-inch drainage layers, 14 oz/sy and 6 oz/sy geotextiles during construction of the final cover.

Permit Amendment: This minor permit modification is the eighth modification of the Permit Number 270. 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 was revised to occur during construction of Cell Q. Also

included in this modification were updates to the groundwater monitoring plan and changes to the monitoring network. Previous permit amendments along with the current one are detailed in Section I.G PERMIT AMENDMENTS of Permit Module I.

THIS IS TO CERTIFY THAT:

Taylor Road Landfill, Inc.
5200 Hatcher Street
Richmond, VA 23231

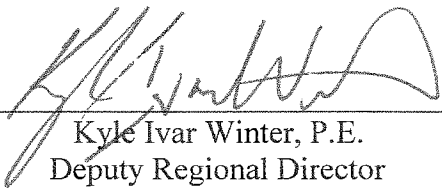
is hereby granted a permit to construct, operate, and maintain the facility as described in the attached Permit Modules I, II, IV, X, XI, XII, and XIII; and their associated Permit Attachments. These Permit Modules and Permit Attachments are as referenced hereinafter and are incorporated into and become a part of this permit.

The herein described activity is to be established, modified, constructed, installed, operated, used, maintained, and closed in accordance with the terms and conditions of this permit and the plans, specifications, and reports submitted and cited in the permit. The facility shall comply with all regulations of the Virginia Waste Management Board. Prior to issuing this permit, any comments by the local government and general public have been investigated and evaluated and it has been determined that the proposed facility poses no substantial present or potential danger to human health or the environment. The permit contains such conditions and requirements as are deemed necessary to comply with the requirements of the Virginia Code, the regulations of the Board, and to prevent substantial or present danger to human health or the environment. Failure to comply with the terms and conditions of this permit shall constitute grounds for the revocation or suspension of this permit and for the initiation of necessary enforcement actions.

The permit is issued in accordance with the provisions of § 10.1-1408.1.A, Chapter 14, Title 10.1, Code of Virginia (1950) as amended.

Issued : July 6, 1979
Amendment 1: March 25, 1996 (Major)
Amendment 2: August 28, 1999 (Minor)
Amendment 3: July 27, 2001 (Major)
Amendment 4: March 9, 2005 (Major)
Amendment 5: July 17, 2007 (Major)
Amendment 6: January 29, 2010 (Minor)
Amendment 7: April 28, 2011 (Minor)

APPROVED:



Kyle Ivar Winter, P.E.
Deputy Regional Director

DATE: 16 May 2013
Amendment No. 8 (Minor)

PERMIT MODULES AND PERMIT ATTACHMENTS¹

REFERENCE LIST

PERMIT MODULE I – GENERAL PERMIT CONDITIONS

- PERMIT ATTACHMENT I-1 – PREVIOUS APPROVAL LETTERS
- PERMIT ATTACHMENT I-2 – VARIANCE PETITIONS
- PERMIT ATTACHMENT I-3 – PART A APPROVAL LETTERS

PERMIT MODULE II² – OPERATIONS

- PERMIT ATTACHMENT II-1 – OPERATIONS MANUAL
- PERMIT ATTACHMENT II-2 – EMERGENCY CONTINGENCY PLAN

PERMIT MODULE IV – CONSTRUCTION/DEMOLITION/DEBRIS LANDFILL

- PERMIT ATTACHMENT IV-1 – DESIGN REPORT
- PERMIT ATTACHMENT IV-2 – DESIGN PLANS
- PERMIT ATTACHMENT IV-3 – LANDFILL GAS MANAGEMENT PLAN
- PERMIT ATTACHMENT IV-4 – TECHNICAL SPECIFICATIONS
- PERMIT ATTACHMENT IV-5 – CONSTRUCTION QUALITY ASSURANCE PLAN
- PERMIT ATTACHMENT IV-6 – DESIGN REPORT (CELLS C, D, AND E)

PERMIT MODULE X -- PHASE I GROUNDWATER MONITORING

- PERMIT ATTACHMENT X-1 GROUNDWATER MONITORING PLAN

PERMIT MODULE XI -- PHASE II GROUNDWATER MONITORING

- PERMIT ATTACHMENT XI-1 GROUNDWATER PROTECTION STANDARDS (RESERVED)

PERMIT MODULES XII AND XIII² – CLOSURE AND POST-CLOSURE

- PERMIT ATTACHMENT XII AND XIII-1 – CLOSURE AND POST-CLOSURE PLAN

NOTES:

1. Should information contained in any permit module that consists of documents submitted by the permittee, conflict with the any requirement or condition contained in the permit modules I, II, IV, X, XII, XIII, or the 9 VAC 20-81-10 *et seq.*, the regulatory/permit module requirement or condition shall prevail (unless an appropriate variance has been granted). The Department is not responsible for spelling, typographical, or syntax errors in modules based on information submitted by the permittee.
2. The Emergency/Contingency Plan (Permit Attachment II-2 of Permit Module II), or the Closure and Post-Closure Plan (Permit Modules XII and XIII) emergency contact lists may be revised with Department approval.