



COMMONWEALTH of VIRGINIA

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August 10, 2015

Mr. Stephen J. Applebaum, PG
Senior Project Geologist
Clean Harbors Environmental Services, Inc.
42 Longwater Drive
P.O. Box 9149
Norwell, MA 02061-9149

VIA ELECTRONIC MAIL

**RE: Final Decision and Response to Comments
Former Clean Harbors Environmental Services, Inc., Prince George, VA
EPA ID No. VAD988175055**

Dear Mr. Applebaum,

Please find enclosed with this letter the Final Decision and Response to Comments developed by the Department of Environmental Quality (DEQ), Office of Remediation Programs (Department) for the former Clean Harbors Environmental Services, Inc. facility located in Prince George, Virginia. The 30 day public notice soliciting comments on the Department's determination described in the Statement of Basis dated June 18, 2015 ended on August 3, 2015. No comments were received by the Department during the public comment period. Consequently, the Department's determination did not change.

Please feel free to contact me if you have any additional questions or concerns at (804) 698-4045 or ryan.kelly@deq.virginia.gov.

Sincerely,

A handwritten signature in black ink that reads "Ryan J. Kelly".

Ryan J. Kelly
RCRA CA Project Manager
Office of Remediation Programs

Mr. Stephen J. Applebaum
August 10, 2015
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Enclosure

Cc: Andrea Barbieri – EPA Region 3 (3LC50)
Mike Jacobi – EPA Region 3 (3LC20)
Jason Miller, DEQ-PRO
Chris Evans, Brett Fisher, DEQ-CO
File – DEQ CO



FINAL DECISION AND RESPONSE TO COMMENTS

**FORMER CLEAN HARBORS ENVIRONMENTAL SERVICES,
INC.**

PRINCE GEORGE, VIRGINIA

EPA ID NO. VAD988175055

I. FINAL DECISION

The Virginia Department of Environmental Quality (DEQ) has determined that no further action is required to make this property suitable for any type of land use. This is based on our findings detailed in the Statement of Basis, dated June 18, 2015. This determination is consistent with EPA's February 2003 Final Guidance of Completion of Corrective Action Activities at RCRA Facilities (reference 68 FR 8757).

II. PUBLIC COMMENT PERIOD

On June 18, 2015, DEQ proposed a determination of "Corrective Action Complete without Controls". Consistent with public participation provisions under the Resource Conservation and Recovery Act (RCRA), DEQ requested comments from the public on the proposed determination described in the Statement of Basis. The commencement of a thirty (30)-day comment period was announced in the Progress-Index newspaper on July 3, 2015 and on the DEQ website. The public comment period ended on August 3, 2015.

III. RESPONSE TO COMMENTS

DEQ received no comments on its proposed determination for the Facility. Consequently, DEQ's determination did not change from the determination proposed in the SB.

IV. AUTHORITY

DEQ is issuing this Final Decision under the authority of the Solid Waste Disposal Act, as amended by RCRA, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. Sections 6901 to 6992k.

V. DECLARATION

Based on the Administrative Record compiled for the Corrective Action at the former Clean Harbors Environmental Services, Inc. facility, DEQ has determined that the Final Remedy selected in this Final Decision and Response to Comments is protective of human health and the environment.



Chris Evans, Director
Office of Remediation Programs
Virginia Department of Environmental Quality



Date



VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF LAND PROTECTION AND REVITALIZATION

OFFICE OF REMEDIATION PROGRAMS

STATEMENT OF BASIS

FORMER CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.

PRINCE GEORGE, VIRGINIA

EPA ID NO. VAD988175055

JUNE 18, 2015

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1.0 INTRODUCTION

1.1 Facility Name

The Virginia Department of Environmental Quality (VDEQ) has prepared this Statement of Basis (SB) for the former Clean Harbors Environmental Services, Inc. facility located at 7515 Harvest Road, Prince George, Virginia 23875 (hereinafter referred to as the Facility, Site, “Clean Harbors” or “CHES”).

The Facility is subject to the Corrective Action (CA) Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. (Corrective Action Program). The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and waste constituents that have occurred at their site.

Information on the Corrective Action Program can be found by navigating <http://www.epa.gov/reg3wcmd/correctiveaction.htm>.

VDEQ has prepared this SB in cooperation with the United States Environmental Protection Agency (EPA) and is providing the opportunity for public comment and review on its proposed decision.

1.2 Proposed Decision

VDEQ has reviewed all available Facility data and has determined that there are no unaddressed releases of hazardous waste or hazardous constituents from the Facility. Based on its review, VDEQ’s proposed decision is that no additional characterization or remediation is necessary. VDEQ’s proposed decision represents “Corrective Action Complete without Controls” as described in EPA’s “Final Guidance on Completion of Corrective Action Activities at RCRA Facilities”, (68 FR 8757, February 25, 2003). VDEQ has determined that its proposed decision for the Facility is protective of human health and the environment and that no further corrective action or controls are necessary.

This SB summarizes information that can be found in greater detail in the documents and reports reviewed by VDEQ and EPA, which can be found in the Administrative Record (AR).

1.3 Public Participation

Interested persons are invited to comment on VDEQ’s proposed decision by reviewing this SB and the documents contained in the AR. The information presented in this SB can be found in greater detail in the work plans and reports submitted by the Facility to VDEQ and EPA. To gain a more comprehensive understanding of the RCRA activities that have been conducted at the Facility, VDEQ encourages the public to review these

documents, which are found in the AR. A copy of the AR is available for public review in paper or electronic format and can be obtained from the VDEQ contact person, for which the address and telephone number is provided in Section 6.0 below.

When making a determination regarding the proposed decision, VDEQ will consider all written comments received during the comment period (see Section 6.0). If VDEQ determines that new information or public comments warrant a modification to the proposed decision, VDEQ will modify the proposed decision or select other alternatives based on such new information and/or public comments. VDEQ will announce its final decision and explain the rationale for any changes in a document entitled the Final Decision and Response to Comments (FDRTC).

2.0 FACILITY BACKGROUND

The site is located in Forbes Industrial Park, within a lightly developed agricultural/residential/industrial region of the Town of Prince George, in Prince George County, Virginia. The industrial park is located along Route 156, approximately 20 miles southeast of Richmond. Harvest Road is east of Route 156, and is approximately 0.2 miles long with no outlet. As early as 1966, the site area was sparsely developed for single-family residential housing. Other surrounding property was used for agriculture or was undeveloped. By 1979, the existing industrial park had begun development, and the large site building had been erected.

The site is identified by the Town of Prince George Assessor Office on Tax Map 24 as Lots 69A and 69B. The combined area of the two lots is 3.29 acres. The site is topographically and relatively flat and lies at an elevation of approximately 130 feet above mean sea level (MSL). There are no waterways or wetlands on the site, and the site is not located within a 100-year flood plain. A buried drain line crosses the site from west to east and carries surface drainage from areas west of the site to a stormwater retention pond located on the easterly adjacent property. Precipitation that does not infiltrate through the ground surface flows off the perimeter of the site in all directions. Local surface drainage is southward into the North Fork of the Blackwater Swamp, located approximately 2,000 feet south of the site.

The site was originally leased to a pallet manufacturer, then to a machine shop and, subsequently, to Belpar. Belpar changed its name to Belpar Chemical Services, Inc., and then sold its assets to Chemical Waste Management (CWM). CWM operations at the site included lab packing, underground storage tank removal and installation services (off-site), processing, storage and transportation of waste, and acceptance of waste oil, which was subsequently shipped off-site for disposal.

The site operations were acquired by CHES from CWM, effective September 30, 1994. During CHES' operation, the site has been used as a hazardous and non-hazardous waste storage and treatment facility. Specifically, the facility accepted petroleum/water mixtures.

There are two buildings located on the northwest portion of the site. The larger (main) building is a 5,000 square-foot one story metal building which houses a former on-site laboratory, a boiler that heated water used in the treatment process when the tank farm was operational, and general maintenance equipment and supplies. There are no floor drains in the main building. The second building is comprised of two large trailers, occupies approximately 1,300 square feet in area, and is used as office space. A storage shed is located in the active portion of the facility.

The southern portion of the property is completely enclosed by a chain-link fence. The southern limit of the chain-link fence was extended further south in 1996 or 1997 to expand the active portion of the facility.

Public utilities servicing the site include electric, telephone and sewer. Water is supplied by an on-site well (W-2) located in the northeast corner of the site. According to Gentry Well Works, this well is 203 feet deep, is constructed of PVC pipe and was installed in January 1996. A second on-site water well (W-1, approximately 50 feet deep) was used previously but was replaced by well W-2 because it tended to go dry. Domestic wastewater was discharged to a septic system located west of the main building. This system was closed in-place in the late 1990s, when the site was connected to the municipal service. The only connection to the former septic system from the main building was from restroom facilities. During the septic closure activities, the septic tank was reportedly filled with sand.

Solid or hazardous waste treatment or storage was conducted in two areas: in the tank farm and the concrete pad in the eastern portion of the facility (Lot 69B). The tank farm was used for the off-loading, treatment and storage. The tank farm contained three large vertical tanks of liquid waste with a filter system and retention tanks. Processed wastewater was retained in two wastewater storage tanks and was ultimately trucked to the Hopewell Wastewater Treatment facility for disposal.

Hazardous waste processes continued in the tank farm until 2001, when the tank farm was closed. Waste codes applicable to site activities included D001 (ignitability), D008 (lead) and D018 (benzene). Non-hazardous waste treatment continued until July 2002. The ASTs and concrete containment walls were removed from the site in April 2010. Oily sludge was solidified in a solidification pan on the concrete pad located on the western portion of the site. This practice ceased in 2004. The site was subsequently used by CHES as a service center for spill response activities and scheduled environmental and industrial services. Short-term storage was conducted on the site as part of the day-to-day activities. CHES discontinued all activities and vacated the site on November 6, 2010.

3.0 SUMMARY OF ENVIRONMENTAL HISTORY

Permitting Activities

Belpar Chemical Services, Inc. submitted a RCRA Hazardous Waste Permit Part A Application in January 1987. CHES operated the facility under an Interim Status, and submitted a RCRA Part B Application on February 27, 1997. CHES subsequently withdrew the Part B Application on August 27, 2001 after undergoing RCRA closure of the tank farm, and operated as a wastewater treatment facility regulated under the Clean Water Act (CWA) until 2004.

Aboveground Storage Tank Closure Activities

CHES initiated RCRA closure of the tank farm in 1998. Closure of the interim status 15,000-gallon hazardous waste AST (T-101) and the oil/water separator (OWS, S-101) was achieved in 2000 following a decommissioning and sampling program administered by the VDEQ. Details of the closure activities are documented in the *Partial Closure Report and Certification*, dated January 28, 2000, prepared by Dames & Moore of Richmond Virginia.

RCRA closure of the containment dike was completed in June 2001, following iterative sampling activities and direction from the VDEQ. Documentation of the closure was presented in the *Closure Report and Certification*, dated June 28, 2000 prepared by URS Corporation (Dames & Moore), and the *Revised Closure and Certification Report*, dated March 21, 2001, prepared by URS Corporation. In a letter dated June 1, 2001, the VDEQ indicated that clean closure for the secondary containment structure had been achieved.

The tank farm, the westerly adjacent concrete containment dike and the 5,000-gallon diesel fuel AST were decommissioned in April 2010. The remaining tanks and associated piping, concrete sides of the tank farm, containment dike and the dike around the diesel fuel tank were removed as part of the decommissioning activities. The closure activities were summarized in an *Above Ground Storage Tank Closure Report* dated May 27, 2010.

Since the tank farm and dike were decommissioned, the need for the frac tanks was eliminated, and the frac tanks were emptied and removed from the site in April 2010. Two decommissioned 10,000-gallon ASTs, never used at the facility and previously stored in the southwest corner of the property, were transported from the site for disposal in April 2010, during but not part of the tank farm closure activities.

Corrective Action Activities

The following is a list of RCRA Corrective Action milestones that have been completed at the Facility and are relevant to VDEQ's decision to recommend a "Corrective Action Complete Without Controls" determination:

- In August 2005, the USEPA conducted a site meeting to initiate a Facility Lead Agreement (FLA) and RCRA Corrective Action Program activities at the site. Present at the meeting were representatives of the USEPA, VDEQ and CHES. Existing site information was discussed, and a site inspection was conducted.
- Based on the site inspection, the United States Army Corps of Engineers (USACE) prepared a *Final RCRA Site Visit Report*, dated January 23, 2006, which summarized the site meeting and identified six Areas of Concern (AOCs) and two Solid Waste Management Units (SWMUs).
- CHES entered into the FLA in January 2007 with the USEPA and committed to conducting investigation and remediation activities in accordance with the RCRA Corrective Action Program.
- RCRA Facility Investigation Report (RFI Report), prepared and submitted by Clean Harbors, dated April 20, 2011.
- RFI Report - Comments, prepared by VDEQ, dated January 5, 2012.
- Revised Risk Assessment Report, prepared and submitted by CHES on April 24, 2014.
- Risk Assessment Results and Corrective Action Path Forward, prepared by VDEQ, dated May 14, 2015.

The results presented in the Clean Harbors' April 2014 revised risk assessment report indicated that the cumulative risk and hazard index exceeded the acceptable range/limit for a residential (unrestricted) scenario. VDEQ's risk assessment staff reviewed the April 2014 revised risk assessment report and identified significant errors in calculations and methods. In a conference call conducted on July 8, 2014 VDEQ requested the site analytical data be submitted in electronic format for purposes of performing an independent quantitative risk assessment for the site. The VDEQ risk assessment staff performed the appropriate calculations using the available data and the results for site soils indicated that the carcinogenic risk is within the acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} , and the Hazard Index is below the acceptable level of 1 for non-carcinogens. Therefore, no unacceptable risk or hazard was identified under an unrestricted land use or residential scenario. The groundwater risk assessment results indicate a potential unacceptable risk, but the results were further evaluated by the VDEQ project team. The primary risk drivers in groundwater were identified as PAH's which were conservatively included in the quantitative risk assessment due to elevated method detection limits used in the analytical procedures. Since these constituents were not detected in groundwater above applicable groundwater protection standards they were removed from further consideration, and therefore the groundwater is considered to have no unacceptable risk under an unrestricted or residential scenario. The VDEQ risk assessment results were documented in a letter to CHES dated May 14, 2015. All investigations required under the CA program have been completed at the facility.

4.0 ENVIRONMENTAL INDICATORS

Under the Government Performance and Results Act ("GPR"), EPA has set national goals to address RCRA corrective action facilities. Under GPR, EPA evaluates two key environmental indicators for each facility: (1) Current Human Exposures Under Control

and (2) Migration of Contaminated Groundwater Under Control. The Facility met these indicators on September 26, 2013.

5.0 FINANCIAL ASSURANCE

Since no further investigations or corrective actions are anticipated based on the available information, financial assurance for corrective action is not required for the Facility.

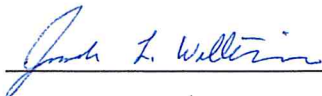
6.0 PUBLIC PARTICIPATION

Interested persons are encouraged to review the AR and are invited to comment on VDEQ's proposed decision. The Administrative Record contains all the information considered by VDEQ for its proposed remedy for the Facility. The public comment period will last thirty (30) calendar days from the date the notice is published in a local newspaper. Comments may be submitted by mail, e-mail, or phone to Ryan Kelly at the address listed below. VDEQ will hold a public meeting to discuss the proposed decision upon request. Requests for a public meeting should be made to Project Manager, Ryan Kelly.

Virginia Department of Environmental Quality
629 East Main Street
P.O. Box 1105
Richmond, VA 23218
Contact: Mr. Ryan J. Kelly
Phone: (804) 698 - 4045
Email: ryan.kelly@deq.virginia.gov

VDEQ will respond to all relevant comments received during the comment period. If it's determined that new information warrant a modification to the proposed decision, VDEQ will modify the proposed decision or select other alternatives based on such new information and/or public comments. VDEQ will announce its final decision and explain the rationale for any changes in the FDRTC. All persons who comment on this proposed decision will receive a copy of the FDRTC. Others may obtain a copy by contacting Ryan Kelly at the address listed above.

Date:



Justin Williams, Director
Land Protection and Revitalization
Virginia Department of Environmental Quality

CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.
PRINCE GEORGE, VIRGINIA
EPA ID NO. VAD988175055

ADMINISTRATIVE RECORD
INDEX OF DOCUMENTS FOR STATEMENT OF BASIS DATED
JUNE 18, 2015

This index includes all documents VDEQ relied upon to evaluate and propose the final decision of “Corrective Action Complete Without Controls” described in the Statement of Basis.

1. January 12, 1987, *RCRA Part A Application*. Belpar Chemical Services, Inc.
2. January 28, 2000, *Hazardous Waste Management Unit Partial Closure Report and Certification*. Dames and Moore.
3. June 28, 2000, *Hazardous Waste Management Unit Closure Report and Certification*. URS.
4. March 21, 2001, *Revised Hazardous Waste Management Unit Closure Report and Certification*. URS.
5. April 2, 2001, *Modified Report Pages - Closure Report and Certification*. URS.
6. June 1, 2001, *Secondary Containment Structure Closure Verification*. Virginia Department of Environmental Quality.
7. August 27, 2001, *RCRA Part B Permit Application Withdrawal*. Virginia Department of Environmental Quality.
8. January 23, 2006, *Final RCRA Site Visit Report – Clean Harbors*. USACE.
9. January 5, 2007, *FLA Commitment Letter*. Clean Harbors Environmental Services, Inc.
10. May 27, 2010, *Aboveground Storage Tank Closure Report*. Clean Harbors Environmental Services, Inc.

11. April 20, 2011, *RFI Report*. Clean Harbors Environmental Services, Inc.

12. January 5, 2012, *RFI Report – Comments*. Virginia Department of Environmental Quality.

13. April 24, 2014, Revised Risk Assessment Section of RFI Report. Clean Harbors Environmental Services, Inc.

14. April 24, 2014, Revised Risk Assessment Tables of RFI Report. Clean Harbors Environmental Services, Inc.

15. May 14, 2015, *Risk Assessment Results and Corrective Action Path Forward*. Virginia Department of Environmental Quality.