

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

STATEMENT OF BASIS
FINAL PERMIT
FOR CORRECTIVE ACTION

WASHINGTON RESEARCH CENTER
7500 GRACE DRIVE
COLUMBIA, MARYLAND 21044
EPA ID NO. MDD074933961

I. Introduction

The United States Environmental Protection Agency (EPA) issued a permit (Final Permit) for Corrective Action under the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984 (RCRA), 42 U.S.C. §§ 6901-6992k, for the facility owned and operated by W. R. Grace & Co.-Conn. (W.R. Grace or Permittee) and located at 7500 Grace Drive in Columbia, Maryland (Facility). Pursuant to 40 C.F.R. § 124.7, EPA has prepared this Statement of Basis (SB) to explain to the public the background and basis for the Final Permit.

The Final Permit consists of three (3) sections: The Introduction which sets forth the legal authority for issuing the Final Permit in final form, Part I which contains standard conditions applicable to all hazardous waste management facilities, and Part II which contains Facility specific conditions that address corrective action obligations at the Facility.

II. Facility Background

The Facility is located in Columbia, Maryland, northeast of Route 32 and north/northwest of Cedar Lane. The Facility subject to this Final Permit consists of approximately 64 acres, including landscaped grassy areas; office, research and support buildings; two ponds, and wooded areas. The Middle Patuxent River is located just east of the Facility. See Attachment A of the Final Permit for a Facility map.

W.R. Grace operated a research and development facility, known as the Washington Research Center, at the Facility from the late 1950s until the late 1990s, when W.R. Grace's Davison Chemical Division and Davison Chemical corporate headquarters moved to the Facility. During the 1960s, W.R. Grace burned and disposed of wastes in an area referred to as the Former Landfill Area located in the northeast area of the Facility. The Former Landfill Area covers approximately 7000 square feet. In 1985, W.R. Grace removed and disposed of waste from the Former Landfill Area and closed

the landfill.

W.R. Grace used a former drum storage area, which is located west and north of Building 16, for the collection, staging and storage of drummed solvent wastes. Leaking drums in the storage area are believed to have been the source of groundwater contamination at the Facility. In 1986, W.R. Grace detected volatile organic compounds, including trichloroethene and its degradation products, in drinking water wells SW8 and SW9 at the Facility. Those wells were subsequently converted to groundwater remediation pumping wells and the Facility is now supplied with public water.

On July 10, 1992, EPA issued a HSWA Corrective Action Permit (EPA I.D.# MDD074933961) to the Permittee under the authority of Section 3004(u) RCRA, 42 U.S.C. Section 6924(u) (Original Permit). The Original Permit, which on its terms expired on August 14, 2002, was administratively continued under 40 C.F.R. § 270.51. EPA issued two subsequent permit modifications in 2007 and 2016, respectively. The 2007 Permit Modification became effective on November 30, 2007 (First Permit Modification) and the 2016 Permit Modification (Second Permit Modification) became effective on January 1, 2016. The Original Permit, as modified by the First and Second Permit Modifications, expired on November 30, 2017. The Original Permit was administratively continued until the Final Permit for the Facility became effective.

The Original Permit contained standard permit conditions as well as the requirement to conduct a RCRA Facility Investigation (RFI) to, among other things, characterize the nature, extent, concentration and rate of migration of releases of hazardous waste or hazardous constituents from each SWMU into groundwater, surface water and/or soil.

The First Permit Modification required the implementation of the Final Remedy selected in the Final Decision and Response to Comments dated September 14, 2006 (FDRTC). For soils, the Final Remedy for the Facility consists of no further action because EPA had determined that there was no threat of exposure from direct contact with Facility soils. For Facility-related groundwater, the Final Remedy consists of operating a groundwater recovery and treatment system for the Facility and monitored natural attenuation (MNA) with institutional controls for Former Landfill Area. In April 2014 EPA approved the temporary (eighteen (18) month) shutdown of the groundwater recovery and treatment system as part of the Interim Monitoring Plan to assess changes in site groundwater conditions during the discontinuation of the groundwater extraction/treatment at the Facility. The temporary shutdown also allowed evaluation of the appropriateness of transitioning to a monitoring only program. Data collected during the eighteen (18) month Interim Monitoring Plan demonstrated that monitoring only may be an appropriate remedy for the Facility and the operation of the pump and treat system in this area may no longer be warranted.

With the Second Permit Modification, EPA approved the removal of the 58-acre GF Columbia Parcel from the 122-acre Facility property subject to the requirements of the Original Permit and the First Permit Modification. EPA has determined that no additional corrective measures are necessary on the GF Columbia Parcel because there is

no further action necessary for Facility soils and there is no Facility-related groundwater contamination under the GF Columbia Parcel.

With the Final Permit, the Permittee shall implement a Facility-wide groundwater monitoring program in accordance with the Sampling and Reporting Plan, approved by EPA on February 13, 2017. In addition, the permittee shall abide by the institutional controls which include groundwater use restrictions prohibiting the development of onsite wells at the Facility for drinking water or other domestic uses. The prohibition shall remain in effect for as long as necessary to minimize potential exposure until Groundwater Cleanup Standards for the Facility are demonstrated to be achieved and maintained in the long-term. The Permittee shall continue to maintain assurances of financial responsibility, initially established under the First Permit Modification, for completing the Final Remedy under this Permit as required by Section 3004(u) of RCRA, 42 U.S.C. § 6924(u).