

Statement of Basis

**SABIC Innovative Plastics US LLC
(Formerly General Electric Co.)
WVD089911854
Washington, WV**

July, 2008

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Appendix A

I. Introduction

The United States Environmental Protection Agency ("EPA") has prepared this Statement of Basis ("SB") for the SABIC Innovative Plastics US LLC ("SABIC Innovative Plastics") manufacturing plant in Washington, West Virginia ("the Facility" or "the Site"). The purpose of this Statement of Basis is to notify the public of EPA's proposed Corrective Measures, or remedy, for the Site. In this Statement of Basis EPA explains the RCRA Corrective Action investigation and interim measures for soil, sediment, groundwater and surface water that were implemented at the Facility over a three-year period from November 1995 through November 1998. In this document EPA also summarizes the process employed to evaluate air emissions from the operating units in the Facility's Wastewater Treatment plant and describes the changes made to reduce these emissions as part of the RCRA Corrective Action Program.

EPA and the State recommend that a determination of Corrective Action Complete with Controls for the facility is appropriate. EPA's proposed remedy, set forth in this Statement of Basis, is the continued Operation, Maintenance and Inspection activities at three (3) Solid Waste Management Units (designated as SWMUs 14,17 and 39) and one (1) Area Of Concern (designated as AOC H), all as originally undertaken by GE and as currently performed by SABIC Innovative Plastics.

This document summarizes information that can be found in greater detail in the RFI and CMS reports and other documents contained in the Administrative Record for the Facility. The Administrative Record is located at EPA Region III, 1650 Arch Street, Philadelphia, Pa 19103 and at the Wood County Public Library, 3100 Emerson Ave., Parkersburg, WV. EPA and the State of West Virginia Department of Environmental Protection ("WVDEP") encourage the public to review these other documents in order to gain a more comprehensive understanding of the Facility and RCRA activities that have been conducted there.

The selected remedy will be described in a Final Decision and Response to Comments. EPA anticipates having the selected remedy implemented through a module to be included in a permit to be issued by the WVDEP.

II. Facility Background

The Facility which was originally built by Borg-Warner in 1957 produces plastics in the form of pellets and flakes from basic raw materials which include Acrylonitrile, Styrene and 1,3 Butadiene. In 1988, General Electric ("GE") Plastics took ownership of the Washington site through acquisition of the Borg-Warner Chemical business. EPA Region III issued a final HSWA RCRA Corrective Action Permit ("CAP") to GE Plastics in May 1995 that required investigation of 23 Solid Waste Management Units (SWMUs) and 5 Areas of Concern (AOCs). Pursuant to the CAP, GE Plastics developed Corrective Action Work Plans covering RCRA Facility Investigations (RFI), Verification Investigations (VI), and Interim Measures (IM) that were approved by EPA Region III between September and November 1995. Fieldwork began in March 1996 and was conducted in three separate mobilizations during 1996, 1997, and 1998. During the course of the investigations, GE Plastics identified six new SWMUs and two new AOCs that were incorporated into the Correction Action Permit.

On August 31, 2007, General Electric sold its plastics division, GE Plastics, to SABIC Innovative Plastics. Through this acquisition the former GE Plastics business became SABIC Innovative Plastics which assumed responsibility for the RCRA Corrective Action Permit as well as other governmental permits, authorizations and licenses in connection with the operation of the Facility.

Facility Location

The Facility is located in Washington, West Virginia on the eastern bank of the Ohio River which serves as a primary route of transportation of the raw materials that arrive by barge. Washington is approximately 5 miles south of Parkersburg on State Route 892. The Facility's property includes land on the east side of State Route 892 where the Facility maintains an inactive and an active non-hazardous waste landfill and a natural gas well. Access to the Facility is controlled by perimeter fence and 24-hour surveillance.

The Facility location is shown on the United States Geological Survey ("USGS") 86102, Little Hocking, Ohio quadrangle in Figure 1, which is attached as Appendix A to this SB.

Environmental Setting

The Facility is located on a topographically flat area on the eastern bank of the Ohio River. This area, known as the Washington Bottoms, is a geological sedimentary deposit known as a point bar. The alluvial sediments underlying the Facility are well sorted and become finer grained near the surface. The fine-grained, near-surface soils have helped reduce the potential impact of surface or near-surface contamination on groundwater and other media. The coarser, deeper sediments consisting of coarse sands and gravels are a plentiful source of groundwater for the historic water supply wells that the Facility operates to support production activities. This groundwater extraction system has resulted in the formation and maintenance of a site-wide groundwater containment system that effectively prevents offsite migration of groundwater. The local municipal supply wells are located 1.7 miles south of the Facility, well outside the zone of influence of Site operations. Prevailing winds are generally from the south, south-west, and west, and are redirected toward the north by the higher topography located immediately to the east of the Facility. Adjacent land uses are primarily non-residential. A more comprehensive discussion of the physiographic setting can be found in the RCRA Facility Investigation Final Report dated April 2001.

Local Hydrogeology

The groundwater table is between 50 feet and 75 feet below grade within the alluvial sediments that underlie the manufacturing area. Groundwater flows from the highlands in the east toward the Ohio River in the west. An array of historical groundwater production wells pump groundwater from the western and northern boundaries of the Facility to provide water for production uses. This continuous pumping results in a depression of the water table locally and effectively prevents offsite migration of groundwater downgradient of the production areas.

The local municipal water supply wells are similarly located within the alluvial sediments adjacent to the Ohio River, but are located well south of the Facility and are not influenced in any way by Facility operations. The Facility receives its potable water from the municipal supply system. Onsite groundwater is not used for potable water.

List of SWMUs and AOCs

GE conducted a Verification Investigation and a RCRA Facility Investigation, pursuant to the CAP, for the following SWMUs and AOCs:

VERIFICATION INVESTIGATION

Unit Number	Unit Name
SWMU 33	Wastewater Treatment Plant
SWMU 39	Environmental Building Operations Wash Rack
SWMU 48	Floor Sweepings Rolloff
AOC L	Washington Emergency Training Center

RCRA FACILITY INVESTIGATION

Unit Number	Unit Name
SWMU 3	Former Pre-shipment Drug Storage Area
SWMU 5	Empty Drum Storage Area
SWMU 7	Former Waste Oil Underground Tank
SWMU 14	Former Landfill A
SWMU 15	Former Landfill B
SWMU 17	Former Landfill D
SWMU 18	Former Landfill E
SWMU 19	Former Landfill F
SWMU 20	Former Landfill H
SWMU 21	Former Landfill J
SWMU 22	Former Landfill K
SWMU 23	Former Landfill L
SWMU 24	Former Sludge Farm South
SWMU 25	Former Sludge Farm North
SWMU 26	Cyclac Coagulum Pit
SWMU 27	Latex A Coagulum Pit
SWMU 28	Latex B Coagulum Pit
SWMU 29	Former Open Trash-burning Pit
SWMU 35	Process Sewer System
SWMU 46	Chemical test-burn bunker
SWMU 49	Former Latex A Coagulum Pit Settling Ponds
SWMU 50	Former Latex B Coagulum Pit Settling Ponds
SWMU 51	Styrene Truck Loading/Unloading Area
SWMU 52	Former Buried Latex Area
SWMU 53	Former Laboratory Waste Pits
SWMU 54	Former Resin/Coagulum Settling

	Trenches	
Unit Number	Unit Name	
AOC A	Acrylonitrile Spill Area	
AOC D	Soy Bean Pond	
AOC E	Fire Training Area	
AOC H	Diesel Fuel Tank Area	
AOC I	Barge Transfer Line-Leak Area	
AOC M	Former Pit Under Fire Training Area	

III. Corrective Action Summary

Three key elements of GE's strategy to meet the RCRA Corrective Action Permit requirements were:

- The application of risk-based principles to prioritize the SWMUs/AOCs (refer to Table 6.6 1996 RCRA Facility Investigation Report)
- The utilization of the Interim Measures provision under the CAP to rapidly achieve source stabilization
- Complete implementation of Interim Measures such that they served as final remedies

This strategy was consistent with EPA's risk assessment guidelines and policy and enabled GE and EPA to work quickly and efficiently through the requirements of the Corrective Action process and yield significant environmental improvements at the Facility in a relatively short period of time.

The SWMU locations are shown on Plate 1 located in Appendix A.

The following table summarizes the investigations performed to assess the conditions at each SWMU and AOC. The table also provides an overview of the findings from the respective investigations (namely, Verification Investigation and RFI), and describes the Interim Measures which were selected by EPA and implemented by GE to mitigate impacts to the media of concern.

SWMU/AOC	Investigation	Findings	Interim Measures
SWMU 33 Wastewater Treatment Plant	Investigated process units to determine the structural integrity of the units. Soil borings were drilled to test subsurface soils to determine if there were measurable impacts from historic operations. Air dispersion modeling was performed to evaluate the offsite impact of air emission from the WWTP.	Operating basins were found to be structurally sound. Soils showed very limited and disperse contamination and not of the character to be expected from wastewater releases. Most constituents were detected at concentrations far below applicable residential or industrial screening values and posed no risk to human health or groundwater. Air dispersion models suggested that emissions of Acrylonitrile had the potential to exceed risk-based target levels off site.	Risk-based evaluations concluded that no action was necessary for soils. GE Plastics undertook efforts to revise the WWTP configuration to reduce emissions of Acrylonitrile

SWMU/AOC	Investigation	Findings	Interim Measures
SWMU 39 Environmental Building Operations Wash Rack	Evaluated the integrity of the floor sump, drain and dry well. Soil samples collected to assess impact to soils	A breach in the drain line and poor integrity of the floor sump was discovered. Residual organic compounds in soils were found to be well below the residential screening level and posed no risk to human health or groundwater.	IM involved hydrostatic testing, integrity inspection, video survey and soils sampling. Structural deficiencies were repaired
SWMU 48 Floor Sweepings Rolloff	Surface soil samples collected in the immediate vicinity of the rolloff	Only Arsenic was found to exceed the industrial screening level in soils but was well within the range of background concentrations. No impact on groundwater.	Rolloff was relocated to newly constructed secondary containment area
AOC L Washington Emergency Training Center	Surface soil samples collected to assess potential impact from historic use	No evidence of unacceptable release. No exceedance of soil screening values. No impact on groundwater.	None required
SWMU 3 Former Drum Storage Area	Surface soil samples collected to assess potential impact from historic use	Isolated sample exceedance for lead and arsenic. Additional sampling conducted show no exceedances of screening levels. No impact on groundwater.	None required based on isolated occurrence
SWMU 5 Empty Drum Storage Area	Surface soil samples collected to assess potential impact from historic use	No evidence of unacceptable release. No exceedance of soil screening values. No impact on groundwater.	None required
SWMU 7 Former Waste Oil UST	Surface soil samples collected to assess potential impact from historic use	No evidence of unacceptable release. No exceedance of soil screening values. No impact on groundwater.	None required
SWMU 14 Former Landfill A	Geophysical survey, surface and subsurface soil samples collected to assess potential impact	Exceedences of screening levels were found for both organic and inorganic constituents. Limited potential to impact groundwater. Potential existed for slope erosion to impact water quality in Pages Run. No buried containers present	Cover on Landfill A was extensively upgraded in 1997 to prevent erosion, minimize infiltration and eliminate potential contact with waste

SWMU/AOC	Investigation	Findings	Interim Measures
SWMU 15 Former Landfill B	Geophysical surveys, soil borings and sampling conducted	Buried drums and soil contamination encountered. Although drums were intact there was a potential to impact groundwater if they were to leak.	All buried drums and affected soils were excavated and disposed off-site, post-excavation samples collected and the area backfilled with uncontaminated soil
SWMU 17 Former Landfill D	Geophysical survey, soil borings drilled to collect subsurface soil samples and delineate extent of fill. Groundwater tested within waste	Three inorganic compounds exceeded soil screening levels. Two organic compounds exceeded soil screening levels for soil to air transfer. Limited potential to impact groundwater. No buried containers. Potential existed for slope erosion to impact water quality in Pages Run.	Slope stabilization and placement of soil cover was completed in 1995.
SWMU 18 Former Landfill E	Geophysical survey, soil borings drilled to collect subsurface soil samples and delineate extent of fill.	Two volatile organic compounds exceeded screening criteria in only one sample. Very limited potential to impact groundwater.	None required
SWMU 19 Former Landfill F	Geophysical survey, soil borings drilled to collect subsurface soil samples and delineate extent of fill.	No Exceedences of EPA Region III Risk Based Concentrations.	None required
SWMU 20 Former Landfill H	Geophysical survey, soil borings drilled to collect subsurface soil samples and delineate extent of fill.	No Exceedences of EPA Region III Risk Based Concentrations.	None required
SWMU 21 Former Landfill J	Geophysical survey, no evidence of waste disposal, no sampling performed	No sampling required	None required
SWMU 22 Former Landfill K	Geophysical survey, soil borings drilled to collect subsurface soil samples and delineate extent of fill.	No evidence of an unacceptable release. Organics within range of background concentrations. No potential impact on groundwater.	None required

SWMU/AOC	Investigation	Findings	Interim Measures
SWMU 23 Former Landfill L	Geophysical survey, soil borings drilled to collect subsurface soil samples and delineate extent of fill.	No Exceedences of EPA Region III Risk Based Concentrations.	None required
SWMU 24 South Land Farm	Geophysical survey, soil borings drilled to collect subsurface soil samples and delineate extent of fill.	No Exceedences of EPA Region III Risk Based Concentrations.	None required
SWMU 25 North Land Farm	Geophysical survey, soil borings drilled to collect subsurface soil samples and delineate extent of fill.	No Exceedences of EPA Region III Risk Based Concentrations.	None required
SWMU 26 Cyclac Coagulum Pit	Soil borings to collect samples	No Exceedences of EPA Region III Risk Based Concentrations.	Open pit was replaced and reconfigured to minimize air emissions
SWMU 27, 28 Latex A and B Coagulum Pits	Soil borings to collect samples	No Exceedences of EPA Region III Risk Based Concentrations.	Waste handling process revised and pits no longer used for coagulation
SWMU 29 Trash Burning Pit	Soil borings to collect samples	Exceedences of residential soil screening levels for one semi-volatile and two inorganic constituents. One inorganic (arsenic) exceeded the industrial soil screening level but was within the range of background. No potential impact on groundwater.	None required
SWMU 35 Process Sewer System	Remote camera survey used to evaluate condition of pipe and to identify sampling locations. Soil samples collected to assess impact of historic operation	Minor exceedences of one semi-volatile and two inorganic compounds but no significant soil contamination encountered. Potential to impact groundwater.	Entire process sewer was re-lined in-situ to repair defects and as a future preventative measure
SWMU 46 Chemical Test Burn Bunker	Soil borings drilled to collect subsurface soil samples and delineate extent.	No Exceedences of EPA Region III Risk Based Concentrations.	None required
SWMU 49 Latex A & B Settling Ponds	Soil borings drilled to collect subsurface soil samples	No Exceedences of EPA Region III Risk Based Concentrations.	None Required

SWMU/AOC	Investigation	Findings	Interim Measures
SWMU 50 Former Latex B Coagulum Pit Settling Ponds	Subsurface soil samples collected from native soils below the base of the former ponds	No Exceedences of EPA Region III Risk Based Concentrations.	None Required
SWMU 51 Styrene Loading Area	Soil borings drilled and samples collected to assess impact of historic operation	No Exceedences of EPA Region III Risk Based Concentrations.	Surficial soils were excavated disposed of off-site and construction of concrete secondary containment was completed
SWMU 52 Former Buried Latex Area	Soil borings drilled to delineate aerial extent and collect subsurface soil samples	One inorganic (arsenic) exceeded soil screening levels but was within range of background concentrations. No potential to impact groundwater.	None required
SWMU 53 Former Laboratory Waste Pits	Soil borings drilled to delineate aerial extent and collect subsurface soil samples	One inorganic (arsenic) exceeded soil screening levels but was within range of background concentrations. No potential to impact groundwater.	None required
SWMU 54 Former Resin/Coagulum Settling Trenches	Soil samples collected	Arsenic concentrations found at SWMU 54 are statistically indistinguishable from background.	None Required
AOC A Acrylonitrile Spill Area	Soil borings drilled to collect subsurface soil samples	No exceedences of EPA Region III Risk Based Concentrations.	None Required
AOC D Soy Bean Pond	Soil samples to collect subsurface soil samples	No exceedences of EPA Region III Risk Based Concentrations.	None Required

SWMU/AOC	Investigation	Findings	Interim Measures
AOC E Fire Training Area	Soil samples collected	Elevated levels of TPH Limited potential to impact groundwater.	Impacted soils were excavated and properly disposed. Post-excavation confirmation samples were collected. Concrete secondary containment was installed over the entire area
AOC H Diesel Fuel Tank Area	Soil samples collected	Elevated levels of TPH just outside diked area. No potential to impact groundwater.	Impacted soils were excavated and properly disposed. Post-excavation confirmation samples were collected. Concrete secondary containment was installed over the entire area
AOC I Barge Transfer Line Leak Area	Soil samples collected and air emission estimates made	No Exceedences of EPA Region III Risk Based Concentrations.	The underground line was replaced with a new above ground pipe.
AOC M Pit under fire training area	Soil samples collected	Elevated levels of TPH. Limited potential to impact groundwater.	Impacted soils were excavated and properly disposed. Post-excavation confirmation samples were collected. Excavation was backfilled with clean soil. Concrete secondary containment was installed over the entire area as part of the IM for AOC E

IV. Interim Measures

All interim measures were completed after discussions with and approval from EPA. A report detailing the interim measures titled Phase I Interim Measures Implementation Report was prepared by GE in December, 1996. Interim measure implementation began in April 1996. Three general methodologies were employed to mitigate discovered impacts and to prevent future recurrences. These were:

1) **Upgrades or Replacements** - Upgrades and replacements consisted of replacing or repairing piping, constructing more expansive secondary containment areas, and reconfiguring operations in such a way as to reduce or eliminate the potential for future releases. The SWMUs and AOCs where these methods were applied are listed immediately below:

- Environmental Wash Rack (SWMU 39)
- Coagulum Pits (SWMU 27 and 28)
- Fire Training Area (AOC E)
- Process Sewer System (SWMU 35)
- Barge Transfer Line (AOC I)
- Wastewater Treatment Plant (SWMU 33)
- Styrene Loading Area (SWMU 51)
- Floor Sweepings Rolloff (SWMU 48)
- Diesel Fuel Tank Area (AOC H)

2) **Soil/Waste Removal** –Contaminated soil/waste removal was completed when encountered during the investigation activities. Impacted soils were excavated, characterized and transported offsite for proper disposal. In all cases, post-excavation confirmation samples were collected. Buried drums found at former Landfill B containing solids and liquids were excavated and overpacked where necessary to prevent the possibility of release during transportation. SWMUs and AOCs where these activities were completed are listed below:

- Former Waste Oil UST (SWMU 7)
- Diesel Fuel Tank Area (AOC H)
- Former Landfill B (SWMU 15)
- Fire Training Area (AOC E)
- Pit under Fire Training (AOC M)
- Former Laboratory Waste Pits (SWMU 53)
- Styrene Loading Area (SWMU 51)

3) **Slope Stabilization** - A riprap revetment was installed along the toe of slope of Landfill A (SWMU 14) to prevent bank erosion in the adjacent ephemeral stream (Pages Run) during flood events. A compacted, vegetated cover was installed over the entire Landfill A area as a final measure to minimize infiltration and prevent erosion or possible exposure of waste. Slope stabilization for Landfill D (SWMU 17) consisted of placement of a soil cover and revised surface storm drain to improve drainage and minimize erosion.

V. Groundwater Quality

Based on the findings from the 1996 fieldwork, the groundwater investigation plan originally described in the EPA-approved RFI Work Plan was modified by GE. The revised approach, approved by EPA, took advantage of the knowledge gained from the source area soil investigations which indicated that groundwater was unlikely to have been adversely impacted by historic operations.

In 1997, groundwater was sampled from the 14 active production wells, 10 pre-existing monitoring wells and 10 wells installed at the direction of EPA to specifically target SWMUs and AOCs with the highest probability of

adversely impacting groundwater. A well location map is provided in Figure 5.8 of the RCRA Facility Investigation Final Report issued April 2, 2001.

All groundwater samples were extensively analyzed for volatile and semi-volatile organic compounds, a suite of inorganics specified in the RCRA Corrective Action Permit and petroleum hydrocarbons. The groundwater sampling produced a high quality data set that provided a representative assessment of site-wide water quality and a focused assessment of water quality immediately downgradient of the most significant potential sources of contamination. The results demonstrated negligible impact to groundwater after over 40 years of Facility operation.

VI. Emissions

The potential risks posed by emissions of hazardous air pollutants were evaluated using a tiered approach. Tier 1 involved a review of historic fence line data from 1990-1992 which suggested potentially unacceptable risks (greater than 10^{-4}) may have been posed by emissions of acrylonitrile and 1,3 butadiene. SWMUs and AOCs with the potential to emit these chemicals were evaluated further. AOC I, the location of a former underground transfer line leak where 1,3 butadiene was detected in shallow soils up to 27 parts per million ("ppm"), open top sumps in the wastewater stream (coagulation pits) where both 1,3 butadiene and acrylonitrile were emitted, and the Waste Water Treatment Plant (WWTP) itself which was a significant emission source for acrylonitrile were subject to this additional evaluation.

Tier 2 evaluated the risk posed by shallow soils impacted from the historic leak of 1,3 butadiene using a conservative box model which indicated soil concentrations were approximately three orders of magnitude below levels which could pose an unacceptable risk.

Further evaluation of the coagulation pit and the WWTP emissions were conducted using a three-dimensional air dispersion computer model. The model and its input parameters were approved by USEPA in 1996 and enabled prediction of concentrations at focused receptors off site. Initial model runs (1997) indicated potentially unacceptable risks posed by acrylonitrile emissions from the WWTP while coagulum pit emissions were within the acceptable range.

GE subsequently reconfigured the WWTP to reduce or eliminate emissions from the equalization basin (EQ Basin), the primary source of acrylonitrile emissions. These changes included construction of a new spill basin to contain significant spills for treatment prior to discharge and removal of the equalization basin from service to reduce air emissions.

The air dispersion model was rerun in 2000 with the new configuration and the predicted concentrations were found to be within EPA's acceptable range. Subsequent operational changes have reduced acrylonitrile concentrations in the wastewater stream resulting in total emissions that are currently less than or equal to those modeled in 2000.

VII. Summary of Facility Risks

All target analytes detected above the sample quantitation limit or the laboratories working detection limit were included in the database for analysis. Contaminants of potential concern (COPC) were identified based on the range of concentrations and the frequency of detection of each analyte. COPCs were then selected for inclusion in a Human Health Risk Assessment based on EPA screening criteria using the following steps:

- Analysis and evaluation of data quality;
- Utilization of risk-based concentration screen to identify COPCs for the soil ingestion pathway;
- Utilization of Soil Screening Levels for volatile compounds in soil to identify COPCs for the soil-air inhalation pathway, and
- Review of the preliminary list of COPCs and exclusion of analytes based on additional considerations such as essential nutrient status, comparison to background, and evaluation of toxicity in cases where there are no risk-based screening criterion

A Human Health Risk Assessment was performed by GE Plastics in a manner consistent with EPA Guidance and based on the projected long-term industrial use of the Facility. The risk characterization process is described fully in Section 6 of the RCRA Facility Investigation Final Report issued April 2, 2001. Industrial Exposure Risk Based Concentrations (RBCs) were chosen for screening of soil at all SWMUs and AOCs within the perimeter fence where access is limited to site workers. Residential RBCs were applied for those few SWMU and AOCs located outside the fence. The results of the risk assessment indicate that complete exposure pathways with potential adverse impacts to human health or the environment are not present at the Facility. Therefore, further corrective measures, beyond those already implemented under the Interim Measures provisions of the CAP, are not necessary. Operation and Maintenance will be required at four of the SWMUs and AOCs.

VIII. Evaluation of EPA's Proposed Remedy

EPA has evaluated the proposed remedy, along with the already completed interim measures, using the criteria that EPA uses to evaluate proposed final remedies under the RCRA Corrective Action Program. The criteria are considered in two phases. In the first phase, EPA evaluates four remedy threshold criteria as general goals. In the second phase, for those remedies that meet the threshold criteria, EPA then evaluates five balancing criteria to determine which proposed remedy alternative provides the best relative combination of attributes.

A. Threshold Criteria

EPA's evaluation of the threshold criteria follows:

1. Be protective of human health and the environment

The implementation of interim measures at the 18 SWMUs and AOCs has removed contaminants from site soils, reduced air emissions, stabilized waste management areas and provided secondary containment to prevent environmental impacts from ongoing operations. These actions have mitigated any environmental impacts from historic operations and overall have resulted in the Facility posing no unacceptable risk to human health and the environment.

2. Attain media cleanup standards

Groundwater sampling performed during the RFI produced a high quality data set that provided both a representative assessment of site-wide water quality and a focused assessment of water quality immediately down gradient of the SWMU and AOCs most likely to have groundwater impacts. The results demonstrate negligible impacts to groundwater during over 40 years of Plant operation. Additionally, the results of water-level surveys conducted in 1987, 1993 and repeated again during the RFI demonstrate that onsite pumping maintains a continuous inward gradient that prevents offsite migration of groundwater along the entire boundary of the facility. Analytical results of surface water, sediment, groundwater and soil have been compared with applicable MCLs and RBCs in the RFI. Based on the projected long-term industrial use of the facility, industrial exposure RBCs were chosen for the screening comparison of the soil media at all SWMU and AOCs except three SWMUs (7,20, and 24) where residential exposure RBCs were applied. No unacceptable risks have been identified for exposure to soil, sediment, or groundwater.

3. Control the sources of releases

RFI and VI data collection and analyses of several hundred soil samples from all SWMUs and AOCs indicate that no additional corrective measures are necessary for soil. The distribution of residual contaminants in soils (post interim action) at the SWMUs and AOCs is such that there is an insufficient mass of contamination in any one area to remain a concern for potential leaching to groundwater. In addition, the facility has installed and upgraded secondary containment in areas where there is a potential to impact groundwater as required by the West Virginia Groundwater Protection Act.

A human health risk assessment was conducted for residual contaminants detected in soil at concentrations exceeding risk-based screening levels. Populations with the potential for exposure to contaminated media related to the Facility operations include onsite workers only. No ecological receptors were identified at the Site during the RFI.

The results of the human health risk assessment indicate that there are no risks resulting from exposures to non-carcinogens in soil that exceed USEPA's risk target of 1.0. In addition, there are no cancer risks resulting from exposure to soil at the Site that exceed USEPA'S carcinogenic risk range. Therefore, no further remedial action other than visual inspections of interim measures already in place is required at the Site.

4. Comply with applicable standards for waste management

The Interim Measures implemented by GE at the 18 SWMUs and AOCs have collectively removed contaminants from Site soils, reduced air emissions, stabilized waste management areas and provided secondary containment to prevent environmental impacts from ongoing operations. These actions have mitigated any negative environmental impacts from historic operations and overall have resulted in the Facility posing no unacceptable risk to human health and the environment. In order to sustain these benefits the current owner, SABIC Innovative Plastics, will be required to continue to operate and maintain the Facility in accordance with State and Federal permits, and program requirements. Three SWMUs and one AOC that will require periodic inspections are listed below. The inspection schedule will be determined by the WVDEP in their permit for this facility.

SWMU/AOC	Activity	Frequency	Regulatory Basis
SWMU 39 Environmental Building Operation Wash Rack	Cleaning of wash rack floor and floor sump. Structural inspection of sump, sump-slab joint and drain pipe connection	Quarterly	West Virginia Groundwater Protection Rule Title 47, Series 58
SWMU 14 Former Landfill A	Inspections of vegetative cover and riprap. Maintenance may include re-seeding, and replacement of earthwork, as needed	Quarterly and after heavy precipitation events	West Virginia Groundwater Protection Rule Title 47, Series 58
SWMU 17 Landfill D	Inspections of cover soils and storm drain. Maintenance may include replacement of earthwork, as needed	Quarterly and after heavy precipitation events	O&M Plan submitted to EPA in March 1996. West Virginia Groundwater Protection Rule Title 47, Series 58 -and- NPDES Permit
AOC H Diesel Fuel Tank Area	Inspection of secondary containment pad and sump	Quarterly	West Virginia Groundwater Protection Act Rule 47, Series 58

B. Balancing Criteria

Because the proposed remedy consists of the Interim Measures that have already been completed and are operating, and because EPA is satisfied that the proposed remedy is protective of human health and the environment, an evaluation of other alternative remedies is not necessary. Specifically, EPA is not evaluating among alternatives, and, therefore, a complete evaluation of the balancing criteria is unnecessary. Nonetheless, EPA presents the five criteria below to illustrate the suitability of the proposed remedy:

1. Long-term reliability and effectiveness

The Facility's Interim Measures have provided a permanent, effective remedy to address soil contamination and air emissions. RFI and VI data collection and analyses of several hundred soil samples from all SWMUs and AOCs indicate that no additional corrective measures are necessary for soil. Groundwater sampling performed during the RFI revealed negligible impacts to groundwater. The distribution of residual contaminants in soils (post interim action) at the SWMUs and AOCs is such that there is an insufficient mass of contamination in any one area to remain a concern for potential leaching to groundwater. In addition, GE has installed and upgraded secondary containment in areas where there is a potential to impact groundwater as required by the West Virginia Groundwater Protection Act.

2. Reduction of toxicity, mobility or volume of wastes

A human health risk assessment (HHRA) was conducted for residual contaminants detected in soil at concentrations exceeding risk-based screening levels and soil screening levels (SSLs). The results of the HHRA indicate that there are no risks resulting from exposures to non-carcinogens in soil that exceed USEPA's risk target of 1.0. Therefore, there are no concerns for non-cancer effects resulting from exposures to soil for commercial workers at the site. In addition, there are no cancer risks resulting from exposure to soil at the site that exceed EPA's acceptable risk range of 10^{-6} to 10^{-4} and there were no cumulative risks for any SWMU that exceeded a risk of 10^{-5} . Groundwater quality indicates negligible impact, in spite of more than 40 years of operation, due in part to the lower permeability of near surface soils, the volatile and highly degradable nature of most chemicals in use at the Site and the rate of groundwater movement beneath the Site. Sample results from surface water and sediment also show negligible impacts, including ecological receptors, from the Site's historic operations.

3. Short-term effectiveness

The short-term effectiveness criterion is intended to address hazards posed during the implementation of corrective measures. Short-term effectiveness is designed to take into consideration the impact to site workers and nearby residents during construction. Examples of hazards addressed by this standard include the potential for volatilization of organic contaminants, the spread of contamination through dust generation, and hazardous materials spills resulting from waste loading and transport operations. Facility operating plans such as the health and safety plan, contingency plan, emergency preparedness and prevention plan, and spill prevention, control and countermeasures have been adequate to ensure that all short-term hazards have been addressed such that the Interim Measures were protective of human health and the environment during short-term remedy implementation.

4. Implementability

Implementability includes the technical and administrative feasibility of constructing and operating the proposed remedy. The proposed remedy for the Facility is both technically and administratively feasible. No regulatory impediments were encountered during the construction and implementation of the Interim Measures, and no future impediments are anticipated for the continued operation of the Interim Measures as the final remedy. Further, EPA expects that remedy, once finalized will be implemented through a module to be included in a new permit to be issued by the WVDEP.

5. Cost

GE has spent in excess of \$2 million on the Corrective Action Program which included numerous upgrades to operations to minimize the potential for releases to soil, groundwater or air from future operations. SWMUs 14, 17, 39, and AOC H have undergone investigation and corrective measures as part of the RCRA Corrective Action conducted at the facility by GE. The continued maintenance of these areas is conducted as part of the routine operations at the Facility in compliance with the WV Groundwater Protection Rule Title 47, Series 58.

IX. State Acceptance

WVDEP worked closely with the EPA in providing guidance and oversight during the completion of interim measures at the GE facility. WVDEP has approved this Statement of Basis and will incorporate information pertaining to the Corrective Action Program as a module into the State RCRA Permit.

X. Public Participation

EPA is requesting comments from the public on its determination of Corrective Action Complete with Controls. The public comment period will last forty-five (45) calendar days from July 23, 2008, the date that this matter is publicly noticed in the Parkersburg News. Comments may be sent to EPA in writing at the EPA address listed below, and all persons who comment will receive a copy of the final decision and a copy of the response to comments.

A public meeting will be held upon request. Requests for a public meeting should be made to Mr. Bill Wentworth of the EPA Regional Office at the address below or at (215) 814- 3184.

The Administrative Record contains all information considered by EPA when making this determination of Corrective Action Complete with Controls. The Administrative Record is available at the following locations:

U.S. Environmental Protection Agency
Region III
1650 Arch Street - 3WC23
Philadelphia, PA 19103-2029
Contact: Bill Wentworth Voice: (215) 814-3184
Fax: (215) 814-3113
Hours: Mon-Fri, 9:00 A.M - 5:00 P.M.
E-mail: wentworth.william@epa.gov

Wood County Public Library
3100 Emerson Ave.
Parkersburg, West Virginia 26104
(304) 420-4587
Hours: Monday-Thursday 9:00 am - 9:00 pm
Friday-Saturday 9:00 am - 5:00 pm

Following the forty-five (45) calendar day public comment period, EPA will prepare a final decision which will address all written comments and any substantive comments presented verbally at a public meeting. This Final Decision and Response to Comments will be incorporated into the Administrative Record. If the comments are such that significant changes are made to the proposed remedy at this facility, EPA will seek public comments on the revised proposal.

It is expected that the final remedy will be implemented by the Facility owner through a module contained in a permit to be issued by WVDEP.

XI. References

The approach, field activities, analytical results and findings from the RCRA Corrective Action program conducted by GE Plastics can be reviewed in the following documents:

- Final (EPA-approved) RCRA Corrective Action Work Plan September 11, 1995
- Interim Measure Work Plan (Vol. 2) November 29, 1995
- Phase I Interim Measures Implementation Report December, 1996
- 1996 RCRA Facility Investigation March 5, 1997 (covers 1995 and 1996 field activities)
- GE Plastics Response to EPA Comments November, 1997 (GE Plastics to D. Zielinski, EPA)
- 1997 Annual Report December, 1997
- Data Summary Report August, 1998 (GE Plastics to M. Kotsch, EPA)
- RCRA Facility Investigation Final Report April, 2001
- Letter from GE Plastics to B. Wentworth EPA, Submission of Air Dispersion Model Information in support of Human Health Environmental Indicator August 28, 2003

APPENDIX A