

COMMONWEALTH OF PENNSYLVANIA

Department of Environmental Protection  
Hazardous Sites Cleanup Program

J.C. Cleaners

Gettysburg Borough, Adams County

REVISED STATEMENT OF DECISION

The Commonwealth of Pennsylvania, Department of Environmental Protection (DEP) files this Revised Statement of Decision (SOD) in accordance with Section 506(e) of the Pennsylvania Hazardous Sites Cleanup Act (HSCA), Act of October 18, 1988, P.L. 756 No. 108, 35 P.S. § 6020.506(e).

The selected response for the J.C. Cleaners site (Site) constitutes a revision of the previously selected remedial response, documented in an April 11, 1994 SOD (1994 SOD), to address contamination of Site groundwater and soils by volatile organic compounds (VOCs) including benzene, tetrachloroethylene (PCE), trichloroethylene (TCE), and 1,2-Dichloroethylene (1,2-DCE). As revised, the remedial response provides for continued extraction and treatment of contaminated groundwater by the Gettysburg Municipal Authority's (GMA's) Well No. 6 (GMA-6), and installation of a Vapor Mitigation System (VMS) to address soil vapor intrusion at the Site. Operation of the onsite Ground Water Treatment System (GWTS) and vacuum extraction of contaminants from Site soils called for in the 1994 SOD will be discontinued.

**I. SITE INFORMATION**

**A. Site Location and Description**

The Site includes a 0.17-acre property located at 30 West Railroad Street, Gettysburg, Adams County, Pennsylvania (Adams County Tax Parcel 16-007-0157-000). This property houses a former dry-cleaning facility (Facility) that consists of two masonry block buildings that share a common exterior wall. The areas immediately east and west of the Facility are asphalt paved. The Site is in an area densely populated by commercial establishments and residential neighborhoods. The GMA, which operates a Community Water System that serves Gettysburg Borough, operates a water supply well, GMA-6, located approximately 640-ft northwest of the Facility.

**B. Site History**

In 1991, a remedial investigation revealed that the shallow and deep portions of the bedrock aquifer in the vicinity of the Facility contained concentrations of PCE, TCE and 1,2-DCE that exceeded their Medium-Specific Concentrations (MSCs) developed pursuant to the Pennsylvania Land Recycling and Remediation Standards Act (Act 2), 35 P.S. §§ 6026.101 – 6026.908. This contamination resulted from wastewater discharges from the dry-cleaning process into a leaking sewer drain located inside the Facility.

DEP added the Site to the Pennsylvania Priority List of Hazardous Sites for Remedial Response (PAPL) on May 5, 1990. The selected remedial response identified in the 1994 SOD called for the Site soils via vacuum extraction and remediation groundwater via pumping of extraction wells installed at the Facility. Remedial systems, consisting of extraction wells and a GWTS incorporating an air stripper unit with vapor phase activated carbon units, were installed at the

Facility. Operation and maintenance (O&M) of the remedial systems at the Facility began on July 10, 1997, and the Site was subsequently removed from the PAPL on October 31, 1998.

Following an equipment failure, operation of the remedial systems at the Site ceased in 2015. As a precaution, DEP began conducting monthly sampling of groundwater from GMA-6. Maximum concentrations of PCE, TCE, and 1,2-DCE in samples collected from GMA-6 since the remedial systems shut down were 120, 6.9 and 6.8; micrograms per Liter ( $\mu\text{g/L}$ ); respectively.

Though not part of the Site's remedial systems, GMA has operated, and otherwise continues to operate, a separate air stripper with 98-percent treatment efficiency for VOCs to treat water drawn from GMA-6 before it is distributed through GMA's Community Water System. Given the effectiveness of the air stripper, the observed concentrations in VOCs in GMA-6 would have to be several times greater to exceed their respective Maximum Contaminate Levels (MCLs) and MSCs, post treatment.

### **C. Release of Hazardous Substances**

The presence of TCE, PCE and 1,2-DCE in GMA-6, and the presence of benzene, TCE, and PCE, in sub-slab vapor at the Site, are evidence of a release or threat of a release of hazardous substances. Benzene, TCE, PCE, and 1,2-DCE are VOCs (collectively "Contaminants of Concern" or "COCs") are "hazardous wastes," as that term is defined under the Section 103 of the Solid Waste Management Act, 35 P.S. § 6018.103, and a "hazardous substance" as that term is defined under Section 103 of HSCA, 35 P.S. § 6020.103. When present in drinking water supplies, benzene, TCE, PCE, and 1,2-DCE pose ingestion, inhalation, and dermal exposure threats to human health. U.S. Environmental Protection Agency Maximum Contaminate Levels (MCLs), for benzene, PCE, TCE, cis-1,2-DCE, and trans-1,2-DCE in drinking water are 5, 5, 5, 70, and 100  $\mu\text{g/L}$ , respectively. See 40 C.F.R. § 141.61(a).

TCE is a colorless, nonflammable liquid with a somewhat sweet odor and a sweet, burning taste. It is used mainly as a solvent to remove grease from metal parts, but can also be found in adhesives, paint removers, typewriter correction fluids, and spot removers. Individuals who drink water containing TCE in excess of the MCL over many years may experience liver issues and may have an increased cancer risk. According to the Agency for Toxic Substances and Disease Registry's 1997 Toxicological Profile for TCE, TCE has a high propensity to volatilize from water. Elevated indoor air levels of TCE can occur within structures located on properties with TCE contaminated groundwater, and inhalation can be a major exposure pathway.

PCE is a colorless, nonflammable liquid with a somewhat sweet odor. It is used as a dry cleaning and textile-processing solvent and for vapor degreasing in metal-cleaning operations. Individuals who drink water containing PCE in excess of the MCL over many years may experience liver and kidney issues and may also have an increased cancer risk. According to the Agency for Toxic Substances and Disease Registry's 1997 Toxicological Profile for PCE, PCE has a high propensity to volatilize from water. Elevated indoor air levels of PCE can occur within structures located on properties with PCE contaminated groundwater, and inhalation can be a major exposure pathway.

1,2-cis and trans-DCE are isomers that are colorless, odorless, flammable liquids with vapors that are heavier than air. 1,2-cis and trans-DCE are used primarily as solvents in industrial processes and as a component in degreasers and cleaning products. Individuals who drink water containing 1,2-cis and trans-DCE in excess of their respective MCLs over many years may experience liver, circulatory system and nervous system issues.

Benzene is a clear, colorless-to-light yellow liquid that is highly flammable and has a sweet aromatic odor. It is only slightly soluble in water but readily soluble in most organic solvents. Benzene is also less dense than, and will float on the surface of, water. Most exposures to benzene occur by inhalation. Its odor threshold generally provides adequate warning of acutely hazardous concentrations (odor threshold 1.5 – 5 ppm). Benzene is mildly irritating to the skin, eyes, and respiratory tract. Individuals that suffer acute Benzene exposure may experience central nervous system depression and cardiac arrhythmias. Chronic exposure to benzene may result in anemia, immune system impacts, and leukemia.

## **II. RESPONSE CATEGORY**

DEP selected a remedial response at this Site to protect public health and the environment. A response action is justified in order to remove the exposure risks posed by hazardous substances in the groundwater, soil, and vapor. This determination is based upon the following conditions which exist at the site: 1) the continued release and/or presence of TCE, PCE and 1,2-DCE isomers in the groundwater and 2) the risk of actual human exposure to hazardous substances, including benzene, via inhalation, ingestion, and dermal contact.

Responses are defined under HSCA Section 103, 35 P.S. § 6020.103 as follows:

*“Interim response” Response which does not exceed 12 months in duration or \$2,000,000*

*“Remedial response or remedy.” Any response which is not an interim response.*

The response at this Site will be categorized as a Remedial Response. This action will be conducted under HSCA utilizing the Hazardous Sites Cleanup Fund.

This Remedial Response will be implemented as a final response pursuant to Section 504 of HSCA, 35 P.S. § 6020.504. Further investigation is not merited, as the source of the contamination is known.

## **III. CLEANUP STANDARDS**

Section 106(a) of Act 2, 35 P.S. § 6026.106(a), provides that the environmental remediation standards established under Act 2 shall be applicable to remedial activities conducted under HSCA. This Site will be remediated to appropriate Act 2 groundwater and soil standards for the COCs at the Site, as provided in 25 Pa. Code Chapter 250. The modification to the selected groundwater remedy remains containment and extraction of contaminated groundwater, along with pathway elimination and institutional controls. However, the containment, extraction, and pathway elimination of the contamination, via the groundwater remedy as modified, would be through the ongoing pumping and treatment of the nearby GMA-6, not from on-Site extraction wells.

Specifically, Act 2 Statewide Health Standards (SHS) will be utilized to address the COCs in groundwater at the Site, which serves as source of drinking water for the GMA's public-water system. The groundwater Act 2 SHS for TCE, PCE, and 1,2-DCE isomers are equivalent to their respective MCLs (i.e. 5 µg/L TCE, 5 µg/L PCE, 70 µg/L cis-1,2-DCE and 100 µg/L trans-1,2-DCE). See 25 Pa. Code § 250.304(c); 40 C.F.R. § 141.61(a).

Act 2 Non-residential, Site-Specific Standards (SSS) via pathway elimination, calculated pursuant to the procedures provided by 25 Pa. Code § 250.305, will be applied to the soil and vapor. As calculated, the SSS for PCE, TCE, and Benzene in soils are 18, 0.88, and 1.60 micrograms per cubic meter (µg/m<sup>3</sup>), respectively.

#### **IV. APPLICABLE, RELEVANT AND APPROPRIATE REQUIREMENTS**

Section 504 of HSCA requires that final remedial responses must meet all applicable or relevant and appropriate requirements (ARARs) and be cost effective. The primary ARAR for final remedial responses conducted under HSCA is the Land Recycling and Environmental Remediation Standards Act, Chapter 250, Administration of Land Recycling Program. DEP has determined that the selected response will comply with the cleanup standards for a final remediation under Act 2.

The following standards, requirements, criteria, or limitations are legally applicable or relevant and appropriate under the circumstances presented by the Site.

Applicable requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law, that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a state site. The "applicability" determination is a legal one and implies that the remedial action or the circumstances at the site satisfy all the jurisdictional prerequisites of a requirement.

Relevant and appropriate requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a state site, address problems or situations sufficiently similar to those encountered and their use is well suited to the particular site.

The determination of relevant and appropriate relies on professional judgment. A requirement can be judged by comparing several factors, including the characteristics of the remedial action, the hazardous substances in question, or the physical circumstances of the site, with those addressed in the requirement. It is also helpful to look at the objective and origin of the requirement.

A requirement that is determined to be relevant and appropriate must be complied with to the same degree as if it were applicable. However, there is more discretion by DEP in this determination. It is possible for only part of a requirement to be considered relevant and appropriate, the rest being dismissed, if judged not to be relevant and appropriate in a given case.

Non-promulgated or non-regulatory documents (health advisories, guidance, proposed regulations), issued by the state or federal government, are not considered ARARs and are

referred to as “to be considered” requirements or TBCs. TBCs are evaluated along with ARARs and are considered appropriate in the absence of a specific ARAR or where ARARs are not sufficiently protective in developing cleanup goals. A TBC identified for the action must be complied with to the same degree as if it were applicable.

### **ARARs**

The Pennsylvania Constitution, Article 1, Section 27.

Land Recycling and Environmental Remediation Standards Act, Act of May 19, 1995, P.L. 4, No. 1995.2, 35 P.S. Section 6026.101 et. seq. (Act 2).

Administration of the Land Recycling Program, 25 Pa. Code Chapter 250, Subchapter C (Statewide Health Standards).

Subchapter C – Statewide Health Standards

Section 250.304 – MSCs for groundwater

Section 250.305 – MSCs for soil

Section 250.307 – Inhalation numeric values

Appendix A – Table 1 – Medium-Specific Concentrations for Organic Regulated Substances in Groundwater

Administration of the Land Recycling Program, 25 Pa. Code Chapter 250, Subchapter D (Site-specific Standard).

Subchapter D – Site-specific Standard

Section 250.402 – Human health and environmental protection goals

Section 250.404 – Pathway identification and elimination

The Pennsylvania Solid Waste Management Act, Act of July 7, 1980, P.L. 380, No. 97, as amended, 35 P.S. Sections 6018.101 et. seq.

The Air Pollution Control Act, Act of January 8, 1960, P.L. 2119, 35 P.S. Sections 400 I, et. seq.

Chapter 123 - Standards For Contaminants

Section 123.1 - Prohibition of certain fugitive emissions

Section 123.2 - Fugitive particulate matter

Chapter 127 - Construction, Modification, Reactivation and Operation of Sources

Sections 127.1 - Purpose (New source emission control)

Section 127.12(a)(5) - Best Available Technology (BAT)

Section 127.71 - New or modified volatile organic compound sources

Chapter 131 - Ambient Air Quality Standards

Section 131.1 - Purpose

Section 131.2 - National Ambient Air Quality Standards

Section 131.3 - Ambient air quality standards

Section 131.4 - Application of ambient air quality standards

Pennsylvania Safe Drinking Water Act, Act of May 1, 1984, P.L. 206, 35 P.S. Sections 721.1 et. seq.

Chapter 109 – Safe Drinking Water

Section 109.201 – Authority

Section 109.202 – State MCLs and treatment technique requirements

Pennsylvania Hazardous Sites Cleanup Act, Act of October 18, 1988, 35 P.S. 6020-101 et. seq.

Pennsylvania Hazardous Transportation Regulations, Pa. Code Titles 13 & 15.

Pennsylvania Uniform Environmental Covenant Act, Act of December 18, 2007

**TO BE CONSIDERED**

In addition to the ARARs listed above, the following documents are relevant to the response actions proposed herein, though they do not create any statutory or regulatory obligations.

Guidance for Commonwealth-Funded water Supply Response Actions, November 21, 2015 (262-5800-001)

Pennsylvania Land Recycling Program 2021 Land Recycling Program Technical Guidance Manual (TGM) Section IV.K.4: Site-Specific Standard VI Screening

Standard Operating Procedure for the Hazardous Sites Cleanup Program, HSCA Handbook, January 2022.

**V. ANALYSIS OF ALTERNATIVES**

**Groundwater Remedial Alternatives**

**ALTERNATIVE 1: Modification of Remedial Response**

**Description of the Alternative:**

Under this alternative, the on-Site GWTS would not be rebuilt. Groundwater containment, extraction, and pathway elimination of on-Site COCs in groundwater (i.e. TCE, PCE, 1,2-DCE) would be achieved via: (1) an engineered response currently performed by GMA-6 via an air-stripper with 98-percent efficiency and (2) by existing institutional controls, namely Borough of Gettysburg Municipal Code §26-103, which prohibits “[t]he use of, or attempted use of, groundwater from within the corporate lists of the Borough for any purpose, by the installation or drilling of wells or by any other method ...”.

DEP would sample GMA-6 once per month for the groundwater COCs. All above ground material related to the GWTS would be removed while underground piping, conduits and other similar components related to the GWTS would be preserved. DEP would also prepare a Contingency Plan that would be implemented if GMA-6 goes off-line permanently. This plan

would include (1) additional groundwater and surface-water monitoring as needed and (2) a stand-alone remedial action plan that would be instituted quickly to prevent the migration of Site COCs to potential receptors.

**Protection of Public Health and the Environment:**

This alternative is protective of public health and safety in that water-quality monitoring of GMA-6 since 2015 and analysis by GMA indicates that current treatment at GMA-6 is more than adequate to treat groundwater COCs that are leaving the Site and thereby address the threat posed by such groundwater contamination.

**Compliance with ARARs:**

This alternative complies with ARARs. Air stripping at the GMA-6 will eliminate or reduce the levels of groundwater COCs in the water supply of the impacted well, thus assuring that the groundwater utilized by the GMA for all household uses meets drinking water standards, as set forth in Section 141.61 of the National Primary Drinking Water Regulations, 40 C.F.R. §141.61(a). The Borough of Gettysburg's Municipal Code, which prohibits the installation of drilling of wells, will prevent future use of on-Site groundwater. See Borough of Gettysburg Municipal Code § 26-103.

**Feasibility, Effectiveness, Implementability, and Permanence:**

This alternative would provide a permanent solution to the potential for exposure to Site related contamination. Properly maintained air-stripping on GMA-6 would be effective in eliminating the ingestion and inhalation pathways of the groundwater COCs that are released from the Site and transported to GMA's public-water system. This alternative would also be feasible and implementable.

**Cost Effectiveness:**

There would be no installation and operational costs for the air-stripper as one has already been installed and is otherwise being operated by, GMA for GMA-6. The cost for sampling and laboratory analysis of GMA-6 for groundwater COCs is estimated at \$500 per month or \$6,000 per year. This alternative was determined to be a cost-effective response action.

**ALTERNATIVE 2: Repair/Replace On-Site Groundwater Extraction System**

**Description of the Alternative:**

Under this alternative, DEP would repair/replace the remedial GWTS that was shut down on August 13, 2015. This effort would require the construction of an entirely new GWTS including an air-stripper assembly; moisture-separator assembly; control panel, moisture separator-discharge pump, treatment for calcification, reconstruction/deepening of existing extraction wells and the installation of one or more extraction pumps plus O&M.

**Protection of Public Health and the Environment:**

This alternative is not completely protective of public health and safety in that some on-Site groundwater COCs would not be captured by the remedial GWTS. The Site groundwater is within the capture zone of the GMA-6. Under historical operating conditions, groundwater COCs in the deep groundwater aquifer were able to migrate to GMA-6 even when the GWTS was in service.

**Compliance with ARARs:**

This alternative is not practically feasible as containment of groundwater COCs via an on-Site GWTS would require extraction wells to compete effectively with GMA-6. Extraction of groundwater at a rate sufficient to overcome GMA-6 would reduce the capacity of GMA-6 and decrease the amount of water available to the GMA for public distribution. Compliance with this alternative will not improve the standard of performance currently in place for containment of groundwater COCs.

**Feasibility, Effectiveness, Implementability, and Permanence:**

This alternative is neither feasible nor more effective than what currently exists. GMA has a vested interest in maintaining the effectiveness of the air-stripper for GMA-6.

**Cost Effectiveness:**

The cost associated with re-building the GWTS is estimated to exceed \$100,000. Unknown costs would include two appropriately sized extraction pumps, reconstruction of existing extraction wells and treatment for calcification. Annual O&M costs are estimated to exceed \$40,000. However, current information indicates that the Site is well within the capture zone of GMA-6 and rebuilding of the GWTS would be redundant since GMA-6 currently captures and effectively treats all on-Site groundwater COCs and meets drinking water standards.

**Soil Remedial Alternatives**

**ALTERNATIVE 1: No Action (use existing asphalt cap)**

This alternative was developed as a baseline against which other remedial alternatives can be compared. This alternative involves taking no action to remove or remediate contaminated soil or reduce threats to human health at the Site. Risks posed by ingestion or dermal exposure from soil would remain.

**Protection of Public Health and the Environment:**

This alternative does not provide for long-term protection of public health and safety in that (1) the asphalt cap will, over time, degrade resulting in exposure of the underlying material and (2) future construction or excavation activities which may present a potential hazard to construction workers or residents are not limited.

**Compliance with ARARs:**

Under the No Action Alternative, since no action is being initiated, compliance with ARARs is not considered.

**Feasibility, Effectiveness, Implementability, and Permanence:**

This alternative is feasible and implementable. It reduces exposure to on-site soil contamination, but only in the short-term and does not limit future disturbances to the in-place asphalt cap.

**Cost Effectiveness:**

The estimated capital, operation and maintenance cost associated with this alternative are all \$0.

**ALTERNATIVE 2: Engineering and Institutional Control**

Alternative 2 combines engineering and institutional controls to protect workers or residents from contaminants in soils. Activity and Use Limitations (AULs) would be implemented that

would limit property usage and access, require specific cap standards and maintenance, and specify special precautions including protective equipment for excavation, special employee training, and air monitoring. An engineered asphalt cap (in place) would be maintained to specific standards. The asphalt cap would require maintenance, and cracks or other defects in the asphalt would require repair.

Institutional controls via soil AULs would prevent exposure to soils above direct contact MSCs. The institutional controls would have to be reviewed, updated, and enforced to effectively control potential exposures. There could be an impact on the future redevelopment plans for the property. There would not be a reduction in the toxicity and volume of contaminants.

**Protection of Public Health and the Environment:**

This alternative is protective of public health and safety as it eliminates the soil pathway for dermal and inhalation exposure and provides for long-term maintenance of the asphalt cap. It will also address potential exposure as a result of excavation and construction activities.

**Compliance with ARARs:**

Alternative 2 meets the SSS established for soils by Act 2 regulations since contaminated soils would be capped with an impermeable barrier, and said barrier would be maintained and repaired.

**Feasibility, Effectiveness, Implementability and Permanence:**

This alternative is feasible and implementable. It eliminates exposure to on-site soil contamination by removing the soil pathway. Appropriate deed restrictions would need to be implemented to ensure that the cap is maintained and disturbances as a result of excavation and construction activities are properly designed to limit dust exposure.

**Cost Effectiveness:**

There would be no cost for DEP. Currently, the asphalt cap serves as a parking area for employees and customers and is regularly maintained. AUL requirements will be included as part of the maintenance plan for the cap.

**Vapor Remedial Alternatives**

**ALTERNATIVE 1: Repair/Enhance Soil Vapor Extraction**

Treatment of soil through vacuum extraction of VOCs was the selected alternative under the 1994 SOD. On July 10, 1997 the soil-vapor extraction system (SVE) began operation but did not prove effective due to the high-water table (approximately 4-feet below ground surface) as the system drew in water. In May 2007 dual-phase extraction (DPE) technology to remove vapor from the Property was initiated. However, it was later determined that DPE technology was not optimal for the removal of soil-vapor contamination due largely to the very tight soil conditions. Site conditions have not changed and current soil vapor extraction technology has not improved sufficiently to merit the re-installation of a SVE.

**Protection of Public Health and the Environment:**

This alternative is not protective of public health and safety. Indoor-Air Quality (IAQ) data indicated exceedances of the residential and non-residential vapor screening criteria for PCE and

TCE during multiple sampling events which corresponded to exceedances in several sub-slab vapor monitoring points.

**Compliance with ARARs:**

This alternative would not comply with ARARs and would not be protective of human health and the environment.

**Feasibility, Effectiveness, Implementability, and Permanence:**

This alternative would not remove the actual or potential exposure threat posed by the contaminated media and would not be protective of the public health and safety.

**Cost Effectiveness:**

There would be no cost for DEP. Currently, there is no effective treatment for the soil conditions beneath the facility.

**ALTERNATIVE 2: Installation of Vapor Intrusion Mitigation System**

Under this alternative, DEP will install a sub-slab depressurization system (SSDS) / vapor-mitigation system (VMS) beneath the floor of the Facility. AULs would be implemented to ensure the VMS is effective in eliminating the inhalation pathway of the contaminants released from the Site soils into the Facility (i.e. PCE, TCE, and benzene). The system will include seven extraction points that require sub-surface installation. Each point will include a flow-control valve and a connection for vacuum and vapor monitoring. Process piping will be secured to interior walls and ceiling. Groundwater, surface water, and other debris will be prevented from entering. Cracks within the existing concrete slab will be patched. Sub-slab vapors will be vented to the outside by a regenerative blower. The system will be designed for a vacuum of 0.01 inches of water. Total emissions are estimated to be less than 330 pounds per year.

**Protection of Public Health and the Environment:**

This alternative is protective of public health and safety. The vacuum applied to the individual extraction points can be adjusted to maintain appropriate IAQ. Sampling by DEP will confirm the effectiveness of the SSDS / VMS.

**Compliance with ARARs:**

This alternative will comply with all ARARs and is protective of human health, safety and the environment by eliminating pathways.

**Feasibility, Effectiveness, Implementability, and Permanence:**

This alternative would provide a permanent solution to the potential for exposure to Site related vapor contamination within the Facility. Properly maintained, the VMS is effective in eliminating the inhalation pathway of the contaminants released from the Site soil into the Facility. This alternative would also be feasible and implementable.

**Cost Effectiveness:**

The cost associated with a SSDS / VMS installation is estimated to be about \$50,000. One year of VMS operation is estimated to be \$10,000 which would include monthly O&M and bag filters.

**VI. SELECTED RESPONSE**

## **Groundwater**

DEP has already implemented Alternative 1 as the Final Response. The on-Site extraction system was shut down in 2015 and increased monitoring of GMA-6 began.

DEP's response will include annual sampling of on-Site monitoring wells and monthly sampling of GMA-6. This alternative will provide maximum protection as the capture zone of GMA-6 has been shown to completely encompass the Site. In addition, the air stripper at GMA-6 has demonstrated to be effective in removing groundwater COCs. Monthly sampling at GMA-6 and annual sampling of on-Site monitoring wells will be maintained.

## **Soil**

DEP has selected Alternative 2 as the Final Response for the soil. The engineering control is the use of an impermeable asphalt cap which is already in place. Maintenance and activities that disturb or penetrate the cap will be addressed through AULs.

## **Vapor**

DEP has selected Alternative 2 as the Final Response for the Facility because it is protective, cost effective, and mitigates the vapor intrusion threat immediately upon completion. Vapor intrusion will be addressed through Facility site-specific engineering controls consisting of sealing any cracks in the concrete floor and installing SSDS / VMS to eliminate the route of exposure resulting in an indoor-air direct contact or inhalation threat.

## **VII. MAJOR CHANGES FROM 1994 SOD SELECTED RESPONSE**

This Revised Statement of Decision amends and alters the 1994 SOD. The original SOD utilized treatment and containment of COCs via on-Site treatment and extraction wells such that (1) contaminated groundwater would be, to the extent feasible, remediated to background concentrations and (2) contaminated soil would be remediated, to the extent feasible, to levels that will result in no further degradation of groundwater quality.

Changes to the original response are the result of (1) the implementation of environmental remediation standards under Act 2 (remediation to "background" standards is no longer required); (2) the failure of the on-Site groundwater extraction system to contain all on-Site COC's; (3) proven groundwater containment of on-Site COCs and pathway elimination via GMA-6; (4) the use of engineering controls and AULs to eliminate pathways of soil contact or vapor inhalation exposure; and (5) the prohibitive cost and redundancy to restore the on-Site extraction system.

## **VIII. RESPONSE TO PUBLIC COMMENTS**

The public comment period for the selection of this remedial response action opened on XXXX and will close on XXXX. The public notice of the proposed response was published in the XXXX editions of the *Pennsylvania Bulletin* and the *Gettysburg Times*. DEP's response to public comments concerning the selection of this response action will be reopening of the administrative record.

## **IX. DEP APPROVALS**

FOR THE COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Robert DiGilarmo, Director

Southcentral Region

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Date