



# Permit For Hazardous Waste Treatment, Storage, and/or Disposal Facility

|              |                   |
|--------------|-------------------|
| Permit No.   | PAD003047792      |
| Date Issued  | February 20, 2015 |
| Date Expired | February 20, 2025 |

Under the provisions of the Pennsylvania Solid Waste Management Act of July 7, 1980, Act 97, a permit for hazardous waste treatment, storage, and/or disposal facility in (municipality) City of Lock haven in the County of Clinton is granted to (applicant) American Color & Chemical, L.L.C. (address) Mt. Vernon St., Lock Haven, PA 17745

This permit is applicable to the facility named as American Color & Chemical and described as:  
 A former clay pipe and chemical manufacturing facility currently in post closure status. Operatons on site include groundwater recovery and treatment.



This permit is subject to modification, amendment and supplement by the Department of Environmental Protection and is further subject to revocation or suspension by the Department of Environmental Protection for any violation of the applicable laws or the rules and regulations adopted thereunder, for failure to comply in whole or in part with the conditions of this permit and the provisions set forth in the application no. APS#847788 AUTH#1034337

which is made a part hereof, or for causing any condition inimical to the public health, safety or welfare.

See attachment for waste limitations and/or special conditions.

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION



**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
PERMIT  
FOR HAZARDOUS WASTE FACILITY POST-CLOSURE**

Permittee: American Color & Chemical, L.L.C. Permit Number: PAD003047792  
Facility: American Color & Chemical, L.L.C.

This post-closure permit is issued by the Commonwealth of Pennsylvania Department of Environmental Protection (DEP) under authority of the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. Section 6018.101 et seq. (the Act) and DEP hazardous waste regulations to American Color & Chemical, L.L.C. (hereafter called the Permittee), to perform post-closure monitoring and care at the hazardous waste management facility located in Lock Haven, Clinton County, at latitude 41° 07' 42" North and longitude 77° 26' 49" West.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (Parts I - V, consisting of pages 1 through 14 and Attachments 1 through 6) and the applicable regulations contained in 25 Pa. Code Chapters 260a-270a as specified in the permit.

Additionally, the permittee entered into a Corrective Measures Implementation Order (CMIO) with U.S. Environmental Protection Agency (U.S. EPA) on March 27, 1997 (RCRA-III-082-CA). Components of the facility-wide groundwater corrective measures monitoring are being implemented at the Facility to concurrently fulfill the requirements of the CMIO and Post-Closure Care of the former impoundments.

This post-closure permit is based on the assumption that the information submitted in the post-closure permit application attached to the Permittee's letter dated July 14, 2014 (hereafter referred to as the application) is accurate and that the facility will be monitored and maintained as specified in the application. Any inaccuracies found in this information may be grounds for the revocation or modification of this permit and potential enforcement action. The Permittee must inform DEP of any deviation from or changes in the information in the application, which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This post-closure permit is conditioned upon full compliance with all applicable provisions of the Act; DEP regulations contained in 25 Pa. Code Chapter 260a-270a and 40 CFR 260-270; the Clean Streams Law, 35 P.S. 691.1 et seq.; the Air Pollution Control Act, 35 P.S. 4001 et seq.; the Dam Safety and Encroachments Act, 32 P.S. 693.1 et seq.; the Surface Mining Conservation and Reclamation Act, 52 P.S. 1396.1 et seq.; the Coal Refuse Disposal Control Act, 52 P.S. 30.51 et seq.; all other Pennsylvania statutes related to the protection of the environment; and all Pennsylvania statutes related to the protection of public health, safety, and welfare. Violation of any of these laws and regulations is ground for enforcement action including but not limited to permit revocation.

Where reference is made herein to specific regulatory or statutory sections, such references shall be to the applicable regulatory or statutory sections as amended either in content or citation.

This post-closure permit is effective as of February 20, 2015, and shall remain in effect until February 20, 2025 unless revoked and reissued, or terminated in accordance with 25 Pa. Code 270a.41, 270a.42, 270a.43 and 40 CFR 270.41, 270.42, and 270.43 or continued.



## **PART I - STANDARD CONDITIONS**

### **A. EFFECT OF PERMIT**

This post-closure permit authorizes only the facility monitoring and care expressly described in this post-closure permit and does not authorize any other management of hazardous waste. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local laws or regulations. Compliance with the terms of this post-closure permit does not constitute a defense to any action brought under the Act or any other law governing protection of public health or the environment.

### **B. POST-CLOSURE PERMIT ACTIONS**

This post-closure permit may be modified, revoked and reissued, terminated for cause as specified in 25 Pa. Code 270a.41, 270a.42, and 270a.43 and 40 CFR 270.41, 270.42 and 270.43 or suspended in accordance with the Act. The filing of a request for a post-closure permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay or supersede the applicability or enforceability of any permit condition.

### **C. SEVERABILITY**

The provisions of this post-closure permit are severable, and if any provision of this post-closure permit or the application of any provision of this post-closure permit to any circumstance is held to be invalid, the application of such provision to other circumstances and the remaining provisions of this post-closure permit shall not be affected thereby.

### **D. DEFINITIONS**

For the purpose of this permit, terms used herein shall have the same meaning as those in Title 25 of the Pennsylvania Code (25 Pa. Code Chapter 260a-270a), unless this post-closure permit specifically states otherwise; where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "The Department" is the Department of Environmental Protection of the Commonwealth of PA.

### **E. REPORTS, NOTIFICATIONS AND SUBMISSIONS TO THE DEPARTMENT**

All reports, notifications or other submissions, which are required by this post-closure permit to be sent or given to the Department, should be sent certified mail or hand delivered to:

Environmental Program Manager  
Waste Management Program  
208 West Third St, Suite 101  
Williamsport, PA 17701-6448

### **F. SIGNATORY REQUIREMENTS**

All work plans, applications, and reports required by the permit or requested by the Department shall be signed and certified as required by 40 CFR 270.11.



## G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY SITE

The Permittee shall maintain at the facility, until post-closure is completed, the following documents and amendments, revisions and modifications to these documents:

1. Post-closure plan required by 40 CFR 264.118 (a) and (b) and this permit.
2. Contingency plan required by 40 CFR 264.53(a) and this permit.
3. Inspection schedules and logs required by 25 Pa. Code 264a.15 and 40 CFR 264.15(b)(1) and (2) and this permit.
4. Operating record required by 40 CFR 264.73 and Part II, Section G.1 of this permit.
5. Annually-adjusted cost estimate(s) for facility post-closure required by 40 CFR 264.144 and this permit.
6. Documents required by Part I, Sections A - H, and Part II, Sections A - K of this permit.

## H. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of this post-closure permit. Any permit noncompliance constitutes a violation of the Act and the regulations promulgated thereunder and is grounds for enforcement action; including but not limited to permit revocation, revocation and reissuance, modification, and/or the imposition of fines and penalties.
2. Duty to Mitigate. The permittee shall take all necessary steps to prevent and abate any releases to the environment, and shall carry out such measures as are necessary to prevent significant adverse impacts on human health or the environment.
3. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and controls used by the Permittee to achieve compliance with the Act, the regulations, and the conditions of this permit. Proper operation and maintenance shall at a minimum include effective performance, adequate funding, and adequate operator training.
4. Duty to Provide Information. The Permittee shall furnish to the Department within the time specified by the Department, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or revoking this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Department, upon request, copies of records, which are required to be kept by the Permittee pursuant to the Act, the regulations, or any permit condition.
5. Inspection and Entry. The Permittee shall allow the Department, its agents and authorized representatives to:
  - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records concerning the regulated facility or activity are kept.
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the Act, the regulations, or this permit.
  - d. Sample or monitor any substances or parameters at any location for the purposes of assuring permit compliance or as otherwise authorized by the Act or the regulations.
  - e. Engage in any other activities necessary or appropriate to the documentation of events or conditions at any locations.



6. Monitoring and Records.

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from 40 CFR 261 Appendix I or an equivalent method approved by the Department. Laboratory methods must be those specified in 40 CFR 261 Appendix III; Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (U.S. EPA Document SW-846); most current edition of Standard Methods of Waste Water Analysis; or an equivalent method approved in writing by the Department.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by the Act, the regulations, or this permit, and all records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or record, or application. These periods may be extended by request of the Department at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.
- c. The Permittee shall maintain records of all groundwater quality and groundwater surface elevations collected during the active life of the facility and during the post-closure care period as well.
- d. The Permittee shall, at a minimum, keep monitoring records, which include the following information:
  - (1) The dates, exact place, and times of sampling or measurements;
  - (2) The individuals who performed the sampling or measurements;
  - (3) The dates analyses were performed;
  - (4) The individuals who performed the analyses;
  - (5) The analytical techniques or methods used;
  - (6) The results of such analyses

7. Reporting Planned Changes. The Permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the post-closure permitted facility. This notice must include a description of all incidents of noncompliance reasonably expected to result from the proposed changes. The Permittee shall not modify the closed facility without first obtaining a permit modification or written approval from the Department.

8. Anticipated Noncompliance. The Permittee shall give advance notice to the Department of any planned changes in the post-closure permitted facility or activity, which may result in noncompliance with permit requirements.

9. Transfer of Permits. This post-closure permit shall not be transferred or assigned to any other person or municipality. Any transfer of a permit in violation of this paragraph or the rules and regulations of the Department shall be null and void and automatically revoke that permit.



10. Twenty-Four Hour Reporting. The Permittee shall report to the Department any noncompliance with the Act, the regulations, or any condition of this post-closure permit or any occurrence or event at the facility, which may endanger health or the environment.
- a. Information shall be provided orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:
    - (1) Information concerning release or potential release of any hazardous waste from the facility that may endanger public drinking water supply sources.
    - (2) Any information of a release, potential release, or discharge of hazardous waste from the facility, or information of a potential or actual fire or explosion at the facility, which may threaten the environment or human health.
  - b. The description of the occurrence and its cause shall include:
    - (1) Name, address, and telephone number of the owner or operator;
    - (2) Name, address, and telephone number of the facility;
    - (3) Date, time, and type of incident;
    - (4) Name and quantity of material(s) involved;
    - (5) The extent of injuries, if any;
    - (6) An assessment of actual or potential hazards to the environment and human health at or near the facility; and
    - (7) Estimated quantity and disposition of recovered material that resulted from the incident.
  - c. A written submission shall also be provided to the Department within five (5) days of the time the Permittee becomes aware of the occurrence. The written submission shall contain a description of the noncompliance and its cause; the period of non-compliance (including exact dates and times); if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
11. Other Noncompliance. The Permittee shall report to the Department all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports are submitted. The reports shall contain the information listed in permit condition I.H.10.
12. Other Information. Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Department, or whenever the Permittee becomes aware of circumstances which require a modification or clarification of any fact or representation made to the Department in connection with a permit application, it shall promptly submit such facts or information to the Department.

### **COMPLIANCE SCHEDULE REPORTING**

The Permittee shall submit written reports of compliance or noncompliance with interim and final requirements contained in any compliance schedule of this post-closure permit to the Department no later than fourteen (14) days following each schedule date.



## PART II - GENERAL FACILITY CONDITIONS

### A. DESIGN AND OPERATION OF FACILITY

The Permittee shall maintain the facility to minimize the possibility of a fire, explosion, or release of hazardous waste or hazardous waste constituents to air, soil, surface water, or groundwater.

### B. POST-CLOSURE

1. **Monitoring and Maintenance.** The Permittee shall monitor and maintain the facility as required by 40 CFR 264.117(d), 40 CFR 264.118(a) and (b), 40 CFR 264.228 and in accordance with the post-closure plan, Attachment 3.
2. **Amendment to Post-Closure Plan.** The Permittee shall amend the post-closure plan in accordance with 40 CFR 264.118(a) and (d) whenever necessary.

### C. GENERAL WASTE ANALYSIS

The Permittee shall follow the procedures described in the attached post-closure plan, Attachment 1. The Permittee shall use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations.

### D. SECURITY

The Permittee shall comply with the security provisions of 40 CFR 264.14(b) and 264.14(c).

### E. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection plan set out in the inspection schedule, Attachment 5 and Table 5 in Attachment 6. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR 264.15(c). Records of inspections shall be kept as required by 40 CFR 264.15(d).

### F. PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN

1. **Implementation of PPC Plan.** The Permittee shall immediately carry out the provisions of the PPC plan, Attachment 4, and follow the emergency procedures described by 25 PA. Code 264a.56 and 40 CFR 264.56 whenever there is a fire, explosion, emission or discharge of hazardous waste or hazardous waste constituents, which could threaten human health or the environment.
2. **Copies of Plan.** The Permittee shall comply with the requirements of 40 CFR 264.53.
3. **Amendments to Plan.** The Permittee shall review and immediately amend, if necessary, the PPC plan, as required by 40 CFR 264.54.
4. **Emergency Coordinator.** The Permittee shall comply with the requirements of 40 CFR 264.55.
5. **Emergency Procedures.** The Permittee shall comply with the requirements of 25 Pa. Code 264a.56 and 40 CFR 264.56.

### G. RECORDKEEPING AND REPORTING

1. **Operating Record.** The Permittee shall maintain a written operating record at the facility in accordance with applicable requirements of 40 CFR 264.73. As the facility is closed, updates to the operating records are not required. A copy of the operating records will be maintained at the facility.
2. **Biennial Report.** The Permittee shall comply with all applicable biennial report requirements of 40 CFR 264.75. This report shall also include information as stipulated in 40 CFR 264.77(a). Since the facility is in the post-closure care period, no additional wastes are being generated or disposed of at the facility. Therefore, the biennial reporting is not required.



3. Required Reports. The Permittee shall comply with all applicable reporting requirements as described in Part I, Sections E - H, and Part II, Sections I - K. of this permit.

#### **H. CLOSURE**

The facility closure plan covers the general closure requirements of 40 CFR 264.110 through 264.115 and 25 Pa. Code Chapter 264, Subchapter G, Section 264a.115 and specific closure requirements for the hazardous waste units covered by the permit.

1. Performance Standard. The Permittee shall have closed the facility as required by 40 CFR 264.111 and in accordance with the facility closure plan.
2. Certification of Closure. The Permittee shall maintain at the facility, a copy of the certification that the facility has been closed in accordance with the specifications in the closure plan as required by 40 CFR 264.115 and 25 Pa. Code 264a.115. The closure certification of the facility has been approved by the DEP.

#### **I. COST ESTIMATE FOR FACILITY CLOSURE POST-CLOSURE CARE**

1. Annual Adjustment. The Permittee shall adjust the post-closure cost estimate for inflation within 30 days after each anniversary of the date on which the first cost estimate was made as required by 40 CFR 264.144(b).
2. Adjustment for Changed Conditions. The Permittee shall revise the cost estimate whenever there is a change in the facility's post-closure plan or in the measures necessary to prevent adverse effects upon the environment as required by 40 CFR 264.144(c).
3. Availability. The Permittee must keep at the facility the latest cost estimate as required by 40 CFR 264.112 (a) and (b).
4. Incapacity of Permittee or Financial Institutions. The Permittee shall comply with 40 CFR 264.148 and 25 Pa. Code 264a.148 whenever necessary.

#### **J. BONDING REQUIREMENT**

The Permittee shall maintain the collateral bond submitted to and approved by the Department as required by 25 Pa. Code 264a.153 and 40 CFR 264.147(e). The Permittee shall comply with all applicable bond replacement requirements of 25 Pa. Code 264a.158.

#### **K. NOTICE TO LOCAL LAND AUTHORITY AND DEED RECORDATION**

The Permittee shall record a notation on the deed to the facility property or on some other instrument which is normally examined during title search that will in perpetuity notify a potential purchaser of the property that the land has been used to manage hazardous waste; its use is restricted; and the survey plat and record of the type, location, and quantity of hazardous waste disposed of within each cell or area of the facility in accordance with 40 CFR 264.119(b).

A certification, signed by the permittee, shall be submitted to the PADEP indicating that the notation has been filed with the local zoning authority in accordance with 40 CFR Part 265.119. A copy of the notation shall be forwarded with this certification.

This requirement was met by the Permittee on February 23, 2006 in accordance with the January 7, 2005 RCRA Part B Hazardous Waste Post Closure Care Permit.



### PART III - DETECTION MONITORING

Detection Monitoring was conducted prior to the CMIO. Statistically significant increases in groundwater constituents of interest were detected, an assessment was conducted and an Abatement Program was instituted. The current abatement program sufficiently addresses groundwater concerns, however if abatement activities cease, then the following detection monitoring program must be instituted.

#### A. WELL LOCATION AND CONSTRUCTION

The Permittee shall install and maintain a groundwater monitoring system as specified below:

1. The Permittee shall install and maintain groundwater monitoring wells at the locations specified in the Monitoring and Maintenance Plan (MMP), Attachment 3, approved by EPA on January 21, 2004. (Volume II of III, Figure 1).
2. The Permittee shall construct and maintain the monitoring wells identified in condition III.A.1 in accordance with the approved MMP.

#### B. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells described in condition III.A.

1. Samples shall be collected by the techniques described in the approved MMP, Volume II.
2. Samples shall be preserved and shipped in accordance with the procedures specified in the approved MMP, Volume II.
3. Samples shall be analyzed according to the procedures specified in the approved MMP, Volume II.
4. Samples shall be tracked and controlled using the chain of custody procedures specified in the MMP, Volume II.

#### C. GROUNDWATER ELEVATION

1. The Permittee shall determine, for each monitoring well, the groundwater surface elevation each time groundwater is sampled in accordance with condition III.F., as required by 40 CFR 264.97(f).
2. The Permittee shall, at least annually by January 31, evaluate the data from condition III.C.1., as required by 25 Pa. Code 264a.97, to determine if monitoring wells are still properly located.

#### D. BACKGROUND QUALITY AND MONITORING PARAMETERS

1. The Permittee shall monitor wells as described in condition III.A. for the parameters specified in Table III-1.
2. For those parameters in Table III-1 for which no background values are established, the Permittee shall establish background values using the procedures specified in the approved MMP, Volume II. The values established shall automatically become part of this permit.



## TABLE III-I INDICATOR MONITORING PARAMETERS

| <u>Parameter</u> | <u>Background Concentration</u> |
|------------------|---------------------------------|
|------------------|---------------------------------|

pH

Specific Conductance

Additional Parameters in Tables 3 & 4 within Attachment 6.

### **E. STATISTICAL PROCEDURES**

When evaluating the monitoring results pursuant to condition III.F, the Permittee shall use the following procedures:

1. The Permittee shall follow the statistical procedures described in approved MMP.

### **F. MONITORING PROGRAM AND DATA EVALUATION**

The Permittee shall determine groundwater quality as follows:

1. The Permittee shall collect, preserve and analyze samples pursuant to condition III.B.
2. The Permittee shall determine groundwater quality (i.e., the parameters specified in condition III.D.1) throughout the facility post-closure care period. These determinations shall be made per the approved MMP.
3. The Permittee shall determine the groundwater flow rate and direction at least annually, as required by 40 CFR 264.98(e).
4. The Permittee shall determine whether there is a statistically significant increase, for each parameter identified in condition III.D.1, over the background values for that parameter (see condition III.D.2) each time groundwater quality is determined in accordance with condition III.F.2 as required by 40 CFR 264.98(f)(1). In determining whether such an increase has occurred, the Permittee must compare the groundwater quality at each monitoring well specified in III.D.1 to the background levels specified in Table III-1 in accordance with the procedures specified in condition III.E.
5. The Permittee shall perform the evaluation described in condition III.F.4 within a reasonable amount of time after completion of sampling as required by 40 CFR 264.98(f)(2).

### **G. REPORTING AND RECORDKEEPING AND RESPONSE**

1. The Permittee shall enter all monitoring, testing, and analytical data obtained pursuant to III.F in the operating record, as required by 25 Pa. Code 264a.97(1).
2. If the Permittee determines, pursuant to condition III.F, that there is a statistically significant increase above the background values for the parameters specified in condition III.D.1 he shall:
  - a. Determine whether the facility has caused the significant increase as required by 40 CFR 264.98(g).
  - b. Notify the Department in writing within seven days, as required by 40 CFR 264.99(h)(1).
  - c. Within 30 days, develop and submit a specific plan, as required by 40 CFR 264.99(g) and 264.99(h)(2)(ii), based on the outline required under 40 CFR 264.91 for a groundwater quality assessment program.
  - d. Submit all reports, to the Department, as required by 25 Pa. Code 264a.97(1).
  - e. Begin to implement the groundwater quality assessment program within 30 days of Department approval.



## PART IV - GROUNDWATER QUALITY ASSESSMENT

Currently, American Color & Chemical, L.L.C. is implementing an Abatement Program, which is outlined within the MMP to address groundwater at the site. Additionally, the RCRA Facility Investigation (RFI), which was completed by the Permittee in May 1994, fulfilled the requirements of the Groundwater Quality Assessment. However, should groundwater conditions indicate that a groundwater assessment is warranted, the Permittee must comply with the requirements listed in the following section.

If the Permittee determines that there is a statistically significant increase for indicator parameters, constituents, or reaction products at the point of compliance that provide a reasonable indication of the presence of hazardous constituents in the groundwater, a groundwater quality assessment program must be established at the facility. This Part presents permit conditions addressing the regulatory requirements (40 CFR 264.99(h)) for groundwater quality assessment programs. The applicant is required to submit detailed plans and engineering reports describing the proposed program. Any future attachments to the permit should be from such plans and reports if and when they satisfy the appropriate regulations. The Department must approve the list of the hazardous constituents, the compliance point(s) and the compliance period

### A. WELL LOCATION AND CONSTRUCTION

The Permittee shall install and maintain a groundwater monitoring system to comply with the requirements of 40 CFR 264.99(h), as specified below:

1. The Permittee shall install and maintain groundwater monitoring wells at the locations specified on the map presented in the approved MMP, Attachment 3, and/or the approved Groundwater Quality Assessment Plan (GQA).
2. The Permittee shall construct and maintain the monitoring wells identified in condition IV.A.1 in accordance with the plan and specifications presented in the approved MMP, Attachment 3 and/or the approved GQA Plan.

### B. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells described in condition IV.A.

1. Samples shall be collected by the techniques described in the approved MMP.
2. Samples shall be preserved and shipped in accordance with the procedures specified in the approved MMP, Attachment 3.
3. Samples shall be analyzed according to the procedures specified in the MMP, Attachment 3.
4. Samples shall be tracked and controlled using the chain of custody procedures specified in the approved MMP, Attachment 3.

### C. GROUNDWATER ELEVATION

1. The Permittee shall determine, for each monitoring well, the water table elevation each time groundwater is sampled in accordance with condition IV.F as required by 40 CFR 264.97(f).
2. The Permittee shall, at least annually by January 31, evaluate the data from condition IV.C.1. as required by 40 CFR 264.99(e), to determine if monitoring wells are still properly located.

### D. MONITORING PROGRAM

1. In addition to performing the groundwater assessment as described herein, the Permittee shall monitor the groundwater at the point of compliance for the constituents listed in Table IV-1 as further described in F.4 of this Part.
2. The Permittee shall monitor well numbers at the point(s) of compliance, as described in condition IV.A, and as designated on the map incorporated in an Attachment (to be included in a proposed GQA Plan).
3. The compliance period is equal to the time period specified in the approved GQA Plan.



## TABLE IV - PARAMETERS

### Hazardous Constituents

### Concentration Limit

[Reserved for additions to proposed GQA Plan (per Department approval)]

#### **E. STATISTICAL PROCEDURES**

When evaluating the monitoring results pursuant to condition IV.F, the Permittee shall use the following procedures:

1. The Permittee shall follow the statistical procedures described in 40 CFR 264.97(g) and 40 CFR 264.97(h).
2. In all other situations the Permittee shall use the statistical procedures specified in the approved GQA Plan.

#### **F. MONITORING PROGRAM AND DATA EVALUATION**

1. The Permittee shall determine the rate, extent of migration, and concentration levels of the hazardous waste, hazardous constituents or decomposition byproducts in the groundwater as required by 40 CFR 264.9.
2. The Permittee shall collect, preserve and analyze samples pursuant to condition IV.B.
3. The Permittee shall determine the groundwater flow rate and direction at least annually, as required by 40 CFR 264.98(e).
4. The Permittee shall analyze samples from all monitoring wells at the compliance point for all constituents in 40 CFR 261, Appendix VIII (as modified) at least annually to determine whether additional hazardous constituents are present. If the Permittee finds additional constituents present (one not detected under the detection monitoring program of Part III), their concentrations shall be reported to the Department within thirty days following completion of the analysis and review.
5. The Permittee shall determine whether there is a statistically significant increase, for each parameter identified in condition IV.D.1, over the concentration limit for that parameter each time the concentration of hazardous constituents is monitored in groundwater at the compliance point pursuant to condition IV.F.2. In determining whether such an increase has occurred, the Permittee shall use the statistical procedures specified in condition IV.E.
6. The Permittee shall perform the statistical evaluation required by condition IV.F.5 within 30 days after completion of sampling.

#### **G. REPORTING AND RECORDKEEPING AND RESPONSE**

1. The Permittee shall make determinations, as required by 40 CFR 264.99(a)(6) and 264.99(b) within 180 days of implementation of the program, or as otherwise required by the Department.
2. The Permittee shall submit a report to the Department within 15 days of the determinations made under condition IV.G.1 containing an assessment of groundwater quality.
3. The Permittee shall enter all monitoring, testing, and analytical data obtained pursuant to IV.F in the operating record, as required by 25 Pa. Code 264a.97(1).
4. If the Permittee determines, pursuant to condition IV.F, that there is a statistically significant increase above the concentration limits for the parameters specified in condition IV.D.1 the Permittee shall:
  - a. Submit to the Department an abatement plan as required by 40 CFR 264.100(b), (c), (d) and (e).
  - b. Submit the abatement plan within 30 days after the submission of the groundwater quality assessment report if the report determines hazardous constituents have entered the groundwater.



5. The Permittee shall submit a milestone report containing any information indicating that the significant increase in parameter(s) was due to a source other than the facility, as required by 40 CFR 264.99(i).
6. The Permittee shall submit all reports to the Department as required by 25 Pa. Code 264.a.97(1).
7. The Permittee shall begin to implement the groundwater abatement program within 30 days of Department approval or permit modification.

## **PART V - ABATEMENT PROGRAM**

The Permittee is currently implementing facility-wide groundwater corrective measures and the monitoring associated with these measures is detailed within the MMP. However, should the groundwater conditions indicate that an assessment is warranted, after the current abatement program is terminated, the Permittee must follow the abatement requirements listed in the following section.

If hazardous waste, hazardous waste constituents, or decomposition byproducts have entered the groundwater, an abatement program must be implemented to bring the unit back into compliance. The proposed corrective action measures and the monitoring program and data evaluation procedure must meet the requirements of 40 CFR 264.100, Corrective Action Program.

### **A. WELL LOCATION AND CONSTRUCTION**

The Permittee shall install and maintain a groundwater monitoring system to comply with the requirements of 40 CFR 264.99(h), as specified below:

1. The Permittee shall install and maintain groundwater monitoring wells at the locations specified in the approved Groundwater Abatement Plan.
2. The Permittee shall construct and maintain the monitoring wells identified in condition V.A.1 in accordance with the plans and specifications presented in the approved Groundwater Abatement Plan.

### **B. MONITORING PARAMETERS**

1. Permittee shall implement an abatement program to remove or treat any hazardous waste, hazardous constituents or decomposition byproducts and return to compliance. Table V-1 lists the hazardous constituent concentration limits.

**TABLE V-1. MONITORING PARAMETERS**

| <b>Hazardous Constituents</b> | <b>Concentration Limit</b> |
|-------------------------------|----------------------------|
|-------------------------------|----------------------------|

[Reserved for additions to the proposed Groundwater Abatement Plan (per Department approval)]

2. The Permittee shall monitor wells as described in condition V.A. for parameters specified in Table V-1
3. The compliance period is equal to the frequency specified in the Groundwater Abatement Plan.

### **C. ABATEMENT PROGRAM**

1. The Permittee shall initiate abatement within 30 days after Department approval or modification of the abatement program.
2. The Permittee shall conduct an abatement program that results in abatement of any groundwater contamination by removing or treating all hazardous waste or hazardous constituents or decomposition byproducts in accordance with 40 CFR 264.100(b), (c), (d), and (e).

### **D. SAMPLING AND ANALYSIS PROCEDURES**

The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells described in condition V.A.



1. Samples shall be collected by the techniques described in the approved Groundwater Abatement Plan.
2. Samples shall be preserved and shipped in accordance with the procedures specified in the approved Groundwater Abatement Plan.
3. Samples shall be analyzed according to the procedures specified in the approved Groundwater Abatement Plan.
4. Samples shall be tracked and controlled using the chain of custody procedures specified in the approved Groundwater Abatement Plan.

#### **E. STATISTICAL PROCEDURES**

When evaluating the monitoring results pursuant to condition V.F the Permittee shall use the following procedures:

1. The Permittee shall follow the statistical procedures described in 40 CFR 264.97(g).
2. In all other situations the Permittee shall use the statistical procedures specified in the approved Groundwater Abatement Plan.

#### **F. MONITORING PROGRAM AND DATA EVALUATION**

The Permittee shall establish and implement a groundwater monitoring program to demonstrate the effectiveness of the abatement program. The Permittee shall determine groundwater quality as follows:

1. The Permittee shall collect, preserve and analyze samples pursuant to condition V.D.
2. The Permittee shall determine groundwater quality (i.e., the parameters specified in condition V.B) through the compliance period including any extension to the compliance period to illustrate conformance with the approved monitoring parameters for a period of three consecutive years. These determinations shall be made in accordance with the approved Groundwater Abatement Plan.
3. The Permittee shall determine the groundwater flow rate(s) and direction(s) at least annually as required by 40 CFR 264.98(e).
4. The Permittee shall compare the measured concentration of each monitored hazardous constituent with the approved monitoring parameters each time groundwater quality is determined in accordance with condition V.F.2. The Permittee must compare the groundwater quality measured at each point of compliance monitoring well with the levels specified in Table V-1 in accordance with the procedures specified in condition V.E.
5. The Permittee shall, at least annually by January 31, evaluate the data from condition V.F.1. as required by 40 CFR 264.97(g)(1), to determine if monitoring wells are still properly located.

#### **G. REPORTING, RECORDKEEPING, AND RESPONSE**

1. The Permittee shall enter all monitoring, testing, and analytical data obtained pursuant to condition V.F.2 in the operating record, as required by 25 Pa. Code 264a.97(1).
2. The Permittee must report in writing quarterly to the Director on effectiveness of the abatement program, as required by 40 CFR 264.100(g).
3. The Permittee shall submit all reports to the Department as required by 25 Pa. Code 264.a.97 (1).
4. The abatement program shall be amended either by consent order and agreement or permit modification as necessary to maintain compliance with applicable regulatory requirements.

Currently, the Permittee adheres to the groundwater monitoring and reporting requirements outlined in the CMIO and MMP. The current content of reports and schedule of submittal fulfills the requirements of 25 Pa. Code § 264.a.97.

