EXPLANATION OF SIGNIFICANT DIFFERENCES
DRAKE CHEMICAL SUPERFUND SITE

I. INTRODUCTION

Site Name: Drake Chemical Superfund Site

Site Location: Lock Haven, Clinton County, Pennsylvania

Lead Agency: U.S. Environmental Protection Agency, Region III
("EPA" or "the Agency")

Support Agency: Pennsylvania Department of Environmental Resources ("PADER")

The U.S. Environmental Protection Agency (EPA or Agency) has prepared this Explanation of Significant Difference (ESD) to address groundwater remediation at the Drake Chemical Superfund Site (Site), located in the City of Lock Haven, Clinton County, PA. The ESD presents and documents changes to the Record of Decision ("ROD") for the Drake Chemical Superfund Site ("Site") for groundwater remediation, which was signed on September 29, 1988. This Explanation of Significant Differences ("ESD") is issued in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act of 1986 ("CERCLA"), 42 U.S.C. § 9617(c), and 40 C.F.R. § 300.435(c)(2)(i).

EPA is issuing this ESD to inform the public of changes it has made to the ROD groundwater remediation remedy; to summarize the information that led to the changes; and to affirm that the revised remedy complies with the statutory requirements of CERCLA § 121, 42 U.S.C. § 9621. The changes do not fundamentally alter the remedy selected in the ROD for groundwater remediation with respect to scope, performance, or cost. Therefore, a ROD amendment is not required. This ESD is incorporated into the Administrative Record for the Site, which is located at several locations in Lock Haven and at the regional EPA Office in Philadelphia.

The nature of these revisions include the following:

1. the elimination of a biological component in the activated carbon treatment system for groundwater remediation.

2. the elimination of extraction wells in Zone 1 because groundwater from Zone 1 will be captured by the well system in Zone 2.
a change in the method in which residual sludge or contaminants from the groundwater treatment and extraction system will be managed or disposed due to the fact that residual sludges or contaminants from the groundwater remediation will not be incinerated and backfilled onto the Site.

the elimination of the need for flood control measures.

a discussion about remediation in Zone 3.

a definition of On-Site as it applies to the groundwater remedy.

the identification of Performance Standards and Alternative Performance Standards for benzene, 1,2-dichloroethane and beta-naphthylamine.

a discussion of the actions to be performed at this Site before the Agency will consider the invocation of a technical impracticability waiver of either the Performance Standards or the Alternative Performance Standards. If invoked, a technical impracticability waiver will allow EPA to revise the groundwater Performance Standards and/or Alternative Performance Standards in a future decision document based on its review of the long-term operation and monitoring of the groundwater extraction and treatment system.

II. SUMMARY OF THE SITE HISTORY, CONTAMINATION PROBLEMS, AND SELECTED REMEDY

SITE DESCRIPTION AND HISTORY

The Drake Chemical Site is an inactive chemical manufacturing facility that operated from the early 1940's through 1982. Dye chemicals and dye chemical intermediates were manufactured on the Site for more than three decades. During this time there were unlined lagoons containing pretreatment sludges and demolition debris, chemical tanks and reactors, and several thousand drums containing various chemicals which were rusted and leaking at the Site.

Since 1982, EPA has been involved in ongoing remediation activities at the Site, where the contaminated surface water, groundwater and soils, absent response measures, present a serious threat to the environment and human health.

During a Remedial Investigation/Feasibility Study (RI/FS) conducted in 1987-1988, the groundwater contaminant plume at the site was divided into three Zones. Zone 1 includes the physical boundaries of the property owned by Drake Chemical and the Gorham property. Zone 2 extends from Zone 1 to Route 220 and Zone 3 begins at Route 220 and ends at Bald Eagle Creek. These areas
are identified in Figure 1. Immediately adjacent to and west of the Drake Chemical Site is the American Color and Chemical Company ("AC&C") which is currently undergoing a Resource Conservation and Recovery Act (RCRA) cleanup. The 38-acre AC&C facility is also shown on Figure 1.

From 1915 to 1956 the AC&C facility was used to manufacture various dyes and chemicals. The AC&C facility processes included distillation and reuse of chemicals such as 1,2-dichlorobenzene and nitrobenzene. All commercial operations at the AC&C facility were discontinued in 1982. To date AC&C has closed three surface impoundments and it is in the process of closing the remaining 3 impoundments in accordance with a Pennsylvania Department of Environmental Resources (PADER) approved closure plan.

Contaminants from chemical manufacturing activities at both the AC&C facility and the Drake Site have leached into the groundwater aquifer located in the sand and gravel unit which underlies the AC&C facility and the Drake Site. The sand and gravel unit begins at a depth of approximately 12 feet below the surface. The water table elevation within the aquifer fluctuates.

Zone 1 of the Drake Site is approximately 9 acres in size. Historically a large portion had been used as lagoons for disposal of waste from the production of various compounds including beta-naphthylamine (a color dye compound) and fenac (an herbicide).

Samples taken from monitoring wells in all three zones are affected by site-related contaminants. Table 1 shows some of the various compounds and the range of concentrations for each Zone. Concentrations are generally highest in Zone 1, decrease in Zone 2 and become even lower in Zone 3. The following discussion of groundwater contamination is from the Remedial Investigation conducted for the 1988 Record of Decision.

Organic groundwater contamination in the Zone 1 includes benzene, trichloroethene, chlorobenzene, ethylbenzene, 1,2-dichloroethane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene and toluene in varying amounts. Chlorobenzene had the highest concentration level for the volatiles while 1,2-dichloroethane was found with the greatest frequency.

Base/neural-acid extractable compounds in Zone 1 include 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, nitrobenzene, 1,2,4-trichlorobenzene, phenol and alkyl and chlorinated phenolics.

Samples taken from monitoring wells in Zone 1 indicate that groundwater is also contaminated by both fenac and beta-
naphthylamine. Fenac was detected at the highest level and with the greatest frequency. Beta-naphthylamine was also detected in significant amounts.

Inorganic analysis of groundwater in Zone 1 indicated aluminum, arsenic, barium, beryllium, cadmium, chromium, cyanide, mercury, nickel, iron, and vanadium.

Zone 2 monitoring wells contain the same characteristic organic contamination. Benzene, chlorobenzene, 1,2-dichloroethane, tetrachloroethene and trichloroethene are present in varying amounts. Base/neutral-acid extractable compounds include phenol, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 2,4-Dimethylphenol. Fenac and beta-naphthylamine were also found in Zone 2. Inorganic compounds including aluminum, iron, magnesium, manganese, potassium and sodium were detected with the greatest frequency and at highest concentrations in Zone 2.

Samples taken from further downgradient in Zone 3 monitoring wells show that site-related organic contamination extends toward the Bald Eagle Creek. Chlorobenzene and 1,2-dichloroethane were the volatile organic compounds. The only base/neutral-acid extractable compound of concern was 3,3'-dichlorobenzidine. Samples taken in Zone 3 display further dilution in the concentration of fenac, while beta-naphthylamine was not detected in any Zone 3 samples. Zone 3 samples show that aluminum, iron, magnesium, potassium, and sodium occur at the greatest concentrations and frequency but the heavy metals seem to increase in concentrations with distance from the site.

The complete list of compounds and the concentrations found are located in the Final Phase III RI, Volume I - Narrative, Drake Chemical Site, Lock Haven, Pennsylvania, August 1988 in sections 4.5 and 4.6 for the groundwater investigation. The data is located on pages 302090-302122 in Volume III C of the Administrative Record.

Groundwater beneath the AC&C facility also reveals organic and inorganic compounds of concern. Some compounds identified in the RCRA Facility Investigation (RFI) Report (McLaren/Hart, 1994) include benzene, chlorobenzene, nitrobenzene, phenol, toluene, arsenic, copper, lead and mercury.

The following Table 1 lists three hazardous substances and the Performance Standards ("PSs") set for them for the groundwater remediation. Benzene and 1,2-dichloroethane are listed because they exceed the Maximum Contaminant Level standards ("MCLs") which are above levels required by the Safe Drinking Water Act. Beta-naphthylamine is listed because of the risk assessment conducted as part of the RI/FS which shows that beta-naphthylamine presents a risk to human health. Other hazardous substances in the groundwater are below MCLs.
<table>
<thead>
<tr>
<th>ZONE #</th>
<th>COMPOUND</th>
<th>CONCENTRATION FOUND (µg/l)</th>
<th>PSs (µg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Benzene (6 detections in 15 samples)</td>
<td>Minimum: 3.30, Maximum: 100.00, Average: 38.75</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1,2-dichloroethane (14 detections in 15 samples)</td>
<td>Minimum: 0.08, Maximum: 5100.00, Average: 931.01</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>beta-naphthylamine (8 detections in 15 samples)</td>
<td>Minimum: 1.00, Maximum: 2300.00, Average: 311.25</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Benzene (3 detections in 13 samples)</td>
<td>Minimum: 1.90, Maximum: 76.00, Average: 27.34</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1,2-dichloroethane (6 detections in 13 samples)</td>
<td>Minimum: 6.70, Maximum: 680.00, Average: 269.28</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>beta-naphthylamine (1 detection in 13 samples)</td>
<td>Concentration: 12.00</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>1,2-dichloroethane (6 detections in 13 samples)</td>
<td>Minimum: 0.12, Maximum: 210.00, Average: 43.94</td>
<td>5</td>
</tr>
</tbody>
</table>
The remedial action as described in the 1988 ROD for the pumping and treating of the groundwater at the Site to an acceptable level for discharge included the following tasks:

- install necessary flood control measures
- install extraction wells in the areas of groundwater contamination within the property boundaries of the former Drake Chemical facilities and in the properties adjacent to the facility in the south and east directions
- pump groundwater to the treatment system
- treat by using Biological Activated Carbon (BAC)
- discharge effluent to Bald Eagle Creek either through the underground conduit constructed for the Phase I leachate stream or through the Lock Haven sewage treatment facility (The water treatment unit must comply with permit requirements for discharge of treated water)
- analyze residuals (e.g., sludgecake) and use as backfill if acceptable in accordance with State requirements (Further treatment may be necessary for On-Site disposal.)

III. DESCRIPTION OF SIGNIFICANT DIFFERENCES AND THE BASIS FOR THOSE DIFFERENCES

Elimination of Biological Treatment

EPA's basis for this ESD is the "Final Treatability Testing Report, Drake Chemical Superfund Site, Lock Haven, Pennsylvania", prepared by Gannett Fleming, Inc., 8/92 that compared the biologically activated carbon to regular activated carbon. The report can be found on pages 304653-304880 in volume III H of the Administrative Record for the Site.

The Drake groundwater is contaminated with a wide variety of compounds but the herbicide fenac has the highest concentration, which has been detected at 20,000 µg/l in Zone 1 and up to 9,200 µg/l in Zone 2. The Treatability Study assessed whether or not biologically activated carbon would remediate fenac more effectively than regular activated carbon.

The initial task of the Treatability Study was to acclimate bacteria from several sewage treatment plants to the contaminated groundwater extracted from Zone 2. The Treatability Study then measured the survival and growth rates of the bacteria in the
contaminated groundwater. The Treatability Study continued for several weeks showing the bacteria had a high survival rate but low levels of growth.

The Treatability Study next constructed a bench scale replica of carbon tanks to represent the carbon treatment system used to treat contaminated groundwater at the adjacent American Color and Chemical (AC&C) facility. When EPA was developing information for the groundwater remedy for ROD 3 for the Drake Site, EPA and AC&C had discussed the possibility of using one system to treat the groundwater at the Drake Site and at the adjacent AC&C facility.

The Treatability Study then processed the contaminated water through the bench scale tanks of regular activated carbon and measured the effluent concentration to determine the effectiveness of the treatment. The sampling and analysis revealed that activated carbon was effective in removing the groundwater contaminants, up to a point. As expected, fenac was the first compound to be detected in the effluent indicating that the adsorption capacity of the granular activated carbon had been reached for the fenac.

The next step was to repeat the process through the biologically activated carbon. To make the biologically activated carbon treatment system, the acclimated bacteria was introduced into the activated carbon bench scale tank. The effluent was sampled and analyzed in the same manner as before and once again the measures revealed that fenac was the first compound to be detected when the adsorption capacity of the carbon was depleted. Thus the Treatability Study revealed that the bacteria did not add to the effectiveness of the treatment process. The final conclusion of the Treatability Study was that the removal of contaminants from the groundwater was not enhanced by the addition of the bacteria to the regular activated carbon bench scale tank.

Accordingly, the first revision to the groundwater remedy in ROD 3 is to eliminate the need for a biological component in the treatment system for the groundwater remediation. Extracted Site groundwater will be treated in a system using granular activated carbon adsorption as the primary treatment technology for organics removal in order to meet the Performance Standards below. The treatment system shall be in accordance with federal, state and local requirements including the requirement to meet the equivalency process or obtain necessary permits.

Elimination of Extraction Wells in Zone 1

The second revision is to eliminate the requirement to locate extraction wells in Zone 1 of the Drake Site. This change is made because the soil, sludge, and sediment remediation
described in ROD 3 will not be conducted concurrently with the groundwater remediation. The groundwater remediation and the soil, sludge, and sediment remediation will occur separately. The soil remediation will excavate and incinerate 9 acres at the Drake Site down to the sand and gravel unit, which is situated about 12 1/2 feet below the surface. After excavation and treatment, the ash from the soil incineration will be placed above a two-foot layer of clean fill. Upon completion, the entire 9 acres will be covered with an additional two feet of clean soil and then vegetated. The soil remediation is targeted for completion by September 1998. EPA has decided not to place extraction wells in Zone 1 as a component of the groundwater remediation because such wells would interfere with the soil remediation.

Disposal of Groundwater Treatment Residuals

As discussed above, at the time EPA issued ROD 3, it was anticipated that the soil remediation and groundwater remediation would occur simultaneously. If these remediations had occurred together, the residuals or sludgecake from the groundwater treatment system would have been treated in the incinerator and then backfilled onto the Site. Now, however, each remediation project will be conducted separately. Therefore, this revision eliminates the requirement to use the residuals or sludgecake as backfill. The ultimate disposal of the treatment residuals will be determined during the groundwater design plan phase, which plan shall be subject to approval by EPA in consultation with PADER. Any disposal shall be in accordance with federal, state and local requirements including the requirement to meet the equivalency process or obtain necessary permits.

Elimination of Flood Control Measures

ROD 3 called for flood control measures because the Site was within the 100 year flood plain. In 1995, the U.S. Army Corps of Engineers completed the flood control project for Lock Haven. The treatment facility for groundwater will be constructed within this project area, making flood control measures unnecessary. Therefore EPA has changed ROD 3 by eliminating the requirement of flood control measures.

Discussion of Groundwater in Zone 3

ROD 3 for groundwater remediation at the Drake Site does not include Zone 3 as an area to place extraction wells because the network of extraction wells will be designed to prevent any further flow of contamination into Zone 3. Therefore, the water quality in Zone 3 is expected to improve by natural attenuation and the flushing effects of groundwater that flows through the aquifer. This expected scenario, however, creates the need to conduct groundwater monitoring to verify that the water quality...
in Zone 3 is improving while the remediation in Zone 2 is ongoing. If the monitoring shows that the expected attenuation is not occurring, the extraction system in Zone 2 may need design modification to influence Zone 3. Monitoring will then continue throughout the groundwater remediation.

Definition of On-Site

At this time, the groundwater remediation for the Drake Site is expected to occur concurrently with the groundwater remediation for the AC&C facility under separate requirements under CERCLA and RCRA. Therefore, some discussion is needed to clarify On-Site treatment and the need for permits because of the CERCLA and RCRA programs. CERCLA Section 121(e) provides that no Federal, State or local permit is required for the portion of the remedy that is conducted entirely On-Site. However, the RCRA requirements require the permits for On-Site treatment. In order to resolve this discrepancy, this ESD defines On-Site for the ROD 3 groundwater remediation under the Consent Decree to mean the areal extent of contamination present in the groundwater plume. This definition includes areas in very close proximity to the contamination necessary for implementation of the remedial response (40 CFR Part 300.5). Specifically, the treatment facility for groundwater remediation under the Consent Decree may be located on the AC&C property or Zone 2 and still be considered On-Site for purposes of CERCLA. One further clarification is needed for the Consent Decree which will provide for implementation of the groundwater remedy for the Drake Site. The On-Site definition stated above will be applicable to contaminated water transported from Zone 2 to the AC&C property and this transportation will be considered On-Site.

This ESD, however, does not exempt the treatment facility from necessary RCRA requirements. As the treatment facility will be operating under the RCRA program, all permits required by the RCRA program are necessary for the treatment facility to be in compliance with the RCRA program.

Performance Standards and Alternative Performance Standards

The following are the Performance Standards and/or Alternative Performance Standards for the Remedial Design/Remedial Action and Operation and Maintenance activities to be performed at the Site for the ROD 3 groundwater remediation:

EXTRACTION IN ZONE 2

1. The Target Constituents for the Site are benzene, 1,2-dichloroethane and beta-naphthylamine. The Site is divided into three Zones. Zone 1 includes the physical boundaries of the property owned by Drake Chemical and the Gorham
property. Zone 2 extends from Zone 1 to Route 220 and Zone 3 begins at Route 220 and ends at Bald Eagle Creek. These Zones are identified in Figure 1.

2. Performance Standards for Zone 2 and Zone 3 defined in ROD 3 are 5 μg/l for 1,2-dichloroethane and 5 μg/l for benzene.

3. This ESD establishes a Performance Standard in Zone 2 for the compound beta-naphthylamine at 10 μg/l. This Performance Standard is based on the detection limits for beta-naphthylamine analytical procedures. This ESD further establishes Alternative Performance Standards which are identified in Paragraph 7 below.

4. Groundwater shall be extracted from the aquifer in the sand and gravel unit of Zone 2 to meet the Performance Standards for 1,2-dichloroethane, benzene and beta-naphthylamine identified above in Paragraphs 2 and 3. The extraction system shall be a network of wells in Zone 2 which create overlapping cones of depression which act as a barrier to groundwater flowing through Zone 2. The extraction system shall capture groundwater flowing from Zone 1 and, to the extent possible, limit migration of groundwater containing the Target Constituents into Zone 3.

MONITORING IN ZONE 2 AND ZONE 3

5. Groundwater monitoring wells in Zone 2 shall be used to demonstrate the effectiveness of the extraction system. Groundwater monitoring wells in Zone 2 and Zone 3 shall be used for collection of groundwater samples that shall be analyzed for the Target Constituents. Within Zone 2 the monitoring wells shall be located upgradient of the extraction well system, within the Zone 2 extraction well system and downgradient from the extraction well system. In Zone 3 the monitoring wells shall be sampled and analysis shall be conducted to verify that the concentration of 1,2-dichloroethane is decreasing from current levels in Zone 3 during the Remedial Action and the Operation and Maintenance period.

SUSPENSION OF EXTRACTION SYSTEM

6. The Performance Standards of 5 μg/l for benzene, 5 μg/l for 1,2-dichloroethane and 10 μg/l for beta-naphthylamine shall be achieved for eight consecutive quarters before completion of the Remedial Action can be certified by EPA as provided in the Consent Decree. After EPA certifies completion of the Remedial Action, the groundwater extraction and treatment system may be suspended and the Operation and Maintenance as defined in the Consent Decree shall begin. Achievement of Performance Standards will be based on
statistical evaluation methodologies. The exact statistical methods will be included in the Final Design, to be approved by EPA. The statistical method will be based on EPA guidance, such as "Methods For Evaluating the Attainment of Cleanup Standards, July 1992 (EPA 230-R-92-014)", and generally accepted scientific protocols to account for data variability caused by sampling, analytical, seasonal, and temporal effects.

7. Alternatively, if quarterly analysis demonstrates that no further decrease in concentrations of the Target Constituents can be achieved for eight consecutive quarters, EPA in consultation with PADER may determine that the demonstration of no further decrease in the concentration of the Target Constituents is an Alternative Performance Standards ("APS"). If EPA determines that the APS have been met completion of the Remedial Action may then be certified by EPA after consultation with PADER and Operation and Maintenance shall begin. Achievement of Alternative Performance Standards will be based on statistical evaluation methodologies. The exact statistical methods will be included in the Final Design, to be approved by EPA. The statistical method will be based on EPA guidance, such as "Methods For Evaluating the Attainment of Cleanup Standards, July 1992 (EPA 230-R-92-014)", and generally accepted scientific protocols to account for data variability caused by sampling, analytical, seasonal, and temporal effects.

MONITORING DURING SUSPENSION

8. When Operation and Maintenance begins, as determined in Paragraphs 6 and 7 above, the operational integrity of the extraction and treatment systems shall be maintained and quarterly monitoring will continue to assess groundwater concentrations for a period of two years.

8a. If the quarterly monitoring required during Operation and Maintenance shows that concentrations for the Target Constituents have remained constant for eight quarters, the Settling defendants may seek to certify the completion of Work as set forth in the Consent Decree.

8b. If any quarterly monitoring required during Operation and Maintenance shows an increase in concentrations of Target Constituents from the Site, the pumps used for the groundwater extraction and treatment system during the Remedial Action shall be restarted to meet the requirements as described in Paragraphs 1 through 5 above.
9. If the extraction and treatment system has been restarted during Operation and Maintenance, the Performance Standards or the Alternative Performance Standards shall be met for a period of four consecutive quarters. If EPA determines that the Performance Standards and/or Alternative Performance Standards have been met, a second round of suspension of the extraction and treatment system shall begin.

10. Following the second suspension in Paragraph 9 above, Operation and Maintenance shall continue. The operational integrity of the extraction and treatment systems shall be maintained and quarterly monitoring will continue to assess groundwater concentrations for a minimum of one year.

10a. If the quarterly monitoring required during Operation and Maintenance shows that concentrations for the Target Constituents have remained constant for four quarters, the Settling Defendants may seek to certify the completion of Work as set forth in the Consent Decree.

10b. If the quarterly monitoring required during Operation and Maintenance shows an increase in concentrations of Target Constituents from the Site, the pumps used for groundwater extraction and treatment system during the Remedial Action shall be restarted to meet the requirements described in Paragraphs 1 through 5 above.

TECHNICAL IMPRACTICABILITY WAIVER

11. If hydrogeological and chemical evidence demonstrate that it will not be possible to meet the Performance Standards and/or the Alternative Performance Standards a technical impracticability waiver may be considered. EPA, after consultation with the PADER, may then waive the Performance Standards and/or the Alternative Performance Standards and then establish new groundwater performance standards in a future decision document based on its review of the long-term operation and monitoring of the groundwater extraction and treatment system in accordance with the CERCLA National Contingency Plan.

IV. SUPPORT AGENCY COMMENTS

All of the above changes to the remedy have been coordinated with representatives of PADER pursuant to 40 C.F.R. § 300.435(c)(2). PADER submitted a letter on April 14, 1995 concurring with the changes to the selected remedy as described in this ESD.
V. AFFIRMATION OF THE STATUTORY DETERMINATIONS

EPA has determined that the revised remedy complies with the statutory requirements of CERCLA § 121, 42. U.S.C. § 9621. Considering the new information that has been developed and the changes that have been made to the selected remedy, EPA believes that the remedy remains protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to this Remedial Action as described in the ROD for groundwater remediation for this Site, and is cost-effective. In addition, the revised remedy utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable for this Site.

VI. PUBLIC PARTICIPATION

A summary of the proposed ESD was published in the Lock Haven Express on June 7, 1995. The ESD and other related documents upon which it is based have been included in the Administrative Record file and the information repository for this Site. The Administrative Record is available for public review at the locations listed below:

U.S. EPA, Region III
841 Chestnut Building
Philadelphia, PA 19107
Hours: Mon. - Fri., 9:00 a.m. - 4:00 p.m.

Lock Haven City Hall
200 Church Street Second floor conference
Lock Haven, PA 17745

Ross Public Library
Lock Haven, PA 17745

Stevenson Library
Lock Haven University
Lock Haven, PA 17745

This ESD will be part of Appendix A to the Consent Decree for the groundwater remediation at the Drake Site.

6/14/95
Date

Thomas C. Voltaggio, Director
Hazardous Waste Management Division