



**PB98-963140**

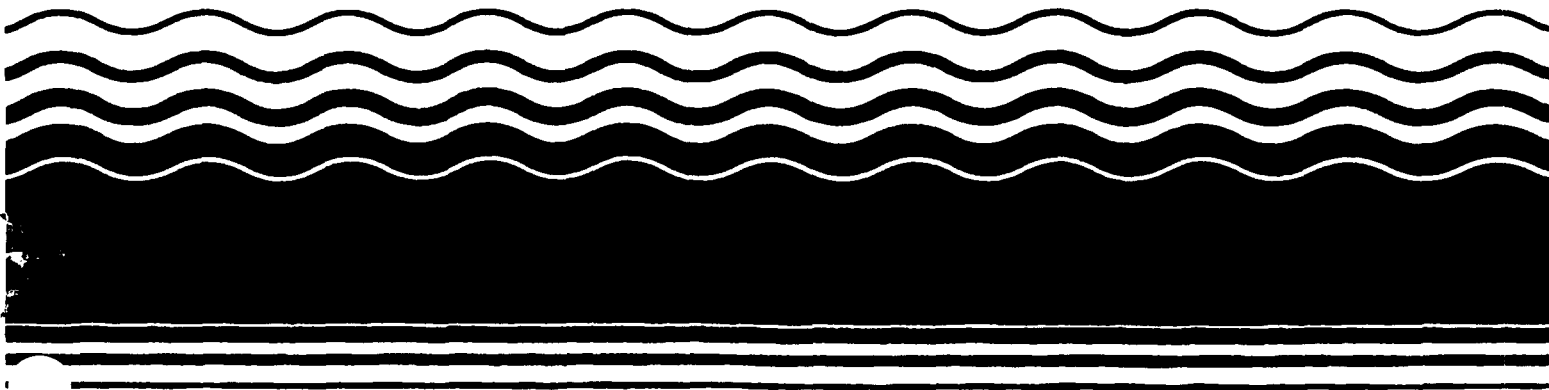
**EPA 541-R98-152**

**March 1999**

## **EPA Superfund**

### **Explanation of Significant Difference for the Record of Decision:**

**Galen Myers Dump/  
Drum Salvage  
Osceola, IN  
9/30/1998**



EXPLANATION OF SIGNIFICANT DIFFERENCES  
GALEN MYERS DUMP/DRUM SALVAGE SITE  
OSCEOLA, IN  
AUGUST 1998

**INTRODUCTION**

This Explanation of Significant Differences (ESD) is for the Galen Myers Dump/Drum Salvage Superfund Site, located in Penn Township, St. Joseph County, Indiana. This ESD is being issued pursuant to Section 117 of the Comprehensive Environmental Response, Compensation and Liability Act, and Section 300.435(c)(2)(i) of the National Contingency Plan (NCP) by the Indiana Department of Environmental Management (IDEM) in cooperation with the United States Environmental Protection Agency (U.S. EPA). IDEM is the lead agency for this site and U.S. EPA is the support agency.

This ESD provides an explanation of significant differences in the following components of the remedy selected in the September 29, 1995, Record of Decision (ROD): "estimates of soils exceeding the soil preliminary remediation goal (PRG) requiring excavation." Based on the data gathered during Remedial Design (RD), soil excavation is no longer necessary. This ESD shall be part of Administrative Record and will be available for viewing at the Information Repositories for this site.

**SITE BACKGROUND**

The Galen Myers Site is located at 11303 Edison Road in Penn Township, St. Joseph County, Indiana, is surrounded primarily by agricultural land. A residence and commercial business are adjacent to the site, and Edison Road is the southern border.

Mr. Galen Myers, former owner of the property, operated a drum reclamation operation from about 1970 to 1983. Mr. Myers acquired 55-gallon drums from local industries and recycled the drums into trash containers by removing the tops and dumping the drum contents into unlined pits and onto the ground surface from the driveway. Both semi-volatile organic compounds (SVOCs) and volatile organic compounds (VOCs) were released into the environment.

The U.S. EPA found numerous empty and several partially filled drums throughout the property. The Myers family indicated its intent to dispose of the drums since the business was no longer in operation; however, no efforts were made to clean up the property.

The Site was placed on the National Priority List in 1989. Remedial Investigation (RI) sampling was performed both on-site and in the residential areas to the south from July 1993 to October 1994. Surface soil, subsurface soil, and vapor samples were collected to determine if residential contamination remained after the U.S. EPA removal actions. The major contaminant of concern for soil and groundwater is a VOC, Trichloroethene or TCE.

Groundwater sample results confirmed that TCE contaminated groundwater was moving



downgradient (to the south) and posed unacceptable threats to human health through ingestion of contaminated groundwater. Inorganic contaminants were detected in residential wells, but are suspected to be associated with the background quality of the groundwater. Soil sample results did not indicate unacceptable threats to human health from direct contact with the soils, but did show that TCE may migrate out of soil to the groundwater at levels higher than the Maximum Contaminant Levels (MCLs) set by the Safe Drinking Water Act.

The Feasibility Study (FS) identified and evaluated alternatives that could address the contamination identified near the site area. Four cleanup alternatives for groundwater and three for soil contamination were considered for this site. IDEM and U.S. EPA evaluated the alternatives on the basis of the nine criteria of the NCP, including effectiveness in protecting the public health and the environment, compliance with federal and State regulations, and cost. A public meeting and public comment period were held and public comments were considered prior to selection of the remedy. In the original 1995 ROD IDEM selected excavation of TCE-contaminated soil on-site, provision of an alternate water supply to affected and potentially affected residents, natural attenuation of groundwater, ground water monitoring and institutional controls. Once the ROD was signed, IDEM began Remedial Design activities.

#### **DESCRIPTION OF SIGNIFICANT DIFFERENCES AND BASIS FOR THE DIFFERENCE**

The primary reason for this ESD is to document a significant difference in the selected remedy. The major difference between the remedy selected in the ROD and this ESD is that based upon sampling conducted during the RD the volume of soils from the test pit area exceeding the soil PRG has decreased significantly. These sampling results indicate that no soils in excess of the PRG exist within that area. As such, it is not necessary to implement the soil excavation component of the remedy.

The other key provisions of the 1995 ROD that will remain the same are:

- Natural attenuation of groundwater;
- Installation of additional groundwater monitoring wells;
- Long-term monitoring of groundwater and the St. Joseph River;
- Alternate water supply to the residential area (completed in early 1996); and
- Institutional Controls, such as prohibiting installation of wells on the site or in the residential area affected by TCE- contaminated groundwater.

Based on the RI and FS conclusions, the original ROD recommended excavation and off-site disposal of soil in areas where soil exceeded the PRGs of 110 parts per billion (ppb) of TCE. The RI risk assessment showed that the risks to future residents and/or construction workers from on-site soil contact were within acceptable ranges for carcinogenic risk. Therefore, during the FS the

residual leaching threats from soil to groundwater were considered. U.S. EPA's Soil Screening Levels guidance was used to develop PRGs. TCE levels were above the PRGs and remediation of the soils to address the residual leaching effect was considered.

The RD phase began in April 1997, when IDEM hired a contractor to perform the design phase activities of the selected remedy. These activities included soil sampling and groundwater screening to determine long-term monitoring well locations.

Soil samples were collected to determine the horizontal extent of TCE contamination around the test pit within the Galen Myers property through the use of a GeoProbe™ rig. Samples for the analysis. Soil samples were collected at 15 locations from a 20-foot interval grid area surrounding the test pit location. The soil samples were collected continuously to the top of the water table which was encountered between 5.5 to 6 feet below ground surface at 4 foot intervals.

The soil samples were analyzed in accordance with the Quality Assurance Project Plan procedures established for analytical work at this site. The on-site lab analyses revealed TCE contamination at only two locations, with concentrations at 106 and 6 ppb. The TCE concentrations are below the action levels that would have triggered excavation and disposal as required in the 1995 ROD. The required action level for soil excavation and removal mentioned in the 1995 ROD is 110 ppb. IDEM conducted confirmatory sampling in March 1998 and analyzed the sample at a conventional lab using CLP procedures. The analytical results showed TCE concentrations at 47 and 89 ppb, which are again below the action levels mentioned in the ROD.

The decrease of TCE concentrations in the unsaturated (vadose) soil zone is likely to be the result of two combined processes: volatilization causing TCE to move from the soil particles into the soil gas in the soil pore spaces; and removal of the TCE from the vadose zone by water (precipitation) soaking its way through the vadose zone to recharge the groundwater.

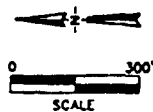
After confirmation of the existing TCE concentrations in the soil at the Galen Myers Site, IDEM, in consultation with U.S. EPA has determined that the excavation is not necessary. The existing soil contamination concentration levels do not pose any residual threat to the environment or human health, and, based upon modeling work completed in the FS, should not pose a residual threat to the groundwater. The well installation work for long-term groundwater monitoring will continue as stated in the 1995 ROD.

### **COST**

The change in the Scope of Work (SOW) discussed in this document decreases the cost of the original remedy by \$164,000. The estimated total cost of the remedy was \$1,730,000, not including an estimated \$5.3 M in costs for any prior U.S. EPA response actions.

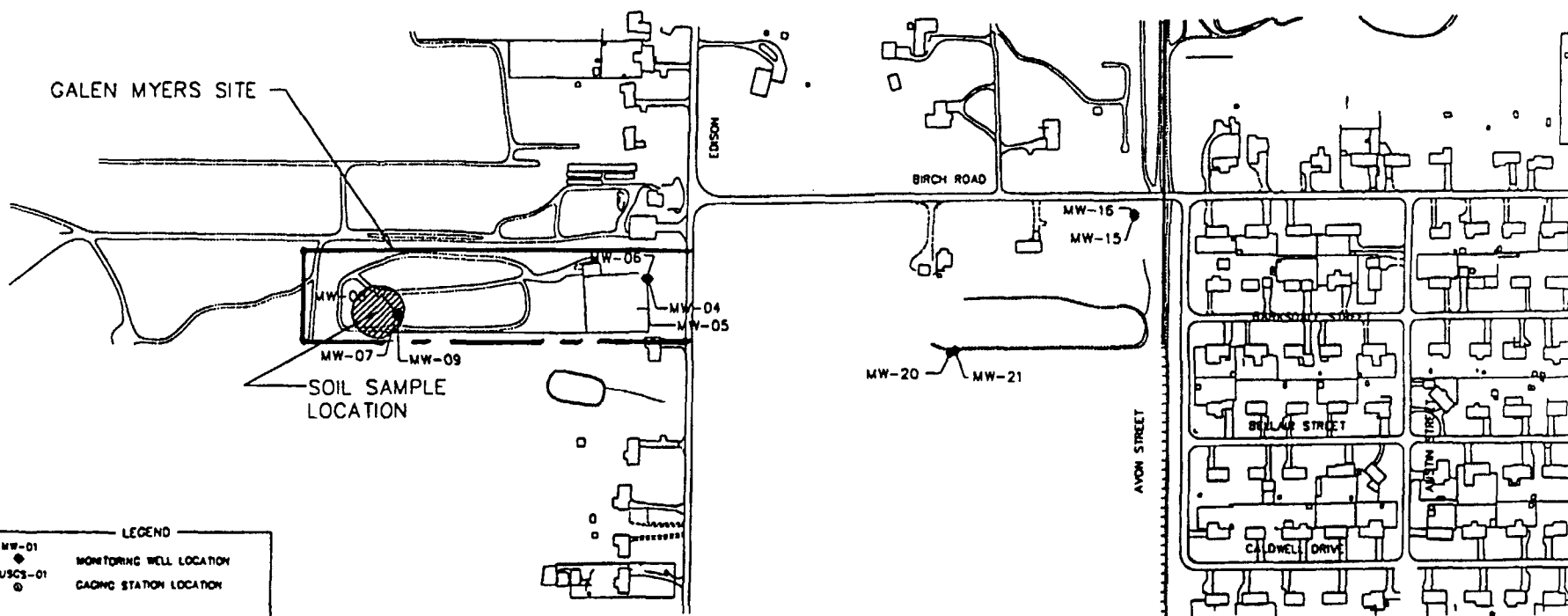
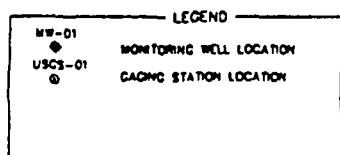
### **AFFIRMATION OF STATUTORY DETERMINATIONS**

The modified remedy continues to satisfy statutory requirements. Considering the new information that has been developed and the change that has been made to the selected remedy,



GALEN MYERS SITE

SOIL SAMPLE LOCATION



FIGURE

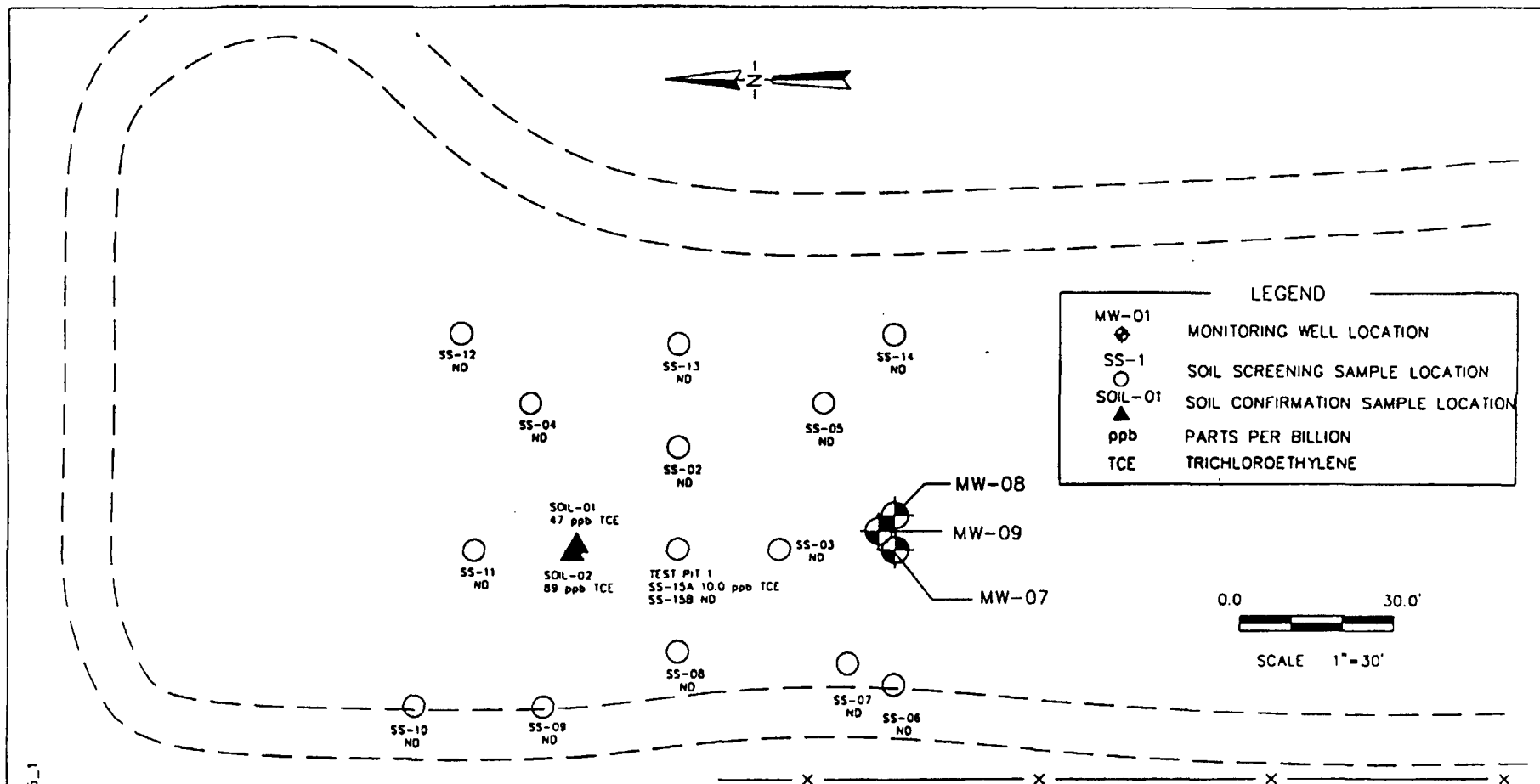
**Baker**  
Baker Environmental, Inc.

**WESTON**  
ENGINEERS DESIGNERS/CONSULTANTS

Three Hawthorn Parkway  
Vernon Hills, Illinois  
60061

SOIL SAMPLE LOCATION MAP  
GALEN MYERS SITE  
Osceola, Indiana

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**Baker**

Baker Environmental, Inc.

SOIL SAMPLING LOCATIONS  
GALEN MYERS SITE  
Osceola, Indiana

FIGURE

DRAWN BY:	WMP
CHECKED BY:	JDP
DRAWING DATE:	9/11/98
DWG NO.	15695_1
SCALE:	AS SHOWN

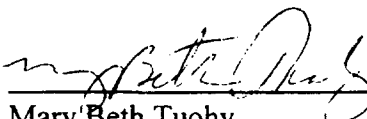
IDEM and U. S. EPA believe that the remedy remains protective of human health and the environment, complies with the Federal and State requirements that are applicable or relevant and appropriate to this remedial action, and is cost effective. In addition this revised remedy utilizes permanent solutions and alternative treatment (or resources recovery) technologies to the maximum extent practicable for this site.

### **PUBLIC PARTICIPATION ACTIVITIES**

The IDEM held a meeting in August 1995 to announce the completion of Remedial Investigation and Feasibility activities and explained the Record of Decision components for final remedial action at the site. Copies of the original ROD and other site related documents including this ESD are available at the information repositories mentioned below:

Mishawaka Penn Public Library  
Bittersweet Branch Library  
602 Bittersweet Road  
Mishawaka, IN

IDEM's File Room (2<sup>nd</sup> Floor)  
2525 North Shadeland Avenue  
Indianapolis, IN 46219  
Hours: 8 a.m. - to 4:30 p.m. (12 / 1 p.m. closed)

 7/27/98  
\_\_\_\_\_  
Mary Beth Tuohy                      Date  
Assistant Commissioner, OER, IDEM



**SUPPORT AGENCY COMMENTS**

The U.S. EPA concurs with the ESD.

W. E. Munro      9/30/88  
William E. Munro, Director      Date  
Superfund Division, U.S. EPA

Table 1  
Galen Myers Dump/Drum Salvage Site Comparison of Evaluation Criteria for Soil Removal  
Action

Evaluation Criteria	1995 Remedy Excavation and Off-site Disposal	No soil excavation
Overall Protection of Human Health and the Environment	<ul style="list-style-type: none"> <li>• Would be protective of human health and the environment.</li> <li>• Would eliminate the potential for chemicals in soil to migrate to groundwater.</li> <li>• Activities will comply with ARARs.</li> </ul>	<ul style="list-style-type: none"> <li>• There are no unacceptable human health risks associated with exposure to site soils.</li> </ul>
Compliance with ARARs	<ul style="list-style-type: none"> <li>• Will comply with ARARs (re: LDRs, OSHA)</li> </ul>	<ul style="list-style-type: none"> <li>• No ARARs for soil</li> <li>• Soils do not exceed PRGs.</li> </ul>
Long-Term Effectiveness and Permanence	<ul style="list-style-type: none"> <li>• Will provide long-term effectiveness and permanence.</li> <li>• Soils exceeding PRGs will be removed from the site.</li> </ul>	<ul style="list-style-type: none"> <li>• Will provide long-term effectiveness or presence.</li> </ul>
Reduction of Toxicity, Mobility, and Volume Through Treatment	<ul style="list-style-type: none"> <li>• The toxicity, mobility, and volume of contaminants will be reduced.</li> </ul>	<ul style="list-style-type: none"> <li>• No treatment necessary, therefore no reduction in toxicity, mobility or volume of contaminants would be achieved.</li> </ul>
Short-Term Effectiveness	<ul style="list-style-type: none"> <li>• Controls to protect workers and the community will be implemented during construction activities.</li> <li>• Excavation and disposal will be effective in the short-term.</li> </ul>	<ul style="list-style-type: none"> <li>• No impacts to community.</li> <li>• Will not exceed PRGs.</li> </ul>
Implementability	<ul style="list-style-type: none"> <li>• Can be implemented easily.</li> <li>• Excavation and disposal activities are conventional.</li> </ul>	<ul style="list-style-type: none"> <li>• There are no technical or administrative considerations.</li> </ul>
Cost	\$806,000 (Hazardous); \$164,000(Non-hazardous)	<ul style="list-style-type: none"> <li>• There is no cost for this alternative.</li> </ul>