

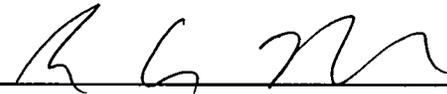
**AFTER-ACTION LETTER REPORT FOR
HASTINGS GASOLINE SPILL
EMERGENCY RESPONSE
8805 BEDFORD ROAD (M-37)
DOWLING, BARRY COUNTY, MICHIGAN
TDD: S05-0308-014**

4 November 2003

Prepared for:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency Response Branch**

**9311 Groh Road
Grosse Ile, Michigan 48138**

Prepared by: 
Rebecca Campbell Nemirovsky, START

Date: 11/4/03

Reviewed and
Approved by:  for
Daniel Capone, START Project Manager

Date: 11/4/03



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SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W-00-119

4 November 2003
12634-001-002-0408-00
DC No. 408-2A-ADOE

Mr. Brian Kelly
On-Scene Coordinator
Emergency Response Branch
U.S. Environmental Protection Agency
9311 Groh Road
Grosse Ile, Michigan 48138

Hastings Gasoline Spill Emergency Response
8805 Bedford Road (M-37)
Dowling, Barry County, Michigan
TDD: S05-0308-014

Dear Mr. Kelly:

On 28 August 2003, the United States Environmental Protection Agency (U.S. EPA) tasked the Weston Solutions, Inc. (WESTON®), Superfund Technical Assessment and Response Team (START) contractor, to respond to a 5,900 gallon spill of gasoline from a tanker truck in a residential neighborhood along State Road M-37 in Dowling, Michigan.

SITE LOCATION AND BACKGROUND

The Hastings Gasoline Spill occurred on 27 August 2003 at 8805 Bedford Road (State Route M-37), Dowling, Barry County, Michigan. The spill resulted in local officials closing a section of State Route M-37 and evacuating residences and businesses from an area within a ½ mile radius of the spill. The area around the spill includes residential homes, a Marathon Gas Station, and agricultural fields. The nearest surface water body is the Mack and Manning Drain, located approximately 1,500 feet to the northeast of the spill site. The Mack and Manning Drain flows to the north eventually emptying into Mud Lake.

On 27 August 2003, at 2130 hours (all times are approximations), an HRJ, Inc. tanker truck carrying 13,400 gallons of gasoline was traveling northbound on State Road M-37 (Bedford Road) when it lost control and capsized. The truck came to rest in the front yard of 8805 Bedford Road, fewer than 50 feet from the occupied home. A breach in the truck's tank caused by the accident resulted in the release of 5,900 gallons of gasoline. The gasoline spread over an area of 15,000 square feet, killing the grass and soaking into the ground, with resulting migration to catch basins and a buried storm drain to the east and north. The gasoline also seeped into the basement of the home on the property, forming puddles of gasoline on the dirt floor. The

truck's driver received treatment for noncritical injuries at the hospital. At 2215 hours, the Hastings Fire Department (HFD) initiated Incident Command (IC) because of the threat of fire or explosion, and ordered the evacuation of 20-30 homes within a ½-mile radius of the spill site.

RESPONSE ACTIVITIES

On Wednesday, 27 August 2003 at 2200 hours, the HFD contacted Young's Environmental, Inc. (Young's) to provide response and cleanup support. However, HRJ, Inc. informed the HFD that they had contracted Taplin Environmental, Inc. (Taplin) to respond to the spill. On arriving at the scene, Taplin discovered the tanker's lids were not accessible with the equipment they had available, and determined that they could not off-load the tanker. HRJ then contracted Young's, who arrived on-site at 0230 hours on 28 August.

Upon arriving at the scene, Young's cut an access port into the tanker and pumped the remaining gasoline into a waiting HRJ tanker truck. At 1045 hours on 28 August, the HFD allowed residents from all but seven evacuated homes to return after the tanker was off loaded, righted and removed from the spill site. At 1100 hours, Young's demobilized from the site, while Taplin remained on-site to continue recovery and cleanup of the spilled gasoline.

On 28 August recovery activities by Taplin included pumping of gasoline and water out of catch basins, excavation of some of the gasoline contaminated soils, construction of an earthen berm in the Mack and Manning Drain, and construction of trench sumps on the north, east, and south sides of the spill. Taplin also removed and transferred two aboveground fuel oil tanks to the east side of the 8805 Bedford Road property away from the excavation. At 2145 hours, Taplin personnel commenced excavation of gasoline contaminated soil at the northeast corner of the 8805 Bedford Road home. A vacuum hose attached to the 8805 home's basement drainage pipe recovered additional gasoline. The recovered gasoline was stored in three on-site frac tanks provided by Taplin.

At 1830 hours on 28 August, the U.S. EPA Emergency Response Branch received notification of the incident by the National Response Center (NRC), and responded under the Oil Pollution Act. The U.S. EPA concurrently tasked WESTON START to respond. On arrival at the scene, U.S. EPA commenced continuous air monitoring, activities which continued until 2 September when HRJ's contractor took over air monitoring responsibilities. Air monitoring was conducted using Multi-RAE air monitoring instruments for volatile organic compound (VOC) vapors and explosivity [as measured by percent of the lower explosive limit (LEL)] at the spill area excavations, nearby storm sewer catch basins, and along the Mack and Manning Drain. Initial air monitoring for benzene (measured with benzene Draeger tubes) conducted by the U.S. EPA in and around the excavation area on 28 August showed benzene concentrations of 3 to 5 parts per million. The area in and around the excavation was subsequently designated as an exclusion zone and only personnel wearing personal protective equipment and air purifying respirators were allowed entry.

Early visual inspection of the nearby storm sewer catch basins by U.S. EPA showed that many contained gasoline. Taplin used vacuum trucks to pump the gasoline from these catch basins. Subsequent air monitoring continued to show the presence of gasoline vapors in three of six nearby catch basins, and at the storm sewer outfall to the Mack and Manning Drain. Air monitoring at a culvert approximately 600 feet northeast (downstream) of the storm sewer outfall showed the gasoline had not migrated through the earthen berm placed by Taplin at the outfall. Additionally Taplin used a sewer plug to plug one catch basin found across the street (up gradient) from the spill. Follow-up monitoring by U.S. EPA showed no gasoline vapors in the up gradient catch basins.

On 29 August, Taplin continued to vacuum pump the recovery trenches and catch basins during the early morning hours. Suspension of vacuum pumping occurred periodically because of lightning. Sporadic heavy rain did not cause significant collection of water in the excavations or in catch basins. Throughout the night, U.S. EPA continued to conduct hourly air monitoring in and around the spill area and at storm sewer catch basins and areas along the Mack and Manning Drain. During the daylight hours of 29 August, Taplin built a lined and bermed soil staging area for staging of excavated soils, pending receipt of disposal sample analysis. Upon completion of the bermed staging area construction, Taplin began excavation and staging of gasoline impacted soils. The soil area that required excavation primarily extended west and north between the 8805 Bedford Road home and M-37. U.S. EPA OSC Kelly coordinated response and cleanup efforts with local and state officials, HRJ officials, and Taplin from 28 August through 5 September. OSCs Michelle Jaster and Ralph Dollhopf were on-site periodically for support.

On 30 August, Taplin continued excavating to the north and northeast of the home and continued staging contaminated soil on the bermed staging area. Underground utilities required Taplin to excavate some of the soils with hand tools. The depth of the initial excavation was approximately 5 feet below ground surface. Pumps transferred collected gasoline and water to on-site frac tanks. U.S. EPA continued conducting oversight of Taplin's cleanup and hourly air monitoring around the excavation, catch basins, and the Mack and Manning Drain using Multi-RAE instruments. U.S. EPA mobilized perimeter air monitoring stations (AreaRAE system) to the site. The AreaRAE continually monitors for VOC vapors in the air and relays data by means of a radio frequency transmitter to an on-site database. Five AreaRAE stations were mobilized and set up at various locations (stations) around the perimeter of the gasoline spill area and contaminated soil staging area. U.S. EPA also began collecting discrete soil samples from the excavation floor and walls for VOC headspace screening using a Multi-RAE to delineate areas requiring further excavation by Taplin. An emergency headspace action limit was established by U.S. EPA of 100 units on the Multi-RAE. U.S. EPA required Taplin to further excavate if VOC headspace readings above 100 units were detected on the excavation floor or sidewall samples.

On 31 August, Taplin expanded the area of excavation laterally to the north, east, and south based on VOC headspace readings. On the east side of the 8805 Bedford Road property, a shed was demolished to allow for further excavation of impacted soils. During a check of storm sewer catch basins to the northeast of the spill site, U.S. EPA identified a sinkhole over the storm sewer line, suggesting the possibility of a broken section of sewer pipe. Taplin confirmed the presence of a sewer line break when they pumped 500 gallons of water into an up gradient catch basin and the water could not be recovered from a down gradient catch basin. Headspace field screening results of soil samples collected from the floor of the excavation showed several areas that did not meet the established 100 unit action level. Taplin subsequently excavated deeper in these areas.

On 31 August, the HFD in consultation with U.S. EPA determined the threat of an explosion had been mitigated by the response activities conducted thus far. Hourly LEL readings were collected by U.S. EPA in the basement of the 8805 Bedford Road home to confirm this determination. At 1800 hours, the HFD demobilized continuous standby of firefighter crews and equipment from the site. The American Red Cross, which had been providing support to responders since 28 August, also demobilized from the site. A steady light rain fell throughout the night of 31 August. During the night, Taplin periodically pumped water and gasoline from the 8805 Bedford Road basement sump and from storm sewer catch basins. In addition, U.S. EPA collect 12-hour Summa canister air samples from inside the remaining evacuated homes for VOC laboratory analysis. Canisters were set in the ground floor and/or basement of each of the seven evacuated homes. Summa canisters air samples were sent to AAC Trinity Laboratories for VOC analysis via U.S. EPA Method TO-15.

On 1 September, Taplin crews continued excavating and staging gasoline impacted soils from the yard of 8805 Bedford Road. Excavation was slowed because of rain. Rainfall throughout the day also mobilized gasoline product from impacted soil areas that had not yet been excavated on the west side of the residence into the excavation. Taplin excavated a sump trench inside the excavation to collect gasoline and water entering the excavation and prevent cross-contamination of excavated clean areas. Taplin periodically continued to pump liquids from the sump trench and from the basement sump throughout the day. U.S. EPA suspended use of the AreaRAE perimeter monitoring system due to rain and high humidity. U.S. EPA continued conducting hourly air monitoring around the excavation and at storm sewer catch basins and the Mack and Manning Drain locations using Multi-RAE instruments.

On 2 September, Taplin continued recovery of gasoline and water out of catch basins around the spill, from the basement of the 8805 Bedford Road home, from the outfall to the Mack and Manning Drain, and from the excavation recovery trenches. Taplin also continued excavating and staging impacted soils from the northwest and northeast corners of the excavation.

U.S. EPA received results of air samples collected from inside the seven evacuated homes. Analytical results are summarized in Attachment B. Analytical results for five homes were below the $3 \mu\text{g}/\text{m}^3$ action levels for benzene set by the Barry County Health Department (BCHD). Samples collected from the basement of 8805 Bedford Road and from the ground floor of one other home contained concentrations of benzene which exceeded the $3 \mu\text{g}/\text{m}^3$ action level for benzene. It is believed the elevated level of benzene in the second home was caused by vapors from the excavation area entering the home through an open window. U.S. EPA subsequently conducted air monitoring for VOCs and LEL in and around the evacuated homes as a final check before allowing reentry of the cleared homes. No VOCs or LEL were detected in any of the homes monitored and four of the five evacuated residents were allowed to return to their homes. The fifth resident was not allowed to occupy the home due to the location of the contaminated soil staging area (next to the home).

On 2 September HRJ, Inc. retained the services of Fishbeck, Thompson, Carr, and Huber, Inc. (FTCH) to conduct consulting and engineering tasks for the site, including air monitoring, soil sampling, disposal coordination, and Phase II investigations. On the evening of 2 September, air monitoring activities were transferred from U.S. EPA to FTCH. U.S. EPA continued oversight of Taplin cleanup activities and FTCH air monitoring activities.

On 2 September, based on air monitoring results and continued pooling of gasoline in the basement of 8805 Bedford, the U.S. EPA required the removal of gasoline saturated soil under the home. After on-site discussions between HRJ, the homeowner, the homeowner's attorney (via phone), the homeowner's insurance agent, and HRJ's insurance agent, HRJ elected to demolish the home based on the cost of other possible removal options. At 2000 hours, demolition of the home at 8805 Bedford Road was initiated by Taplin. Before demolition, an asbestos inspection was conducted by FTCH. A small amount of friable asbestos-containing material was removed from the house by Taplin, and asbestos-containing flooring was wet down prior to demolition to reduce dust formation. The structure was leveled by the Taplin crew in approximately 45 minutes using an excavator. Debris clearing and staging continued through the night and into the next morning.

On 3 September, staging and clearing of demolition debris by Taplin continued throughout the morning. Hourly air monitoring at the excavations, catch basins, along the Mack and Manning Drain, and around the perimeter of the excavation continued by FTCH. Taplin received disposal sample analytical results and obtained approval to dispose of staged gasoline-contaminated soil as a Type II waste at C&C Landfill in Marshall, Michigan. During the evening hours on 3 September, Taplin commenced transportation and

disposal of staged soils to C&C Landfill. Transportation and disposal activities continued throughout the night.

On 4 September, Taplin continued conducting transportation and disposal of stockpiled contaminated soil to C&C Landfill. FTCH started collection of verification of soil remediation (VSR) samples from the excavation floor and walls. FTCH worked with Mr. Dave Wierzbicki from the Michigan Department of Environmental Quality Remediation and Redevelopment Division (MDEQ-RRD) to find out required sample parameters and cleanup criteria for the excavation. U.S. EPA and MDEQ determined that excavation would continue until Part 201 Generic Residential Cleanup Criteria (GRCC) were achieved. FTCH mobilized an on-site laboratory to conduct rapid turnaround analysis of VSR soil samples. After mitigating the fire and explosion threat, U.S. EPA and the ICS determined that activities would focus on backfilling and restoration of the western extent of the excavation, which would allow reopening of the M-37 highway. The first round of results from the VSR samples collected along the western wall and floor of the excavation showed that an area in the northwest portion of the excavation failed to meet Part 201 GRCC. Taplin continued excavation in this area until VSR samples showed that excavation achieved the Part 201 GRCC. During the evening of 4 September, Taplin commenced delivery of clean backfill sand to the site and conducted backfilling of the western portion of the excavation along Bedford Road. Backfilled soil was compacted to meet Michigan Department of Transportation (MDOT) requirements. FTCH collected and analyzed Proctor Density samples to insure adequate compaction was achieved.

An additional 12-hour Summa canister sample was collected in the second home to determine if benzene levels were now below the BCHD action level. The sample was delivered to AAC Trinity Laboratories on the morning of 5 September for analysis.

On 5 September, Taplin continued staging clean backfill to be used once cleanup criteria were achieved. Taplin also continued road restoration work, including placement of 22A aggregate on the excavation surface. MDOT representatives were on site to inspect the M-37 road restoration work. MDOT approved the road restoration activities and reopening of M-37. FTCH subcontracted a Stearns Drilling Company to properly abandon the drinking water well located at the 8805 Bedford Road home. U.S. EPA received results from the Summa canister sample collected at the second home. Analytical results indicated that VOC concentrations were below the action levels (Attachment B). With the removal of the contaminated soil pile near the third home, both residences were allowed to return.

On 5 September, the U.S. EPA concluded their involvement with the response at the Hastings gasoline spill emergency response. All U.S. EPA and START personnel demobilized from the site. Additional response activities and follow-up Phase II investigation were to be overseen by the MDEQ-RRD.

SUMMARY

Approximately 3,900 tons of gasoline-contaminated soil was excavated and transported off site for disposal by Taplin through 5 September 2003. One residential home and one shed were demolished during the response to allow for additional soil excavation. Seven homes were evacuated for several days during the response and six of the seven homes were reoccupied by 5 September 2003. The M-37 highway was closed to traffic from 27 August until 5 September 2003 because of the incident and response efforts.

Select photo documentation for the removal action is provided in Attachment C.

This letter report completes the reporting requirements under this TDD. Please do not hesitate to call if any clarification or further assistance is needed.

Sincerely,


Rebecca Campbell Nemirovsky
START Project Scientist

 for
Daniel Capone
START Project Manager

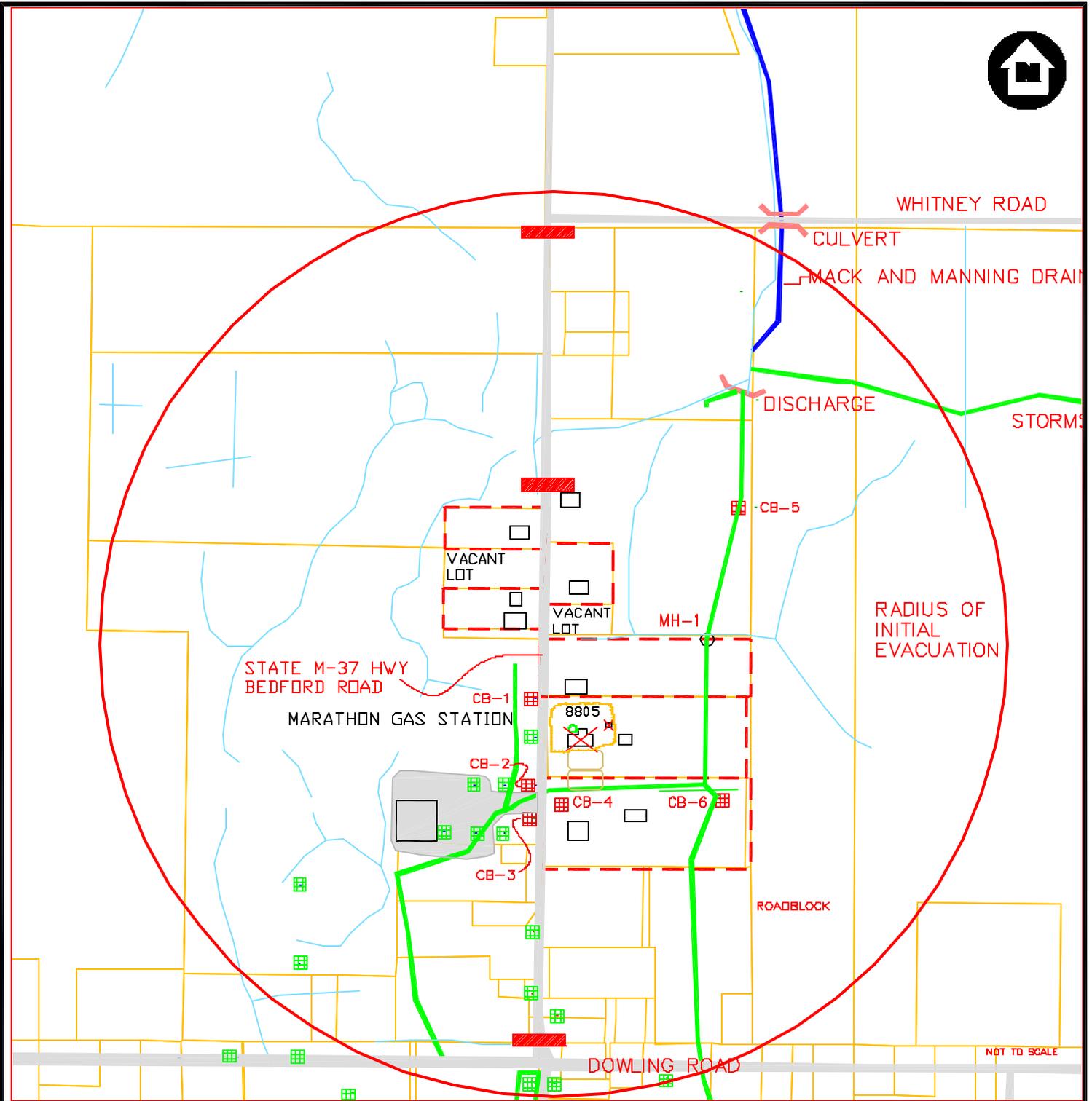
Attachments: A Site Figures
Figure A-1, Site Location Map
Figure A-2, Site Features Sketch
B Analytical Results Table
C Select Photo documentation

cc: Ms. Gail Nabasny, START Project Officer
File

Attachment A

Site Figures

Figure A-1 Evacuation Zone Sketch
Figure A-2 Work Zone Sketch



LEGEND

- DMH DRAINAGE MANHOLE
- ROADBLOCK
- PARCEL BOUNDARY
- EVACUATED PROPERTY
- CB CATCHBASIN
- CULVERT

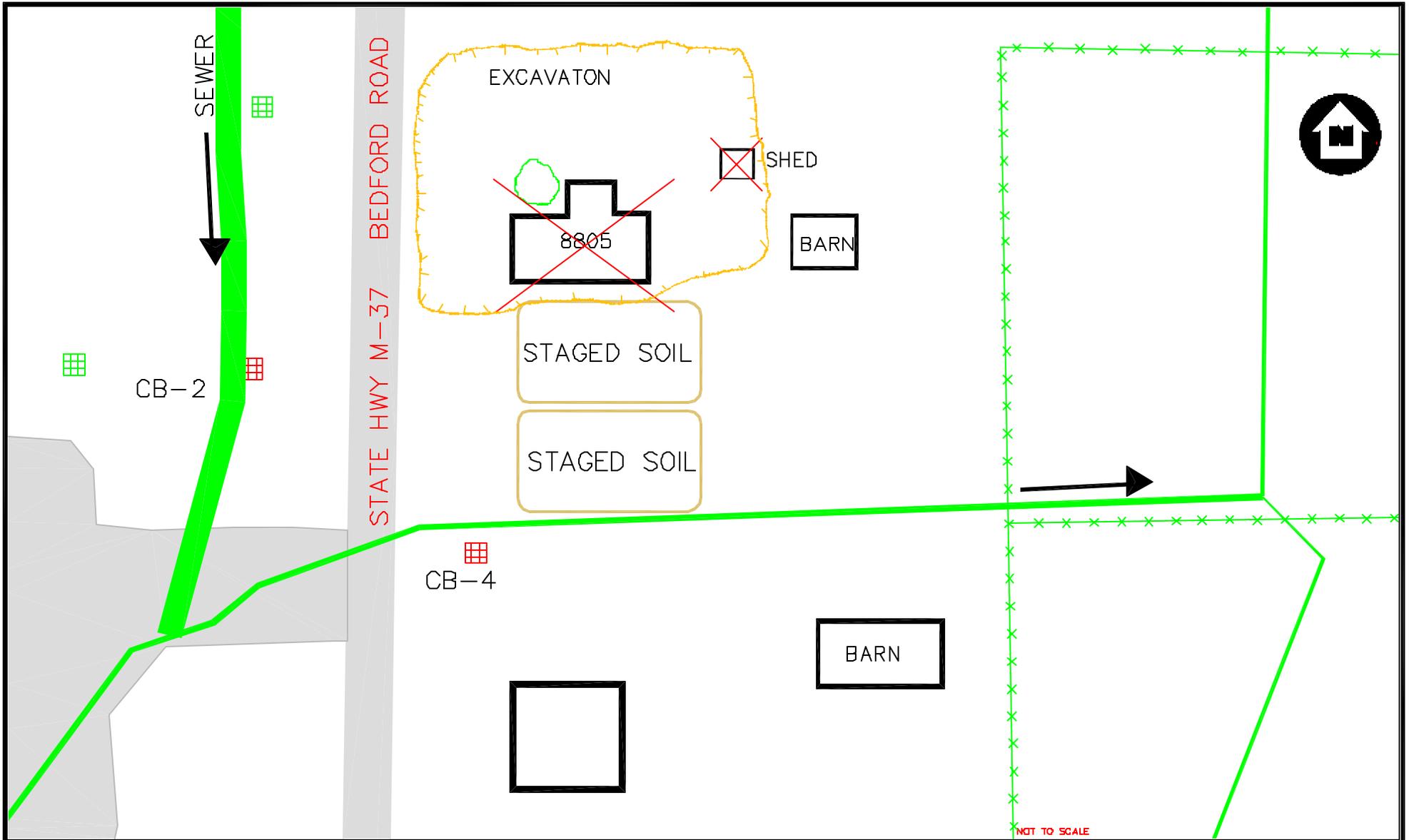
SITE VICINITY SKETCH

HASTINGS GASOLINE SPILL ER
 8055 BEDFORD ROAD
 DOWLING, MICHIGAN



REGION V SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD # S05-0308-014	DRAWN BY: R. NEMIROVSKY	DATE 9/01/03
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NOT TO SCALE

LEGEND

- PAVED AREA
- LIMIT OF EXCAVATION
- CATCHBASIN
- STRUCTURE
- TREE
- FENCE LINE

WORK ZONE SKETCH

HASTINGS GASOLINE SPILL
 8055 BEDFORD ROAD
 DOWLING, MICHIGAN

WESTON SOLUTIONS
SM

REGION V SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD # S05-0308-014	DRAWN BY: R. NEMIROVSKY	DATE 9/1/03
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Attachment B

Analytical Results Table

**Summary of VOC Analytical Results
Hastings Gasoline Spill Emergency Response
S05-0308-014
8805 Bedford Road (M-37)
Dowling, Barry County, Michigan**

Sample ID	Date	Detected Analytical Result	
		Analyte	Result
A	8/31/03	Toluene	24 µg/m ³
B	8/31/03	Toluene 1,1,1-Trichloroethane	30 µg/m ³ 220 µg/m ³
C	8/31/03	Toluene 1,1,1-Trichloroethane	13 µg/m ³ 46 µg/m ³
D	8/31/03	ND	ND
E	8/31/03	Toluene	10 µg/m ³
F	8/31/03	Toluene	17 µg/m ³
G	8/31/03	Toluene m,p-Xylene	30 µg/m ³ 11 µg/m ³ J
H-A	8/31/03	Benzene Toluene m,p-Xylene	17 µg/m ³ J 35 µg/m ³ J 15 µg/m ³ J
8805	8/31/03	Benzene Ethylbenzene Toluene 1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene m,p-Xylene o-Xylene	16,000 µg/m ³ 9,600 µg/m ³ 20,000 µg/m ³ 3,300 µg/m ³ J 7,900 µg/m ³ J 22,000 µg/m ³ J 12,000 µg/m ³
J	8/31/03	Toluene	7.9 µg/m ³
H-B	9/5/03	ND	ND

µg/m³ micrograms per cubic meter

VOC Volatile Organic Compounds

J Values are estimated due to surrogate spike recovery outside of quality control limits

Bolded values indicate exceedence of the Action Level for that compound.

All samples were analyzed for U.S. EPA Method TO15 by AAC Trinity, Inc.

Attachment C

Select Photo documentation



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 005

DIRECTION: W

SUBJECT: Basement of 8805 Bedford Road, with gas visible on the floor.

PHOTOGRAPHER: Rebecca Nemirovsky



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 013

DIRECTION: E

SUBJECT: Initial excavation looking east at 8805 Bedford Road residence.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 014

DIRECTION: E

SUBJECT: Spilled gas on Bedford Road looking east at 8805 Bedford Road residence.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 015

DIRECTION: E

SUBJECT: Initial excavation looking east at 8805 Bedford Road residence.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 017

DIRECTION: W

SUBJECT: Air monitoring at Catch Basin #3.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 018

DIRECTION: S

SUBJECT: Air monitoring at Culvert #1.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 019

DIRECTION: E

SUBJECT: View of Discharge #1 and edge of berm.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 023

DIRECTION: E

SUBJECT: Northern collection trench.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 031

DIRECTION: N/NE

SUBJECT: Initial excavation.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 032

DIRECTION: E

SUBJECT: Construction of stockpile area for contaminated soil.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/29/03

PHOTO NO: 033

DIRECTION: NE

SUBJECT: Excavation activities to west of 8805 Bedford Road residence.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/30/03

PHOTO NO: 042

DIRECTION: E

SUBJECT: Excavation activities to north and west of 8805 Bedford Road residence.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 8/30/03

PHOTO NO: 043

DIRECTION: E

SUBJECT: Night excavation looking east

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/1/03

PHOTO NO: 046

DIRECTION: N/NE

SUBJECT: Excavation east of 8805 Bedford Road residence.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/1/03

PHOTO NO: 047

DIRECTION: E

SUBJECT: Excavation north of 8805 Bedford Road residence, looking east

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/2/03

PHOTO NO: 049

DIRECTION:

SUBJECT: Sump in basement of 8805 Bedford Road residence.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/2/03

PHOTO NO: 057

DIRECTION:

SUBJECT: Sink hole in field east of spill site, downstream from affected catchbasins, upstream of outfall to Mack and Manning Drain.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/2/03

PHOTO NO: 062

DIRECTION: NE

SUBJECT: View of 8805 Bedford Road residence and Fire Department standing by for demolition.

PHOTOGRAPHER: Rebecca Nemirovsky



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/2/03

PHOTO NO: 066

DIRECTION: SE

SUBJECT: Demolition of 8805 Bedford Road residence.

PHOTOGRAPHER: Rebecca Nemirovsky



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/2/03

PHOTO NO: 073

DIRECTION: SW

SUBJECT: Demolition of 8805 Bedford Road residence.

PHOTOGRAPHER: Rebecca Nemirovsky



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/2/03

PHOTO NO: 076

DIRECTION: S

SUBJECT: Demolition of 8805 Bedford Road residence.

PHOTOGRAPHER: Rebecca Nemirovsky



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/3/03

PHOTO NO: 082

DIRECTION: N

SUBJECT: Debris clearing at site of demolished 8805 Bedford Road residence.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/3/03

PHOTO NO: 089

DIRECTION: N

SUBJECT: Excavation site.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/3/03

PHOTO NO: 091

DIRECTION: SW

SUBJECT: Excavation site looking southwest.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/3/03

PHOTO NO: 095

DIRECTION: SW

SUBJECT: Loading trucks for disposal.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/4/03

PHOTO NO: 103

DIRECTION: E

SUBJECT: View of soil stockpile (east).

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/4/03

PHOTO NO: 106

DIRECTION: N

SUBJECT: View of excavation and soil removal.

PHOTOGRAPHER: WESTON/START



SITE: Hastings Gasoline Spill Emergency Response

DATE: 9/5/03

PHOTO NO: 109

DIRECTION: S

SUBJECT: Compacted clean fill placed along Bedford Road.

PHOTOGRAPHER: WESTON/START