

1/6/2011



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
PRAP/ROD ROUTING SLIP



TO: Robert Schick, Assistant Division Director
FROM: The attached is submitted for your approval by:

NAME	INITIAL	DATE
Project Manager: Peter Ouderkirk	PSO	1/6/11
Section Chief/RHWRE: Peter Taylor	PT	1/6/11
Bureau Director: Michael Ryan		

DATE: 1/6/2011

RE: **Site Name** Matt Petroleum
City UTICA

Site Code B00192
County Oneida

☐ **PRAP**

- ☐ Draft PRAP
- ☐ Clean copy of the PRAP
- ☐ Redline/Strikeout version of the PRAP
- ☐ Copies of edits to PRAP (Robert's/Dale's)
- ☐ Site Briefing Report
- ☐ NYSDOH concurrence letter
- ☐ USEPA concurrence letter
- ☐ OGC Referral
 - ☐ Attached
 - ☐ Not Required: Explain:
- ☐ Project Reviews (IGP-13) (if waived, explain why)
 - ☐ Scoping RI date: _____
 - ☐ Scoping FS date: _____

PRAP Release Approvals

Ass't Div Director: _____
Robert Schick

Division Director: _____
Dale Desnoyers

☐ **ROD**

- ☒ Draft ROD
- ☐ Signature-ready copy of the ROD
- ☐ Redline/Strikeout version of the ROD
- ☐ Copies of edits to ROD (Robert's/Dale's)
- ☒ Site Briefing Report
- ☐ NYSDOH concurrence letter
- ☐ USEPA concurrence letter

ROD Signoff

Ass't Div Director: _____
Robert Schick

☐ **BRIEFING**

Date: _____ **Time:** _____ **Room:** _____

c: Dale Desnoyers
Other reviewers who are invited to Briefing



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Briefing Report



Site Code	B00192	Site Name	Matt Petroleum		
Classification	A	Address	Leland Avenue		
Region	6	City	UTICA	Zip	13502-
Latitude	43.1074	Town	Utica (c)		
Longitude	-75.2123	County	Oneida	Project Manager	Peter Ouderkirk
Disposal Area	Dump			Estimated Size	4.7000

Site Description

Location: The Matt Petroleum Site is located on Leland Avenue in the City of Utica, Oneida County.

Site Features: The property is approximately 4.7 acres in size and currently contains one intact building which housed the former Matt Petroleum offices and maintenance facility. The site previously contained ten bulk petroleum tanks, three above ground blending tanks, a slop tank, an oil/water separator, five loading racks, two pump houses, buried piping and four buildings, which were removed from the site during an IRM conducted from the November of 2003 to June of 2004.

Current Zoning/Use(s): The site is currently inactive and is located in an industrial area in the northern part of the City. The City of Utica Fire Training Facility (former bulk petroleum terminal known as the Synthetic Fuel) and Universal Waste (scrap yard) are located to the east and southeast; the City of Utica Bus Garage, the former East Olive Oil Company and rail lines are located to the south; a former bulk petroleum terminal is located to the west; and the Mohawk River is found directly north of the site. The Mohawk River is listed as a Class C water body in this section of Utica.

Historical Use(s): The property was the site of a former brickyard during the first half of the 1900s. From approximately 1950 to the early 1990s the property was used as a bulk petroleum terminal. Since the 1990s the site has remained unused.

Operable Units: The site was divided into two operable units. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

Operable unit 1 (OU1) consists of on-site and an area off-site along the bank of the Mohawk River. A Record of Decision (ROD) was signed on June 29, 2007 for OU1, which required the site to be remediated utilizing a soil turning/biological treatment process. In 2010, 46,476 tons of heavily contaminated soil were removed from the site and an off-site area along the bank of the Mohawk River. Approximately 75% of the site was remediated and backfilled with clean soil. An additional 20,000 cubic yards of petroleum soils remain on-site awaiting mechanical soil turning in order to meet soil cleanup objectives (SCOs).

OU2 consists of off-site, including the sediments, surface water and soil along the banks for the Mohawk River north of the Matt Petroleum Site. The Remedial Investigation for OU2 studied areas upstream, adjacent and downstream of the Matt Petroleum Site.

Site Geology and Hydrogeology: The site is relatively flat. The site soils are comprised of fill overlying a clay-silt unit. The overlying fill extends from the ground surface to between seven to twelve feet. This soil contains fine to coarse sand and gravel with brick fragments, concrete and other pieces of rubble and debris. The underlying clay-silt unit starts generally from seven to twelve feet below the ground surface. This material is characterized as a low permeability layer, which creates a barrier to downward contamination migration. Groundwater flows to the north and is found varying from two to four feet below the ground surface, depending on seasonal fluctuations.

Contaminants of Concern (Including Materials Disposed)	Quantity Disposed
1,2,4-TRIMETHYLBENZENE	UNKNOWN
1,3,5-TRIOXANE, 2,4,6-TRIMETHYL-BENZENE	UNKNOWN
BENZENE	UNKNOWN
ETHYLBENZENE	UNKNOWN Gallons
ETHYLBENZENE	UNKNOWN
NAPHTHALENE	UNKNOWN Gallons
NAPHTHALENE	UNKNOWN
TOLUENE	UNKNOWN Gallons
TOLUENE	UNKNOWN
UNKOWN	UNKNOWN
XYLENE (MIXED)	UNKNOWN
XYLENE (MIXED)	UNKNOWN Gallons

Analytical Data Available for : Groundwater, Surface Water, Soil, Sediment

Applicable Standards Exceeded for: Groundwater, Soil

Site Environmental Assessment

Nature and Extent of Contamination: Based upon investigations conducted to date the primary contaminants of concern for OU1 include volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs) and inorganics (metals). Site contamination has impacted the groundwater resource throughout the site. Eleven of sixteen monitoring wells contained VOCs, and eight of these contained one or more VOCs at a concentration that exceeds the groundwater SCGs. Five of sixteen monitoring wells contained SVOCs, and one of these contained one SVOC at a concentration exceeding the groundwater SCGs. Four monitoring wells sampled were analyzed for metals and displayed elevated iron and manganese levels, and one well also had elevated magnesium and sodium concentrations. Fifty of seventy-seven soil borings and six of six test pit samples showed the presence of VOCs in the subsurface soils and twenty-one of the fifty samples contained either individual VOCs or total VOCs at concentrations that were above the soil SCGs. Sixty-five of seventy-seven samples contained one or more individual SVOCs at concentrations that were above the soil SCGs. Four soil boring samples were collected for metals analysis. One sample contained cyanide at 2.15 ppm, another sample contained mercury at 0.6 ppm, arsenic at 14.9 ppm and zinc at 115 ppm, each above their respective SCGs. The contamination, however, has been significantly reduced/removed since approximately 46,476 tons of heavily contaminated soils were removed from the site and along the Mohawk River. Approximately 75% of the site has been remediated and backfilled with clean soil. An additional 20,000 cubic yards of petroleum impacted soils remains on-site awaiting mechanical soil turning in order to meet soil cleanup objectives (SCOs).

The primary contaminants of concern for OU2, which is the off-site area, are VOCs and SVOCs. Investigations conducted to date have shown that contamination in subsurface soil along the bank of the Mohawk River is consistent with previous investigations for OU1. Off-site surface water and sediment

contamination levels found adjacent to the site are only slightly above SCGs. The migration of site related VOCs to the Mohawk River has been eliminated by addressing the source materials found in soil in OU1. Investigations indicate that downgradient sediment contamination is the result of a separate, off-site source known as Synthetic Oil which is a former major oil storage facility. This site has been referred to the Department's Spill Response program for appropriate evaluation.

Site Health Assessment

The site is located in a remote industrial area of the City of Utica and is fenced. Access to contaminated sediments adjacent to the the site is not likely. Surface water near the site is not used by any public water supplies and the area is served by a municipal supply with a source remote from the site. The potential for contaminated soil vapor to impact structures will need to be assessed for future site development.

Remedy Description and Cost

Remedy Description for Operable Unit 00

Total Cost

Capital Cost

OM&M Cost

Issues / Recommendations

Remedy Description for Operable Unit 01

The ROD includes:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program.
2. The remedial action will entail the development of a water management program to de-water the site and to collect and manage the water. Sheet-pile and/or other barriers may be utilized along the Mohawk River to prevent releases to the surface water, to stabilize the river bank and to prevent infiltration of water on to the site during remediation.
3. A soil management and treatment plan will be developed to coordinate the movement, treatment and replacement of soils. The site will be divided in to sections in order to manage and move soils in an effective and efficient manner. Soils will be screened to remove large pieces of debris such as wood, brick and metal. The soils will then be placed in rows and the soil turning will commence. Based on field indicators and subsequently laboratory analysis, soil turning will continue until SCGs are achieved.
4. Some soils which are deemed un-treatable and/or heavily contaminated will be taken off site for disposal at a permitted landfill. Treated soils will be placed back in the de-watered excavation. Imported clean back fill may be used as backfill, incorporated with the treated soil and/or placed on top of treated soil.

5. Soils found off site in the low lying areas to the southwest will be excavated for on site treatment and the areas will be restored.
6. Imposition of an institutional control in the form of an environmental easement that will require (a) limiting the use and development of the property to commercial use, which would also permit industrial use; (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.
7. Development of a site management plan, if soil cleanup objective are not achieved, which will include the following institutional and engineering controls: (a) management of the final cover system to restrict excavation below the soil cover's demarcation layer, pavement, or buildings. Excavated soil will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) continued evaluation of the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified; (c) monitoring of groundwater; (d) identification of any use restrictions on the site; (e) fencing to control site access; and (f) provisions for the continued proper operation and maintenance of the components of the remedy.
8. The property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.
9. The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

Total Cost	\$4,300,000
Capital Cost	\$4,300,000
OM&M Cost	\$20,000

Issues / Recommendations

In 2010, 46,476 tons of heavily contaminated soils were removed from the site and along the banks of the Mohawk River. Approximately 75 % of the site was remediated and backfilled with clean soil. An additional 20,000 cubic yards of petroleum impacted soils remains on site awaiting mechanical soil turning in order to meet soil cleanup objectives (SCOs). Due to lack of funding the project has not been completed.

Remedy Description for Operable Unit 01A

The Matt Petroleum Site was a former major oil facility located along the barge canal in the City of Utica. The IRM cleaned and removed 17 above ground storage tanks which ranged from 750,000 to 1.5 million gallons in size. Additional smaller tanks, buildings, pipelines and other structures were

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dismantled.

Total Cost

Capital Cost

OM&M Cost

Issues / Recommendations

Project Completed

Remedy Description for Operable Unit 02

The RI has confirmed the presence of petroleum contamination in soils along the banks of the Mohawk River. This contamination originated from the upland portion of the site or Operable Unit 1. The RI has also shown that impacts to both surface water and sediment exist, however, the sediment impacts are due to a separate downgradient source.

In 2010, 46,476 tons of heavily contaminated soils were removed from the site and along the Mohawk River. This resulted in approximately 75% of the site being remediated and backfilled with clean soil.

Under OU1, an additional 20,000 cubic yards of petroleum impacted soils remain on-site awaiting mechanical soil turning in order to meet soil cleanup objectives (SCOs). By addressing the source materials found in soil in OU1, the migration of site related VOCs to the Mohawk River has been eliminated.

Based on the finding of the RI for OU2 and the remediation performed on OU1, the Department has selected No Further Action for OU2.

Total Cost

Capital Cost

OM&M Cost

Issues / Recommendations