SDMS Document

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

Date: May 3, 2008

Subject: Lightman Drum Company Site, Winslow Township, Camden County, New Jersey

From: David Rosoff, OSC Removal Action Branch

To:

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POLREP NO.: 7 (BB1)

II. BACKGROUND

Site No: CERCLIS No: Response Authority: Removal Type: NPL Status: ROD Signed: State Notification: State Notification: Start Date: Completion Date: Status of Action Memorandum: Delivery Order Number: MS NJD014743678 CERCLA Time Critical Listed N/A NJDEP Notified October 29, 2007 May 2, 2008 N/A N/A

III. SITE INFORMATION

A. <u>Incident Category</u>

CERCLA incident category: Soil contamination (groundwater contamination source area)

B. <u>Site Description</u>

1. Site description

The Lightman Drum Company property (Property) covers approximately 15 acres and is located in Winslow Township, Camden County, New Jersey. The Property is narrow (approximately 300 feet wide) with access from Route 73. The majority of the Property is wooded. There is very little topographic relief across the Property with a maximum elevation range of 15 feet.

The eastern portion of the Property is currently used as a drum brokerage business operating under the name United Cooperage. Drums are stored in truck trailers and in open areas, and a small office is located near the entrance along Route 73.

Historic waste storage areas on the Property include the former location of two 5,000 gallon underground storage tanks previously located in the north-central area of the Property (the former Waste Storage Tank Area). The tanks were reportedly used to store waste paint pigments, ink sludges, and thinners between November, 1978 and April, 1979. Reportedly, NJDEP observed the removal of the tanks in 1984.

A Remedial Investigation (RI) for the Lightman Drum Site (Site) was conducted between 2002 and 2007 and included a comprehensive soil and groundwater investigation. The results from the groundwater investigation indicate that groundwater has been impacted with chlorinated VOCs, namely trichloroethene (TCE) and tetrachloroethene (PCE), as well as aromatic (BTEX) compounds. There are two main plumes present, one originating from the former Waste Storage Tank Area, and a smaller plume from the former Unlined Waste Disposal Pit Area in the western part of the Property. The results from soil sampling conducted as part of the RI indicated that seasonally saturated soils in a localized zone close to the water table in the former Waste Storage Tank Area remain contaminated with volatile organic compounds (VOCs) and

continue to constitute a source for contaminated groundwater leaving the Property.

Source removal of saturated soils in the former Waste Storage Tank Area was addressed during this Removal Action pursuant to an Administrative Settlement Agreement and Order on Consent dated September 13, 2007 between USEPA and the Lightman Drum Source Removal Group (the Group) that became effective on September 17, 2007.

2. Description of threat

The VOC contamination in the saturated zone in the former Waste Storage Tank Area represented a continuing source to groundwater contamination and a threat to the environment.

The overall objective of the removal action was to remove this source to groundwater contamination in the former Waste Storage Tank Area. This removal action is beneficial to the Remedial Action at the Site by reducing the time it will take to remediate the aquifer through the removal of contaminant source material

C. <u>Preliminary Assessment Results</u>

In April and May, 2006, 18 soil borings were collected in accordance with the Addendum Remedial Investigation/Feasibility Study Work to assess the potential presence of residual product soil contamination in the seasonally saturated zone at the former Waste Storage Tank Area, the former southwest Drum Storage Area, and the former Unlined Waste Disposal Pit Area.

The soil borings were conducted utilizing a Geoprobe to obtain continuous core samples. Each core sample was screened at 6-inch intervals with a photoionization detector (PID) commencing approximately 3 feet above the water table and extending until PID readings were below background, subject to a minimum depth of 20 feet below the water table. Headspace PID readings were also taken over every two-foot interval; samples with headspace PID readings greater than 50 ppm were also field screened for the presence of NAPL using a ultraviolet (UV) lamp method and the hydrophobic dye "Oil Red O" method. Three samples for laboratory analysis were taken from each boring: one sample from the bottom of the boring, and two from the discrete 2-foot intervals that indicated the greatest potential for residual NAPL. Each soil sample was analyzed for target compound list (TCL) VOC analytes and for 1,4-dioxane. The most impacted sample, based on field screening, was also analyzed for target analyte list (TAL) metals in order to provide comprehensive analytical data for the most impacted sample.

Thirteen borings were completed in the area of the former Waste Storage Tanks, three borings in the former Unlined Waste Disposal Pit and two borings in the former Southwest Drum Storage Area.

There were no detections of 1,4-dioxane in any of the samples. There were also no positive results from the UV lamp test. The laboratory results were compared to the NJDEP Residential and Non-Residential Direct Contact Soil Cleanup Criteria (SCC) and the NJDEP Impact to Groundwater SCC for screening purposes. There were no inorganic parameters that exceeded the NJDEP SCC values. The VOCs detected included chlorinated ethanes, chlorinated ethenes, and aromatic compounds. There were no exceedances for organic or inorganic parameters in borings taken in the former Unlined Waste Disposal Pit Area or the former Southwest Drum Storage Area.

Positive results from the "Oil Red O" test were obtained in three borings taken at the water table in the former Waste Storage Tank. Three VOCs (ethylbenzene, tetrachloroethene, and total xylenes) exceeded the most stringent of the NJDEP SCC (Impact to Groundwater) in four samples from two borings located in the former Waste Storage Tank Area.

The RI concluded that the seasonally saturated soils in a localized zone close to the water table in the former Waste Storage Tank Area remain contaminated with VOCs and continue to provide a source for contaminated groundwater. Excavation of these contaminated soils is expected to mitigate the source of groundwater contamination in this area.

IV. RESPONSE INFORMATION

A. <u>Response Actions</u>

The area of excavation was approximately 33 foot by 16 foot in plan dimensions and encompassed those borings where there was a positive field test result for residual product and borings that contained samples that exceeded the most stringent New Jersey Soil Cleanup Criteria (NJDEP SCC) in the former Waste Storage Tank Area.

The excavation extended to a depth of 25 feet. Sheet pile walls around the excavation were installed to mitigate groundwater in-flow. Soils were excavated and stockpiled temporary containment pads. The containment pads were constructed to capture contaminated pore water drained from the stockpiled soil, and were covered to prevent wind dispersion of soil and contact with rain water. The excavation was backfilled with imported clean soil and excavated soil (approximately 800 cubic yards) was transported for off-Site disposal at the Gloucester County Improvement Authority landfill in Swedesboro, New Jersey.

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Water collected from the excavation (approximately 28,000 gallons) was transported to DuPont Chambers Works facility in Deepwater, New Jersey.

B. <u>Situation</u>

1. **Response activities:**

Between February 5, 2008 and May 2, 2008

The removal of the containment pads was completed by February 8, 2008. Containment materials (liner, straw bails, etc.) were loaded into roll-offs and transported off-Site to Gloucester County Landfill in Swedesboro, New Jersey on February 13, 2008. No evidence of leakage beneath the liner was observed.

After being decontaminated, the 21,000 gallon water tank was demobilized Wednesday February 6, 2008. Approximately 2,824 gallons of contained water were loaded out from the 18,000 gallon storage tank on February 6, 2008 for disposal at the DuPont Chambers Works facility in Deepwater, New Jersey. This tank was decontaminated and subsequently demobilized on February 12, 2008.

The temporary excavation support system (sheet piling) was removed and decontaminated and taken off-Site the week of February 4, 2008.

Tabasco Drilling, Inc. was on-Site Tuesday February 12, 2008 through February–14,–2008 to install and develop replacement groundwater monitoring wells MW-2AR and MW-2BR. Tabasco also over drilled previously decommissioned monitoring well MW-2B to meet NJDEP decommissioning procedures for wells without permits.

A 20 yard roll-off containing soil from the installation of the wells and miscellaneous debris from the removal action was transported to Gloucester County Landfill in Swedesboro, New Jersey on March 26, 2008.

Investigation derived waste (IDW) drums containing soil, water and trash/PPE remaining on-Site from previous remedial investigation field work was transported from the Site for appropriate disposal at EQ in Detroit, Michigan on March 26 and 27, 2008.

The EPA OSC performed a final Site walk with representatives from the Group's contractor on April 22, 2008. Final Site grading was completed

on May 2, 2008. At that time the Site was demobilized and field work for the removal action was complete.

2. Enforcement

The Administrative Settlement Agreement and Order on Consent USEPA Index No. CERCLA-02-2007-2007 between EPA and the Group for the performance of this removal action was executed on September 13, 2007.

C. <u>Next Steps</u>

The Final Removal Action Report will be provided to EPA for review and comment in the latter part of May 2008.

D. Key Issues

Buried pigment and pigment stained soil was discovered throughout the work area on the Site. The colors of the pigment included purple, green, blue/green and yellow. The largest area of visible color was purple material found adjacent to the Waste Storage Tank Area. This material was also uncovered and excavated during the removal of unsaturated soil in the Waste Storage Tank Area. A sample of the purple pigment was collected and sent for laboratory analysis. Results indicate that the dye is organic in nature but the majority of the constituents are tentatively identified compounds or unspecified organic compounds.

The areas of pigment and discolored soil were covered with a geo-textile fabric and a layer of 1-11/2 inch crushed stone during the removal action. The temporary cover allowed planned work under the Order to continue without interruption. Sampling of the dye stained soils around the Site was conducted by the Group in January with oversight from the EPA Remedial Program. Results of the analyses of these samples showed elevated levels of lead in some of the pigment. EPA's remedial program is currently evaluating a remediation of this pigment.

V. COST INFORMATION

N/A

VI. DISPOSITION OF WASTES

See attached table

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[Manifest	CSP		
Date	Number	Number	Tonnage	
12/17/2008	610258	CSP-01	26.64	
12/17/2008	610259	CSP-02	27.46	
12/17/2008	610260	CSP-03	25.91	
12/17/2008	610261	CSP-04	27.92	
12/17/2008	610262	CSP-05	24.64	
12/17/2008	610263	CSP-06	22.84	
12/17/2008	610264	CSP-07	27.24	
12/17/2008	610265	CSP-08	25.28	
12/17/2008	610266	CSP-09	27.78	
12/17/2008	610282	CSP-10	25.03	
12/17/2008	610281	CSP-11	26.40	
12/17/2008	610269	CSP-12	24.35	
12/17/2008	610270	CSP-13	21.30	
12/17/2008	610271	CSP-14	18.57	
12/17/2008	610272	CSP-15	23.72	
12/17/2008	610273	CSP-16	21.06	
12/17/2008	610283	CSP-17	28.87	
12/17/2008	610284	CSP-18	27.10	
12/17/2008	610285	CSP-19	25.78	
12/17/2008	610286	CSP-20	23.39	
12/17/2008	610287	CSP-21	23.20	
12/17/2008	610288	CSP-22	21.54	
12/17/2008	610289	CSP-23	23.09	
12/17/2008	610290	CSP-24	24.28	
12/17/2008	610291	CSP-25	27.99	
12/17/2008	610292	CSP-26	20.76	
12/18/2008	801400	CSP-27	26.16	
12/18/2008	801401	CSP-28	26.72	
12/18/2008	801403	CSP-29	24.55	
12/18/2008	801404	CSP-30	26.69	
12/18/2008	801405	CSP-31	27.60	
12/18/2008	801406	CSP-32	22.18	
12/18/2008	801407	CSP-33	24.75	
12/18/2008	801408	CSP-34	27.93	
12/18/2008	801409	CSP-35	24.69	
12/18/2008	801410	CSP-36	24.18	
12/18/2008	801411	CSP-37	26.88	
12/18/2008	801402	CSP-38	29.85	
12/18/2008	801412	CSP-39	36.59	
12/18/2008	801413	CSP-40	23.91	

Total

1014.82

DRAFT WASTE DISPOSAL SUMMARY UN-NATURALLY COLORED SOIL REMOVAL LIGHTMAN DRUM SUPERFUND SITE WINSLOW TOWNSHIP, NEW JERSEY



Source Removal Bulk Soil

		Document	Vehicle	Unit		Destination			Final
Load ID	Ship Date	Number	ID	License	Transporter	Facility	Material	Unit(s)	Quantity
CSP-01	12/17/2008	610258	9	AJ119G	J&D Trucking	GCIA	NH Soils	Tons	26.64
CSP-02	12/17/2008	610259	17	AK970S	J&D Trucking	GCIĀ	NH Soils	Tons	27.46
CSP-03	12/17/2008	610260	3	AG989G	J&D Trucking	GCIA	NH Soils	Tons	25.91
CSP-04	12/17/2008	610261	4	AJ137N	J&D Trucking	GCIA	NH Soils	Tons	27.92
CSP-05	12/17/2008	610262	14	AJ201D	J&D Trucking	GCIA	NH Soils	Tons	24.64
CSP-06	12/17/2008	610263	5	AJ198D	J&D Trucking	GCIA	NH Soils	Tons	22.84
CSP-07	12/17/2008	610264	19	AJ683T	J&D Trucking	GCIA	NH Soils	Tons	27.24
CSP-08	12/17/2008	610265	15	AG700A	J&D Trucking	GCIA	NH Soils	Tons	25.28
CSP-09	12/17/2008	610266	9	AJ119G	J&D Trucking	GCIA	NH Soils	Tons	27.78
CSP-10	12/17/2008	610282	17	AK970S	J&D Trucking	GCIA	NH Soils	Tons	25.03
CSP-11	12/17/2008	610281	19	AJ683T	J&D Trucking	GCIA	NH Soils	Tons	26.4
CSP-12	12/17/2008	610269	14	AJ201D	J&D Trucking	GCIA	NH Soils	Tons	24.35
CSP-13	12/17/2008	610270	3	AG989G	J&D Trucking	GCIA	NH Soils	Tons .	21.3
CSP-14	12/17/2008	610271	. 5	AJ198D	J&D Trucking	GCIA	NH Soils	Tons	18.57
CSP-15	12/17/2008	610272	4	AJ137N	J&D Trucking	GCIA	NH Soils	Tons	23.72
CSP-16	12/17/2008	610273	15	AG700A	J&D Trucking	GCIA	NH Soils	Tons	21.06
CSP-17	12/17/2008	610283	9	AJ119G	J&D Trucking	GCIA	NH Soils	Tons	28.87
CSP-18	12/17/2008	610284	17	AK9705	J&D Trucking	GCIA	NH Soils	Tons	27.1
CSP-19	12/17/2008	610285	19	AJ683T	J&D Trucking	GCIA	NH Soils	Tons	25,78
CSP-20	12/17/2008	610286	3	AG989G	J&D Trucking	GCIA	NH Soils	Tons	23.39
CSP-21	12/17/2008	610287	14	AJ201D	J&D Trucking	GCIA	NH Soils	Tons	23.2
CSP-22	12/17/2008	610288	5	AJ198D	J&D Trucking	GCIA	NH Soils	Tons	21.54
CSP-23	12/17/2008	610289	4	AJ137N	J&D Trucking	GCIA	NH Soils	Tons	23.09
CSP-24	12/17/2008	610290	17	AK970S	J&D Trucking	GCIA	NH Soils	Tons	24.28
CSP-25	12/17/2008	610291	9	AJ119G	J&D Trucking	GCIA	NH Soils	Tons	27.99
CSP-26	12/17/2008	610292	15	AG700A	J&D Trucking	GCIA	NH Soils	Tons	20.76
CSP-27	12/18/2008	801400	9	AJ119G	J&D Trucking	GCIA	NH Soils	Tons	26.16
CSP-28	12/18/2008	801401	14	AJ201D	J&D Trucking	GCIA	NH Soils	Tons	26.72
CSP-29	12/18/2008	801403	4	AJ137N	J&D Trucking `	GCIA	NH Soils	Tons	24.55
CSP-30	12/18/2008	801404	19	AJ683T	J&D Trucking	GCIA	NH Soils	Tons	26.69
CSP-31	12/18/2008	801405	5	AJ198D	J&D Trucking	GCIA	NH Soils	Tons	27.6
CSP-32	12/18/2008	801406	15	AJ700A	J&D Trucking	GCIA	NH Soils	Tons	22.18
CSP-33	12/18/2008	801407	17	AK970S	J&D Trucking	GCIA	NH Soils	Tons	24.75
CSP-34	12/18/2008	801408	. 9	AJ119G	J&D Trucking	GCIA	NH Soils	Tons	27.93
CSP-35	12/18/2008	801409	14	AJ201D	J&D Trucking	GCIA	NH Soils	Tons	24.69
CSP-36	12/18/2008	801410	4	AJ137N	J&D Trucking	GCIA	NH Soils	Tons	24.18
CSP-37	12/18/2008	801411	19	AJ683T	J&D Trucking	GCIA	NH Soils	Tons	26.88
CSP-38	12/18/2008	801402	5	AJ198D	J&D Trucking	GCIA	NH Soils	Tons	29.85
CSP-39	12/18/2008	801412	15	AG700A	J&D Trucking	GCIA	NH Soils	Tons	36.59
CSP-40	12/18/2008	801413	5	AJ198D	J&D Trucking	GCIA	NH Soils	Tons	23.91
Total						· · · · · · · · · · · · · · · · · · ·			1014.82

Notes: GCIA

CIA = Gloucester County Improvement Authority Landfill, Swedesboro, New Jersey

NH Soils = Non-Hazardous Soil

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