VOLUNTARY CLEANUP PROGRAM

REMEDIAL EXCAVATION REPORT

for

SITE NO. V00264

VOLUNTARY CLEANUP AGREEMENT NO. A7-0493-0903

Prepared by:

PLUMLEY ENGINEERING

8232 Loop Road
Baldwinsville, New York 13027
(315) 638-8587
Project No. 2010150

April 2012

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1.0 INTRODUCTION

On November 18, 2011, the Volunteer implemented a remedial excavation to remove the main source of site impacts – a former sump in the manufacturing building and impacted soils immediately surrounding the sump.

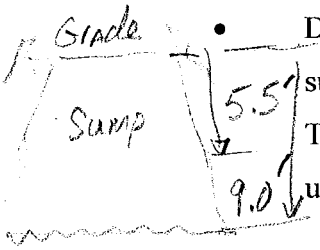
The remedial excavation was completed in accordance with the Interim Remedial Measures (IRM) Work Plan approved by the New York State Department of Environmental Conservation (DEC) in their letter dated September 30, 2011.

2.0 REMEDIAL EXCAVATION

Paragon Environmental Construction, Inc. performed the excavation work and a geologist from Plumley Engineering, P.C. was on-site to observe and document the remedial excavation work. The following main tasks were completed:

- Paragon implemented the site Health and Safety Plan (HASP) for the remedial activities. Plumley implemented the Community Air Monitoring Plan (CAMP).

- Paragon saw-cut the concrete floor at approximately 2 feet beyond the anticipated excavation limits. The concrete sump was then removed and impacted soils were excavated to a depth of 9 feet below the ground surface (bgs). The limits of the remedial excavation are shown on the attached *Figure 1 – Site Plan.* Structural columns and heavy machinery limited the excavation area.



- During the remedial excavation work, soil samples were collected from the bottom of the sump elevation (5.5 feet bgs) to the bottom of the remedial excavation (9 feet bgs). These samples were visually inspected for signs of contamination and field screened using a photoionization detection (PID) meter. Black and green stained impacted soil

with a PID meter reading of 163 parts per million (ppm) was encountered just below the sump at 5.5 feet bgs. Slightly stained soils with petroleum odors and PID meter readings of 580 to 630 ppm were encountered at 7 feet bgs.

- After the remedial excavation was completed, samples were collected from the bottom and sidewalls of the excavation. The following is a summary of the samples collected:

SAMPLE NO.	LOCATION	DEPTH	PID METER READING
S-1	Bottom Excavation	9 feet bgs	2,000 ppm
S-2	South Sidewall	6 feet bgs	1,500 ppm
S-3	North Sidewall	6 feet bgs	1,700 ppm
S-4	East Sidewall	6 feet bgs	12 ppm
S-5	West Sidewall	6 feet bgs	180 ppm

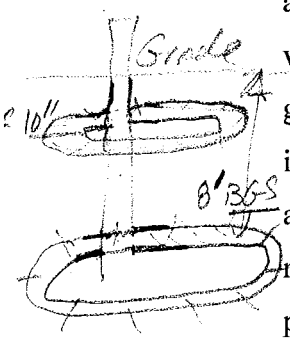
- The impacted soil was staged on the existing pavement, as shown on the attached *Figure 1 – Site Plan.* The soil was staged on 10-mil polyethylene sheeting laid over temporary soil or hay bale berms. The pile was securely covered with polyethylene sheeting at the end of the work day.

- Some groundwater was encountered in the bottom of the excavation at approximately 9 feet bgs, although accumulation of groundwater in the bottom of the excavation was not present until excavation activities were completed.

- Two confirmation samples, S-1 and S-2, were submitted to Accutest Laboratories for laboratory testing to document residual levels of impact. Samples were analyzed for Target Analyte List (TAL) volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals and polychlorinated biphenyls (PCB) per methods outlined

in the Supplemental Investigation Work Plan. The analytical results were compared to Soil Cleanup Objectives (SCOs).[1]

- After the remedial excavation was completed, filter fabric was placed in the excavated area and backfilled with washed No. 2 rounded sandstone gravel. A 4-inch diameter vertical well (MW-4) was then installed in the excavation for future use in monitoring groundwater quality. After the well was installed, two loops of perforated piping were installed in the excavation: a lower loop at approximately 8 feet bgs and an upper loop approximately 6 to 10 inches below floor level. This piping was installed for future remedial use, if deemed necessary. Both loops were constructed of 4-inch Schedule 40 polyvinyl chloride (PVC) perforated piping and connected to 2-inch diameter risers that were extended above the floor and capped.



- Paragon collected a composite sample of the excavated soils, completed the landfill profiling of the soil and disposed of 25 tons of impacted soil at the CWM Chemical Services landfill in Model City, New York. Refer to the attached *Disposal Documentation* for additional information.

3.0 FINDINGS

VOCs

Analysis of the samples collected from the bottom (S-1) and south sidewall (S-2) of the excavation indicated six VOCs were present above method detection limits. No compounds exceeded the SCOs for Restricted Commercial or Restricted Industrial Use. In the bottom sample, trichloroethene was detected at a relatively high concentration of 198 milligrams per kilogram (mg/kg) [equivalent to parts per million (ppm)]. Two compounds in this sample,

TCE
198
ppm

[1]New York Codes, Rules and Regulations, Title 6 (6 NYCRR), Part 375, *Environmental Remediation Programs Soil Cleanup Objectives* (SCOs), effective December 14, 2006 and DEC Final Commissioner Policy, *CP-51 / Soil Cleanup Guidance*, issued October 10, 2010.

trichloroethene and cis-1,2-dichloroethene, exceeded the SCOs for Unrestricted Use and the Protection of Groundwater. In the sidewall samples, four compounds exceeded the SCOs for Restricted Commercial or Restricted Industrial Use.

SVOCs

Analysis of the samples collected from the bottom (S-1) and south sidewall (S-2) of the excavation indicated only one SVOC, bis(2-ethylhexyl)phthalate, was present above the method detection limit. This compound did not exceed any of the SCOs.

Metals

Several metals were detected in the samples, but none exceeded the SCOs for Restricted Industrial Use. Cadmium, nickel and zinc exceeded the Unrestricted Use SCOs in one or more of the samples. Nickel exceed the SCO for Protection of Groundwater in one sample (S-2).

Refer to the attached *Table 1 – Summary Soil Analytical Results – VOCs and SVOCs, Table 2 – Summary Soil Analytical Results – Metals* and *Laboratory Report* for additional information.

4.0 RECOMMENDATIONS

We recommend completing the additional investigation work outlined in the Supplemental Investigation Work Plan[1] before determining a future course of action.

[1] *Supplemental Investigation Work Plan*, prepared by Plumley Engineering, P.C., dated March 2011 and approved by the DEC on September 20, 2011.

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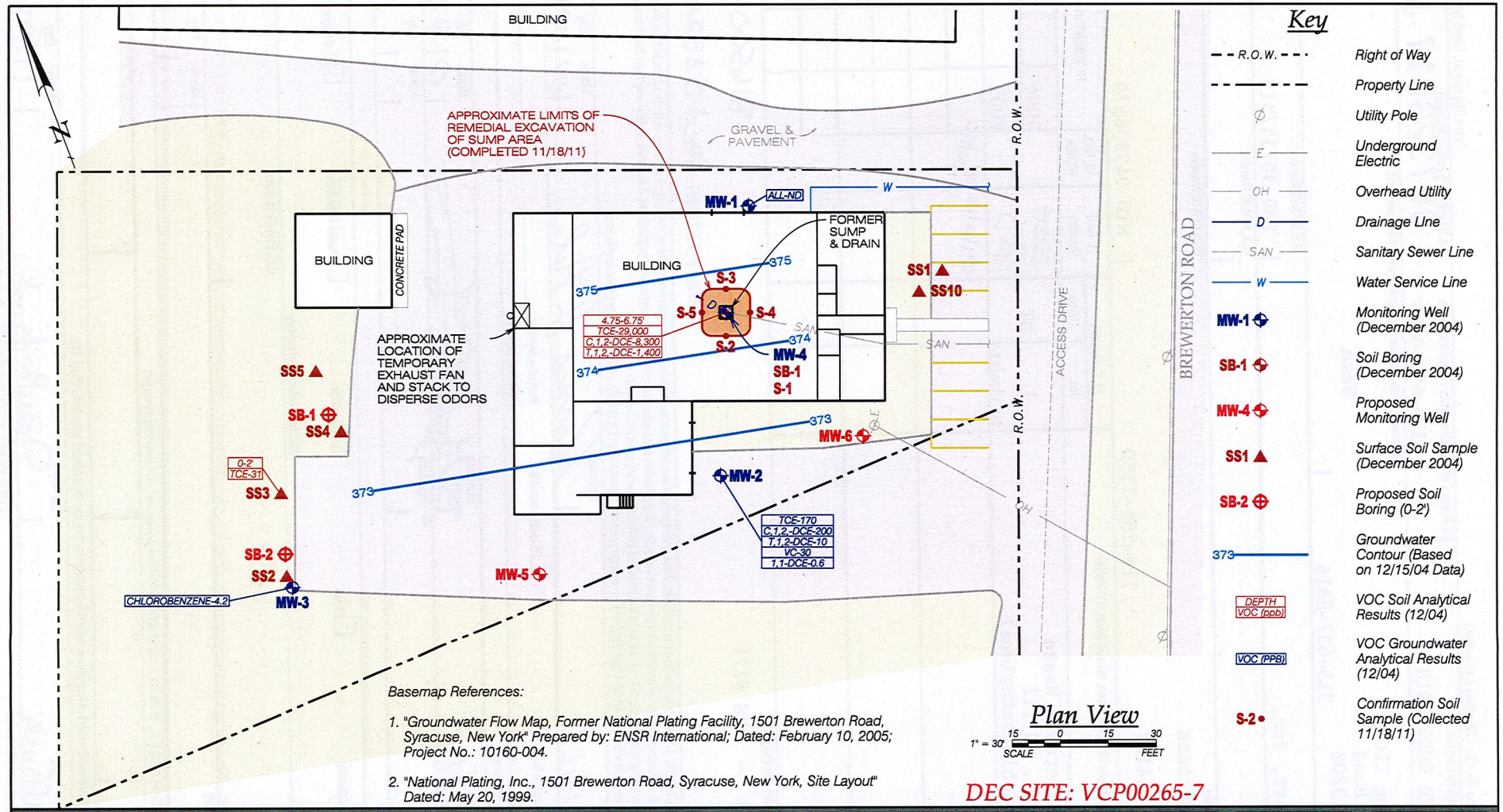

Basemap References:

1. *"Groundwater Flow Map, Former National Plating Facility, 1501 Brewerton Road, Syracuse, New York" Prepared by: ENSR International; Dated: February 10, 2005; Project No.: 10160-004.*
2. *"National Plating, Inc., 1501 Brewerton Road, Syracuse, New York, Site Layout" Dated: May 20, 1999.*

Plan View

1" = 30' SCALE 15 0 15 30 FEET

DEC SITE: VCP00265-7

PLUMLEY ENGINEERING
Civil and Environmental Engineering

PLUMLEY ENGINEERING, P.C.
8232 LOOP ROAD
BALDWINSVILLE, NY 13027

TELEPHONE: (315) 638-9587
FAX: (315) 638-9740
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REVISIONS:	DATE:	BY:
⚠ ADDITIONAL SAMPLING LOCATIONS.	03/04/11	DRV

PROJECT: **FORMER NATIONAL PLATING**

DWG. TITLE: **SITE PLAN**

CLIENT: D.H.J. REALTY CORP.

LOCATION: TOWN OF SALINA, ONONDAGA COUNTY, NEW YORK

Note: No alteration permitted hereon except as provided under Section 7209 Subdivision 2 of the New York State Education Law.

PROJECT No.:	2010150
FILE NAME.:	EV01P
SCALE:	AS NOTED
DATE:	NOV. 2010
ENG'D BY:	DRV
DRAWN BY:	JMD
CHECKED BY:	DRV

SHEET NO.: FIGURE 1

Type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NYD 002226918	1	315-699-0840	007323017 JJK

5. Generator's Name and Mailing Address
National Plating LLC
1501 Briwerton Road
Syracuse, NY 13208
Generator's Phone: 315-437-6816

Generator's Site Address (if different than mailing address)
Same

6. Transporter 1 Company Name: US Bulk Transport, Inc.
U.S. EPA ID Number: PAD 987347515

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CWM Chemical Services
1550 Balmer Road
Model City, NY 14107
Facility's Phone: 716-286-1550
U.S. EPA ID Number: NYD 049836679

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ NA 3077 Hazardous Waste Solid N.O.S. 9, PG III (cadmium, trichloroethylene)	1 op 1/10/12	DT	EST 25 op 1/10/12	T op 1/10/12	D006 F001
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1) NY 303211 - ERG #171
81650044
SR #972885 recd 53820P

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: DENNIS J HILE
Signature: Dennis J Hile
Month Day Year: 01 09 12

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Guy H. Fultz
Signature
Month Day Year: 01 09 12
Transporter 2 Printed/Typed Name
Signature
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jody Parfinski
Signature: Jody Parfinski
Month Day Year: 01 10 12

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

GENERATOR — TRANSPORTER — INTL — DESIGNATED FACILITY

FORMER NATIONAL PLATING FACILITY
Town of Salina, Onondaga County, New York
VCP Site No. V00264

TABLE 1 - SUMMARY OF SOIL ANALYTICAL RESULTS - VOCs and SVOCs (DETECTED COMPOUNDS)

Compound	Part 375 SCOs[1]				Compound Concentration (mg/kg)	
	Unrestricted Use	Restricted Industrial Use	Protection of Ecological Resources	Protection of Groundwater	S-1 (BTM 9' bgs)	S-2 (S.Wall 7' bgs)
					11/18/11	11/18/11
Volatiles						
cis-1,2-Dichloroethene	0.25	1,000	NS	0.25	0.22	4.93
trans-1,2-Dichloroethene	0.19	1,000	NS	0.19	ND (0.17)	3.86
Acetone	0.05	1,000	2.2	0.05	ND (0.43)	0.417
Tetrachloroethene	1.3	300	2	1.3	0.196	ND (0.16)
Trichloroethene	0.47	400	2	0.47	198	2.04
Vinyl chloride	0.02	27	NS	0.02	ND (0.17)	0.217
Semi-Volatiles						
bis(2-Ethylhexyl)phthalate	50*	NS	239	NS	2.79	1.31

Notes:

[1]Reference: 6 NYCRR, Part 375, *Environmental Remediation Programs Soil Cleanup Objectives (SCOs)*, effective December 14, 2006.
[2]DEC Final Commissioner Policy, *CP-51 / Soil Cleanup Guidance,* issued October 21, 2010, Restricted Residential Use
mg/kg milligrams per kilogram, equivalent to parts per million (ppm)
--- No Recommended Cleanup Level
ND (0.43) Not detected less than
One or more samples exceed this SCO

FORMER NATIONAL PLATING FACILITY
Town of Salina, Onondaga County, New York
VCP Site No. V00264

TABLE 2 - SUMMARY OF SOIL ANALYTICAL RESULTS - METALS

Compound	Part 375 SCOs[1]					Compound Concentration (mg/kg)	
	Unrestricted Use	Restricted Commercial Use	Restricted Industrial Use	Protection of Ecological Resources	Protection of Groundwater	S-1 (BTM 9' bgs) 11/18/11	S-2 (S.Wall 7' bgs) 11/18/11
Aluminum[2]	NS	NS	NS	10,000	NS	8,450	12,700
Arsenic	13	16	16	13	16	5	7
Barium	350	400	10,000	433	820	43	101
Beryllium	7.2	590	2,700	10	47	ND	1
Cadmium	2.5	9.3	60	4	7.5	3	27
Calcium[2]	NS	NS	NS	10000	NS	1,870	2,340
Chromium	NS	NS	NS	NS	NS	14	57
Cobalt[2]	30	NS	NS	20	NS	8	7
Copper	50	270	10,000	50	1,720	23	30
Cyanide	27	27	10,000	NS	40	25	0.45
Iron[2]	2,000	NS	NS	NS	NS	19,300	19,700
Lead	63	1,000	3,900	63	450	5	19
Magnesium	NS	NS	NS	NS	NS	3,180	2,390
Manganese	1,600	10,000	10,000	1,600	2,000	682	523
Mercury	0.18	2.8	5.7	0.18	0.73	0.04	0.18
Nickel	30	310	10,000	30	130	25	221 !
Potassium	NS	NS	NS	NS	NS	1,420	1,230
Silver	2	1,500	6,800	2	8.3	ND	1
Vanadium[2]	100	NS	NS	39	NS	15	21
Zinc	109	10,000	10,000	109	2,480	28	247

Notes:

[1]Reference: 6 NYCRR, Part 375, *Environmental Remediation Programs Soil Cleanup Objectives (SCOs)* , effective December 14, 2006.
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mg/kg milligrams per kilogram, equivalent to parts per million (ppm)
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One or more samples exceed this SCO