



ENVIRONMENTAL GROUP, INC.
ENGINEERING, ARCHITECTURE AND SURVEYING, PC

**MATERIALS HANDLING WORK PLAN
AND
COMMUNITY AIR MONITORING PLAN
FOR
DYNAMIC SYSTEMS, INC.**

**EXCAVATION OF SOIL BELOW DEGREASER PIT
POESTENKILL, NEW YORK**

Prepared for:

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FIGURES

- FIGURE 1** **SITE LOCATION MAP**
- FIGURE 2** **SITE LAYOUT MAP**
- FIGURE 3** **DSI BUILDING FLOOR PLAN**

1.0 PROJECT DESCRIPTION AND SITE LOCATION

This Materials Handling Work Plan (“Work Plan”) has been prepared to address soil and groundwater encountered during the removal of concrete, soil, and groundwater below the former location of the degreaser unit at the Dynamic Systems Inc. (DSI) facility in Poestenkill, NY. See Figure 1 “Site Location Map”.

The one acre site is located on the northwest corner of the 82 acre property at 323 State Route 355, Poestenkill, New York. The site is developed with an approximately 29,000 square foot light industrial building (Figure 2). The building contains offices, production areas, testing areas, a painting room, a machine shop, and a warehouse.

2.0 PROJECT PURPOSE

The purpose of this project is to remove contaminated soil and/or groundwater from an area within the DSI facility which housed an equipment degreaser unit. Previous investigations identified trichloroethylene in the soil and groundwater in the immediate area surrounding the unit.

3.0 GENERAL CONSTRUCTION PLAN

The following procedures represent the fundamental plan to be implemented by Precision Industrial Maintenance (PIM), the excavation contractor. The contractor may deviate from this plan if necessary to accommodate unexpected site conditions.

1. Build poly containment around work area to contain dust and debris. This will consist of 6 mil fireproof poly from floor to ceiling to contain the 8'x10' area to be excavated. Estimated size of containment area is 20'x20' or larger if possible.
2. Set up negative air machine. A 1,000 cfm negative air unit with standard HEPA filter. Air will be exhausted to the outside.
3. Initial Draeger Tube readings and PID readings will be taken prior to work startup.
4. Saw cut approximately 8'x10' area of concrete floor (wet method to reduce dust).
5. Two 20 yard lined and covered roll offs will be spotted outside of building. One roll off to be dedicated for C&D to Albany Landfill and one for contaminated soil to CWM Model City.
6. Concrete will be broken up by saw cutting and jackhammer (wet method to reduce dust). Re-bar will be cut as needed. Concrete will be loaded into bobcat bucket. Each

bucket will be covered with poly and duct taped before leaving containment. Bobcat (equipped with a catalytic converter) will be driven through building out back door. Each bucket of concreted debris will be dumped into the C&D roll off.

7. Once all concrete has been removed PIM will remove soil within the 8'x10' area under floor. Estimated 3 feet of soil to be removed in the 8'x10' area.
8. Depending on soil type, groundwater and depth of excavation PIM will use either a mini-excavator (equipped with catalytic converter) or wet/dry vacuum truck to remove soil. If mini-excavator is used, soil will be loaded into Bobcat bucket and covered with poly for transportation to hazardous waste roll off outside. If wet dry vacuum truck is used, vacuum hose will run into facility and once truck is full or soil excavation is complete, PIM will dump soil directly from vacuum truck into roll off for disposal at CWM Model City.
9. If groundwater is encountered PIM will collect groundwater as necessary. Groundwater and water generated from dewatering of soil roll off (if necessary) will be off loaded and temporarily stored in 275 gallon totes until laboratory analysis is completed and acceptance of groundwater to an approved facility (Norlite in Cohoes, NY as a hazardous waste or SWWTP as wastewater).
10. If soil is too wet for landfill PIM will dewater prior to landfill as necessary to comply with landfill specification for acceptance into CWM Model City.
11. Excavation will be covered with 6mil poly at end of each work day.
12. Air monitoring in work area will be continuous with PID meter in addition to monitoring with Draeger Tubes (specific for TCE). This will ensure that workers and surrounding work area are protected and proper PPE is worn at all times. Outdoor air monitoring will be periodically tested with a PID meter. All work will be performed under the site specific job hazard analysis and HASP.
13. Once laboratory analysis is complete for excavation area and DEC has approved closure of area, PIM will remove containment and backfill with #2 pea stone and pour concrete.

Roll offs and collected groundwater (if any) will be taken off site once analysis is complete and acceptance to disposal facility has been obtained.

4.0 SOIL REMOVAL PROCEDURES

The target soils are located in the interior of the DSI facility beneath a concrete floor (Figure 3). Concrete will be removed first to expose the subgrade soil. Concrete will be broken into manageable pieces, cleaned of any impacted soil, and stockpiled for ultimate disposal as construction and demolition debris.

Given the limitations of the interior space, all areas requiring excavation will be dug to specified depths and will be completed using a bucket excavator, other excavation equipment (e.g., Bobcat excavator), or by hand as determined by the excavation contractor. Excavated targeted soils will be brought to the outside of the building and placed in a lined roll-off dumpster where it will remain until it can be disposed of at a regulated facility.

5.0 EXCAVATION DEWATERING

A shallow water table at the site may require dewatering of the excavation to allow for soil removal. The groundwater will be handled by pumping it into a vacuum truck or stationary storage tank until it can be taken offsite to a permitted disposal facility.

6.0 GROUNDWATER HANDLING AND DISPOSAL

For the purposes of this Plan, all groundwater encountered during the opening of excavations will be collected by a vacuum truck and disposed of as contaminated waste at a regulated facility. Water collected during the purging of site monitoring wells will be collected and treated as contaminated and disposed of at a regulated facility.

7.0 SOLID WASTE HANDLING AND DISPOSAL

The solid waste produced from this task will consist of a C&D debris and excavated soil. For the purposes of this Plan, all excavated soil recovered during the project will be considered contaminated until laboratory testing is complete. All material will be stockpiled in a lined roll-off dumpster, covered, and will be disposed of at a regulated disposal facility.

8.0 COMMUNITY AIR MONITORING PROGRAM (CAMP)

The DSI site is a one acre parcel within an 82 acre property. The nearest residence is over 700 feet away. There are no other potential sensitive receptors in the vicinity. All excavation activity will take place in doors. Excavated soil will be collected and disposed into a roll off dumpster located outside the building. This approach will create minimal dust being emitted to the air. A negative air machine will be vented to the outdoors behind the building where there is

no workplace activity. The nearest residence is over 700 feet northwest of the project area. A PID meter will be maintained on site and emissions will be monitored for volatile organic contaminants (VOCs).

9.0 REPORTING

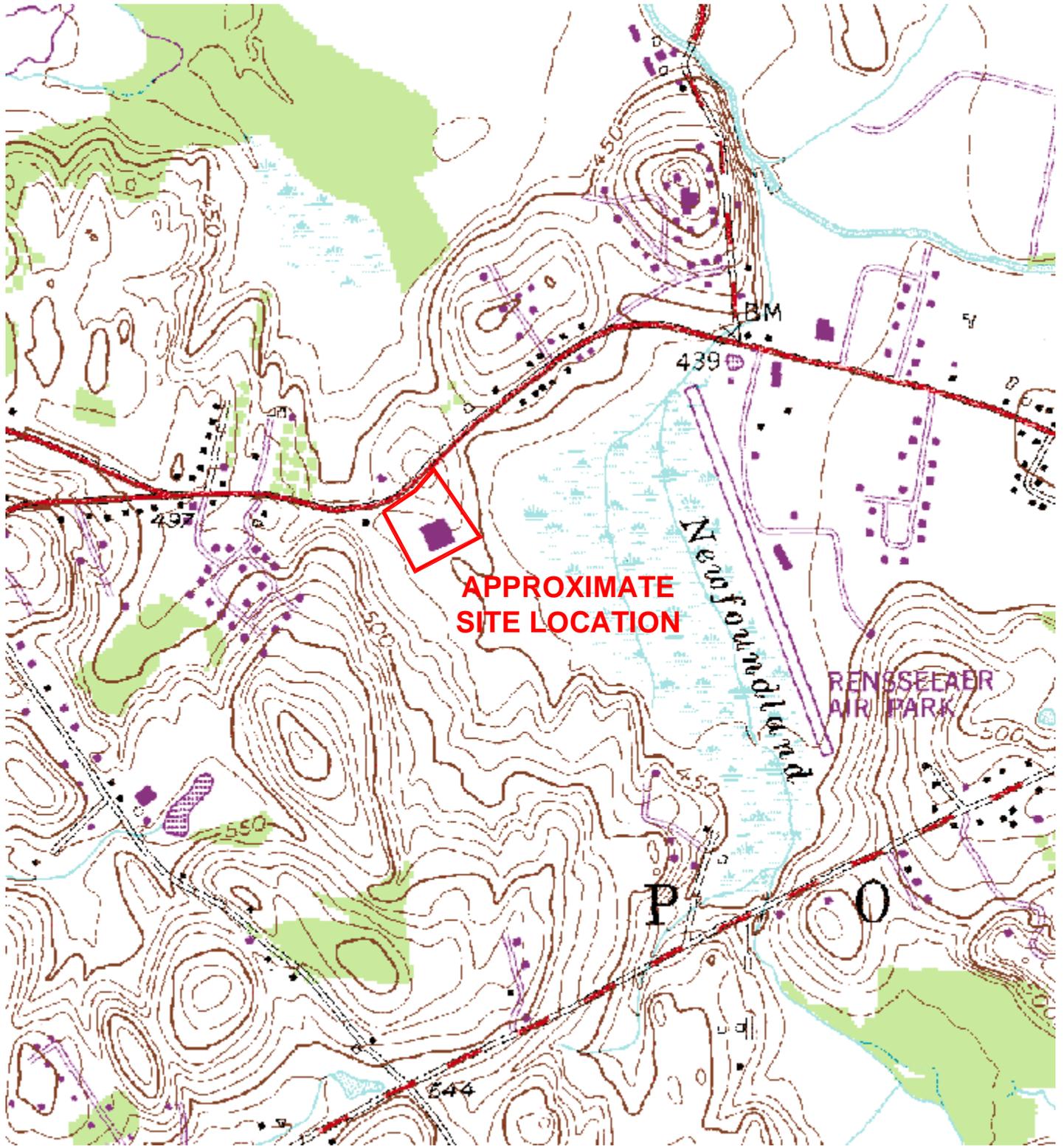
Any soil analytical results required by the NYSDEC will be transmitted to the Department within (30) days of receipt of such results.

FIGURES

FIGURE 1 SITE LOCATION MAP

FIGURE 2 SITE LAYOUT MAP

FIGURE 3 DSI BUILDING FLOOR PLAN



LEGEND

— APPROXIMATE SITE LOCATION

NOTES:

- 1) BASE MAP: 1:24,000 USGS AVERILL PARK QUADRANGLE
- 2) BOUNDARIES ARE APPROXIMATE WHERE SHOWN



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SITE LOCATION MAP
DYNAMIC SYSTEMS, INC.
 POESTENKILL, NEW YORK

TOWN OF POESTENKILL

RENSSELAER CO., N.Y.

PROJ. #: 11124 | DATE: 10/27/11 | SCALE: 1"=1,000' | DWG. NO. Sampling ... | FIGURE 1

RESIDENTIAL

LEGEND

 SITE BOUNDARY



APPROXIMATE LOCATION OF PRIVATE GROUNDWATER WELL



PAINT BOOTH

OFFICES

BUILDING

PARKING LOT

RESIDENCE OF A DSI EMPLOYEE

2 PROPANE ASTs

SEPTIC FIELD

APPROX LOCATION OF VAPOR DEGREASER (ABOUT 50-100) GAL.

NOTES:
1) BASEMAP: "FIGURE 3, SAMPLING LOCATIONS" BY GAIA TECH, DATED 12/16/10. PROVIDED IN PHASE II INVESTIGATION REPORT, DECEMBER 2010.



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RENSSELAER CO.,NY

