Honeywell

FINAL

FORMER DISPOSAL AREA EXCAVATION WORK PLAN FORMER ALEXANDER SCHMIGEL SITE, HOOSICK FALLS, NY NYSDEC SITE ID NO.: 442002

Prepared for:

HONEYWELL INTERNATIONAL, INC. 101 COLUMBIA ROAD MORRISTOWN, NEW JERSEY

Prepared by:

Mactec Engineering and Consulting, Inc. 800 North Bell Avenue Carnegie, Pennsylvania 15106

Mactec Project No. 3410060481

AUGUST 26, 2010

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I certify that this Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10)

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8-26-10

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CAMP Community Air Monitoring Plan

CERP Community and Environmental Response Plan

CHA Clough Harbour and Associates LLP

CY Cubic Yards

DER Department of Environmental Remediation

FER Final Engineering Report

HASP Site Health and Safety Plan

Honeywell, Inc.

JHA Job Hazard Analysis

LDR Land Disposal Restrictions

Mactec Engineering and Consulting, Inc.

NYCRR New York Codes, Rules, and Regulations

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health

PCBs Polychlorinated biphenyls
PID Photoionization Detector

RCRA Resource Conservation and Recovery Act

RI Remedial Investigation

SCOs NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

SF Square Feet

Site Former Alexander Schmigel Site, Hoosick Falls, NY

SVOCs Semivolatile Organic Compounds

SWPPP Storm Water Pollution Prevention Plan

TAL Target Analyte List
TCL Target Compound List

TCLP Toxicity Characteristic Leaching Procedure

UHCs Underlying Hazardous Constituents

USEPA United States Environmental Protection Agency

VOCs Volatile Organic Compounds

WP Work Plan

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1.0 INTRODUCTION

Mactec Engineering and Consulting, Inc. (Mactec), has prepared this Disposal Area Excavation Work Plan (WP) on behalf of Honeywell, Inc. (Honeywell) for the former Alexander Schmigel Site located in Hoosick Falls, New York (Site). The New York State Department of Environmental Conservation (NYSDEC) identification number for the Site is 442002. Figure 1 shows the location of the Site on a United States Geological Survey 7.5-minute topographic map. Figure 2 shows a plan view of the Site layout. The Site consists of a former gravel pit that was reportedly filled with miscellaneous scrap, refuse and demolition debris between 1977 and 1995. The former Site owner indicated that the Site was also used in approximately 1977 to dispose of drums from the former Norplex Oak Materials facility, also located in Hoosick Falls. A supplemental Remedial Investigation (RI) of the Site was performed by Clough Harbour and Associates LLP (CHA) in 2007 under contract to Mactec. The supplemental RI identified several partially-intact buried drums, one of which contained material that was characteristically hazardous for lead. The purpose of this WP is to provide the methodologies to be used to excavate the suspected disposal area, segregate any drums present, characterize and dispose of the excavated debris, soil and any drums encountered, and backfill the excavation with imported clean fill.

1.1 Background and Site Conditions

The Site is located on the north side of State Route 67 in Hoosick Falls, NY. According to the former Site owner, drums and drum contents were disposed of at the Site over an approximate 2-week period in 1977. The accounts of the number of drums and dimensions of the disposal area have varied, with the number of drums ranging from "very few" to between 100 and 200, and the area ranging from 20 feet by 20 feet (400 square feet [SF]) to 0.23 acres (10,000 SF). The reported depth of the fill and waste material ranges from 9 to 12 feet deep.

Numerous investigative activities have taken place on the Site between 1986 and 2007. In 1986, the original groundwater monitoring wells were installed, and soil, groundwater and surface water samples were collected. In 1987, a magnetometer survey was conducted and test pits were excavated. The 1987 test pits identified one full drum and two empty, crushed drums. Additional groundwater samples were collected between 1989 and 1994, and again between 1999 and 2003. Limited surface water sampling was also conducted in 1989. Residential wells located near the Site were sampled in

1986 and 1994. In 1998, a "Final Site Inspection Prioritization Report" was prepared by Roy F. Weston, Inc. for the United States Environmental Protection Agency (USEPA). In early 2004, a Petition to Delist was prepared by Parsons on behalf of Honeywell. The NYSDEC denied the Petition to Delist because:

- 1) Only the current or former owner or operator of a site may make the petition; and
- 2) NYSDEC determined that the nature and extent of the contamination had not been identified, nor had the source been removed.

In response to NYSDEC's denial of the Petition to Delist, Honeywell performed the supplemental RI, completed by CHA, in order to address the data gaps identified by the NYSDEC. The supplemental RI included excavation of 14 test pits, installation of three groundwater monitoring wells, completion of a Site survey and collection of two rounds of groundwater samples from all of the Site wells.

Test pits excavated in the supplemental RI at the Site identified two drums that contained waste material, and a number of empty, crushed drums. These drums were found to be commingled with the miscellaneous debris, scrap, and fill materials that were used to backfill the former gravel pit. The drums that contained waste were sampled, and one of the two was found to be characteristically hazardous for lead. The other full drum contained non-hazardous waste. Based on the findings of the RI, an area less than 2,000 SF of the Site area may contain buried drums (Figure 3). This area is estimated to contain waste to a depth of approximately nine feet for a maximum total in-place estimated volume of 665 cubic yards (CY); although the actual volume is likely less because the depth is shallower at the periphery of the waste area. The estimate of the solid waste material in this soil, including the drums, was estimated to be approximately 10%-15% of the total volume. Other wastes identified in this area included metal, wood, tires, and construction refuse. In addition to debris and potential buried drums, some soil within this area was found to contain acetone in concentrations exceeding the New York Codes, Rules and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs).

1.2 Scope and Objectives of Remedial Measures

The scope of this project will include the excavation, off-site disposal and backfilling of the area suspected to contain drums and the soil containing acetone exceeding the NYSDEC SCOs.

Excavation and off-site disposal was selected as the remedy because the area is relatively small, and because excavation is a viable method to remediate drums containing wastes that cannot be treated in place. If drums are discovered, they will be removed from the subsurface and prepared for off-site disposal. The soil near the drums will also be excavated and characterized for off-site disposal. After excavation activities are complete, confirmatory samples will be collected and submitted for expedited analysis. Once the analytical results indicate that the soil meets the selected cleanup standard, the excavation will be properly backfilled and seeded to reestablish vegetative cover.

1.3 Health and Safety Measures

A Site-Specific Health and Safety Plan (HASP) will be developed by Mactec for the use of its employees during this project. The HASP will identify the anticipated hazards, action levels for known compounds, the required monitoring equipment, the anticipated level of respiratory protection, the appropriate personal protective equipment, and will include Job Hazard Analyses (JHAs) for a comprehensive list of specific project activities. Mactec will also require the subcontracted construction company to provide a HASP that is at least as stringent as Mactec's. Mactec will provide copies of these Site-specific HASPs to Honeywell for review prior to commencement of the work. The HASP will include a Community Air Monitoring Plan (CAMP) and a fugitive dust particulate monitoring program in accordance with the New York State Department of Health (NYSDOH) requirements, provided as Appendix 1A and Appendix 1B of the NYSDEC Division of Environmental Remediation (DER) Program Policy DER-10/ Technical Guidance for Site Investigation and Remediation, issued May 3, 2010, and effective June 18, 2010 (DER-10). The CAMP will provide information on the protective measures that will be implemented at the Site to protect the community and environment during the remedial action. Because 1) this information will be provided in the CAMP, and 2) the remedial actions are expected to be completed in approximately 30 days, it has been determined that the preparation of a Community and Environmental Response Plan (CERP) is not necessary for this Site.

The CAMP requires real-time air monitoring in the breathing zone (i.e., the area from four to five feet above the ground surface) for volatile organic compounds (VOCs) and particulates at the designated work area perimeter or Site perimeter when excavation or remediation activities are in progress. The VOC monitoring component of the CAMP will only be implemented during activities being conducted at work areas known or suspected to contain VOCs. In addition, air samples will be collected from

two locations (one upgradient and one downgradient) at the perimeter of the work area during excavation and remediation activities for lead-containing dusts. Monitoring will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at the beginning of each work day for the contaminant(s) of concern or for an appropriate surrogate. All air monitoring data and the locations of monitoring equipment will be recorded in field notes and will be readily available for NYSDEC, NYSDOH, and Honeywell review.

Within one week prior to mobilization to the Site to perform any excavation activity, a One-Call notification will be made to identify buried utilities that may exist. Previous work performed has included One-Call notifications for this area and no buried utilities have been identified.

Mactec reviewed the soil concentrations that are expected during the excavation project. Based on the review completed to date, Mactec anticipates initiating the excavation in Level D personal protective equipment. Action levels will be developed in the HASP for all compounds that are known to be present, to determine if respiratory protection is warranted. Consideration will first be given to engineering controls that can be instituted to reduce exposure should action levels be exceeded. The CAMP describes actions to be taken if VOCs, lead, or particulates are detected in the breathing zone above the action levels specified in the HASP.

The excavator will be decontaminated at the completion of the project, prior to demobilization. Decontamination will consist of steam cleaning the backhoe bucket and tracks in a temporary decontamination pad. It is anticipated that the decontamination pad will be constructed along the southwest side of the gravel driveway, across from the proposed excavation area (Figure 4). The location for the pad has been proposed based on Mactec's review of historical and physical information of the Site, which indicates that this is a relatively level area believed to be free of surface contamination and easily accessible. However, if a more suitable location is identified during field work activities, the decontamination pad will be constructed in that location. The pad will be lined with a disposable water impermeable material without seams and, if possible, the pad will be constructed with one corner lower than the rest to retain the water generated from the decontamination activities. If necessary, devices will be utilized to hold and elevate equipment above the pad during decontamination activities. At the completion of the excavation activities, the collected wastewater will be containerized in drums, sampled and staged on-site in a secure area pending proper disposal.

The pad will be removed for proper disposal off-site, and the area will be returned to its original condition to the extent practicable.

1.4 Project Organization

Mactec will oversee all field aspects of this project during execution. The Mactec representative will provide technical oversight and will direct the subcontractor to complete excavation work that has been deemed appropriate to achieve the project objectives. Mactec will also maintain accurate records of the stockpiled soil and will work closely with Honeywell and its disposal contractors to arrange timely arrival of trucks to transport soil for disposal. The Mactec representative will also act as an agent of Honeywell to sign manifests for shipment of soil from this Site.

1.5 Organization of Work Plan

The following sections of this WP describe work to be performed according to five major tasks. Those tasks include Excavation Work (Section 2.0), Drum Management (Section 3.0), Sampling (Section 4.0), Soil Management (Section 5.0), and Site Restoration (Section 6.0). A schedule of the planned activities is provided in Section 7.0

2.0 PLANNED EXCAVATION WORK

The work described below will be completed in one phase. This work includes the excavation of debris, soil and drums (including partial or crushed drums that may contain regulated materials) and characterization and disposal of any full or partially-full drums or soil containing acetone above the selected NYSDEC SCOs.

2.1 Site Access

The Site property is currently owned by Mr. Robert Brenenstuhl. Honeywell has secured an access agreement with Mr. Brenenstuhl to complete the remedial work on the Site. Prior to mobilization to the Site, Mr. Brenenstuhl will be contacted and briefed on the Site activities.

2.2 Site Preparation

Prior to mobilization of the excavation contractor, Mactec will prepare the Site for the excavation activities. As discussed in Section 1.1, the results of the supplemental RI conducted in 2007 indicated that an area less than 2,000 SF may contain soil in exceedance of the selected NYSDEC SCOs, buried drums, and other wastes at the Site. Using the information and data included in the supplemental RI report, as well as information from previous investigations, Mactec has calculated the outer limits of this area as shown on Figure 3. This is the area that has been identified for the proposed excavation activities. The excavation area will be located based on existing site survey data and other records and marked on the ground surface with white, high-visibility paint and stakes or pin flags. The New York One-Call system will then be contacted to provide utility clearance services. While the utilities are being cleared, Mactec will designate the areas to be used for the temporary decontamination pad and for staging excavated soil.

Because the work area is adjacent to several occupied residences and access to the work location is via a gravel driveway used by the residents, Mactec will make arrangements with the property owner (Mr. Robert Brenenstuhl) to restrict access to the work area and notify the residents of the work involved.

Once the excavation subcontractor mobilizes to the Site, Mactec will brief the subcontractor on the Site conditions, the status of the utility search and the logistical issues associated with excavation, soil staging and loading the soil or drums into shipping containers. Mactec will then conduct and

document a Site safety briefing in order to communicate the potential safety issues associated with the work.

The area to be disturbed will likely be less than 0.5-acres in size. As such, the site will not exceed the 1-acre size threshold that requires coverage under the NY SPDES General Permit for Stormwater Discharges from Construction Activity - GP-0-10-001 via preparation of a Storm Water Pollution Prevention Plan (SWPPP) and Notice of Intent form. However, a limited SWPPP will be prepared and kept on the Site during the project. The limited SWPPP will identify for use Best Management Practices to ensure that soil erosion in minimized during execution of the project. At a minimum, silt fence will be placed on the topographic low side of the Site and staked in place. Straw bales will also be used in low areas such as the on-Site drainage swale and at the silt fence junctions to control soil erosion. The silt fence and straw bales will be maintained and left in place until the soil vegetative cover is re-established on the Site.

Prior to commencement of the excavation activities, Mactec will instruct the excavation subcontractor to obtain a source of approximately 700 CY of backfill that meets the NYSDEC SCOs. Based on NYSDEC DER-10 and the estimated amount of backfill, six grab samples and two composite samples (comprised of 3-5 grab samples from different locations of the fill) will be collected from the backfill material in advance of placement. The grab samples will be collected and preserved in accordance with SW-846 Method 5035 and analyzed for Target Compound List (TCL) VOCs by USEPA SW-846 Method 8260. The composite samples will be analyzed for TCL semivolatile organic compounds (SVOCs) by USEPA SW-846 Method 8270, TCL polychlorinated biphenyls (PCBs)/pesticides by USEPA SW-846 8082, cyanide by USEPA SW-846 Method 9010, and Target Analyte List (TAL) metals by USEPA SW-846 Methods 6010 (except mercury) and 7471 (mercury).

2.3 Excavation of Potential Buried Drum Area

Previous investigations have indicated that drums, including empty crushed drums and drum lids, are commingled with the miscellaneous scrap, debris and soils that were used to fill the former gravel pit. Figure 4 shows the location of the proposed excavation limits and location of the staging area for the excavation. Excavation will commence at a location of the subcontractor's choosing and proceed throughout the area until Mactec is satisfied that the area has been adequately investigated and that buried drums in the area have been recovered. During work activities, the perimeter of the excavated

area will be secured with a high visibility fence until excavation activities are completed and the area has been properly backfilled. The excavator will be equipped with a bucket capable of removing drums from the excavation without workers entering. The maximum depth of the excavation will be nine feet unless drums are encountered that require deeper excavation.

Based on the nature of the material encountered in each area, a determination will be made regarding the management of the excavated material. It is possible that one or more areas may contain only metal fragments (including drum lids), construction debris, and/or municipal trash. If such materials are encountered, and no full or partially-full drums are observed, such materials will be managed in accordance with Section 5.0 of this WP. If buried drums are encountered, the drums will be removed from the excavation and managed in accordance with Section 3.0 of this WP.

3.0 DRUM MANAGEMENT

Based on the results of the RI, and the occurrence of drums on the Site, it is possible that additional drums will be encountered in the excavation area. The condition of the drums will dictate how they are managed and disposed of. If drums are encountered, the excavation subcontractor will be instructed to remove the surrounding soil so the drum can be visually inspected in place. The drum will then be carefully cradled in the backhoe bucket and lifted out of the excavation. Under no circumstances will anyone enter the excavation unless proper shoring (e.g. trench boxes) is placed into the excavation or the excavation walls are properly sloped to avoid collapse. The following subsections provide a description of the management of drums subsequent to removal from the excavation.

3.1 Intact Drums

Drums that are recovered from the excavation intact and/or filled or partially-filled with an unknown substance will be visually inspected for damage. Such drums will be placed into 85-gallon salvage drums for off-site disposal. The drums will be opened with non-sparking tools and the contents evaluated and sampled. The state of the material (i.e. solid or liquid) in the drum will be noted and a representative sample collected for waste characterization. The drum will be resealed (if possible) and the salvage drum will be sealed and marked. Such drums will be maintained in a secure area, inside the salvage drum, until shipped off-site for disposal. A unique number will be assigned to and marked on each salvage drum for later identification. Mactec will keep an inventory of all drums staged on-Site pending disposal. The inventory will cross reference the drum numbers, the material description and the sample numbers assigned to the samples.

3.2 Damaged Drums

Empty drums in poor condition (those that have had their integrity compromised by corrosion, physical damage, or have otherwise leaked) will be removed from the excavation and placed directly into a roll-off box for off-site disposal. Contents of damaged or deteriorated drums will be sampled along with the soil in the roll-off box in accordance with the sampling procedures in Section 4.1.

3.3 Crushed, Empty Drums

Drums, including drum lids or pieces, that were obviously placed into the disposal area empty and crushed will be segregated and placed into a roll-off box. These drums will be either sent off-site for recycling or disposed of in a Resource Conservation and Recovery Act (RCRA) Subtitle D landfill.

4.0 SAMPLING

This section provides a description of the sampling that will be necessary to characterize the debris, soil, and drums excavated during the project as well as post-excavation sampling. Soil samples will be collected and analyzed immediately upon staging the waste in order to minimize the time it is staged on the Site. Once the sample results are received, the excavated waste will be disposed of in accordance with the requirements of Section 5.0 of this WP. Appropriate quality control procedures will be utilized throughout the project, including use of disposable sampling equipment and decontamination of non-disposable equipment will be completed to minimize the potential for cross-contamination. The analytical results will be validated by a qualified Mactec project chemist and will meet the objectives described in the 2002 NYSDEC Data Usability Summary Report guidelines. The validated results will be compared to the subsurface soil cleanup levels.

4.1 Soil/Debris Disposal Characterization

The material to be excavated has not been sampled for waste characterization; although soil and groundwater samples have been collected from the area. Therefore, waste materials excavated will require disposal characterization.

Soil and miscellaneous debris from the excavation will be stockpiled on plastic sheeting or in roll-off boxes in the designated staging area. More detailed information regarding the staging area construction and maintenance is provided in Section 5.1.

One composite soil sample will be collected per 500 CY of material awaiting disposal. The sample will be collected as a 10-point composite from representative areas within the staged waste pile or roll-off boxes. The sample will be blended prior to placement in sample jars and will be submitted to the subcontracted laboratory for analysis of Toxicity Characteristic Leaching Procedure (TCLP) VOCs, TCLP SVOCs, TCLP metals, ignitability, and paint filter test. Should the disposal facility require other analyses or sample collection procedures, they will be incorporated into the waste characterization procedures. The following table provides the analytical methods to be used for the waste characterization analysis.

Parameter	Extraction Method	Analysis Method
TCLP VOCs	SW-846 Method 1311	SW-846 Method 8260
TCLP SVOCs	SW-846 Method 1311	SW-846 Method 8270
TCLP Metals (except Mercury)	SW-846 Method 1311	SW-846 Method 6010
TCLP Mercury	SW-846 Method 1311	SW-846 Method 7471
Ignitability	NA	SW-846 Method 1030
Cyanide	NA	SW-846 Method 9012
Sulfide	NA	SW-846 Method 9030
Paint Filter Test	NA	SW-846 Method 9095B

In the event that the waste sample is characteristically hazardous, an attempt may be made to segregate the hazardous waste from that which can be disposed of as non-hazardous. This will be accomplished by subdividing the 500-CY staged soil pile and resampling to identify the portion(s) that contain hazardous constituents exceeding the TCLP standards. The soil pile will be subdivided into five 100-CY portions and a five-point composite sample collected for each. The composite sample will only be analyzed for those parameters that exceeded the TCLP standards in the original sample. If the results of the second round of samples indicate that further subdivision of the waste may result in significant reduction of hazardous waste, the above process will be repeated until the amount of hazardous waste has been minimized.

Disposal of the soil will be arranged and executed based on the results of the waste characterization sampling in accordance with Section 5.2 of this WP. Subsequent to final identification of wastes that are characteristically hazardous, a sample will be analyzed for underlying hazardous constituents (UHCs) to evaluate the waste relative to the Land Disposal Restrictions (LDR). The appropriate UHC analysis will be determined by the parameter(s) exceeding the TCLP standards, but will most likely be VOCs and metals. The VOC samples will be collected and preserved using USEPA SW-846 Method 5035 and analyzed using USEPA SW-846 Method 8260. The metals samples will be collected and analyzed by USEPA SW-846 Method 6010/7471.

4.2 Drum Sampling

Crushed or empty drums will not be sampled individually, but rather will be placed into a lined roll-off box, and a representative sample will be collected from each roll-off box. If necessary for disposal,

the drums containerized in the roll-off boxes will be crushed with the backhoe prior to placement into the boxes.

In the event that drums are encountered that are filled or partially filled with an unknown substance, samples of the contents of each drum will be collected for disposal characterization. In the case of drums that are intact, the analysis of the samples collected from the drums will be determined by the physical state of the material. Solid or liquid materials will be analyzed for the parameters and by the methods presented on the following table. If a drum contains both solid and liquid fractions, both fractions will be analyzed for the specified parameters by the appropriate methods.

Parameter	Matrix		Extraction Mathed	Analysis Mathad
Farameter	Solid	Liquid	Extraction Method	Analysis Method
TCLP VOCs	X		SW-846 Method 1311	SW-846 Method 8260
TCLP SVOCs	X		SW-846 Method 1311	SW-846 Method 8270
TCLP Metals	X		SW-846 Method 1311	SW-846 Method 6010
(except Mercury)	Λ		3 W -840 Method 1311	3 w -840 Method 0010
TCLP Mercury	X		SW-846 Method 1311	SW-846 Method 7471
Paint Filter	X		NA	SW-846 Method 9095B
Ignitability	X		NA	SW-846 Method 1030
Sulfide	X		NA	SW-846 Method 9030
Cyanide	X		NA	SW-846 Method 9012
VOCs		X	NA	SW-846 Method 8260
SVOCs		X	NA	SW-846 Method 8270
Metals		X	NA	SW-846 Method 6010
(except Mercury)				
Mercury		X	NA	SW-846 Method 7471
Flashpoint		X	NA	SW-846 Method 1010
Sulfide		X	NA	SW-846 Method 9030
Cyanide		X	NA	SW-846 Method 9012
pН		X	NA	SW-846 Method 9045C

4.3 Post Excavation Sampling

Post excavation samples will be collected upon completion of the waste removal. The excavation will fall between the 20 and 300 foot perimeter designated in DER-10, and will extend down to bedrock (due to the shallow depth to bedrock in the area). Because of the shallow occurrence of bedrock, unconsolidated material is not expected to remain after completion of the excavation. In accordance with DER-10, Section 5.4(b)5, one sidewall sample will be collected from the bottom of each sidewall for every 30 linear feet of sidewall. Additionally, if unconsolidated material remains on the bottom of

the excavation, one sample will be collected from the bottom for every 900 square feet of soil remaining. If multiple layers of contamination are observed during excavation activities, additional sidewall samples will be collected from each horizon in which contamination was identified. If samples are collected within 24 hours of excavation, they will be collected from the zero to six-inch interval, and if they are collected after 24 hours of excavation, they will be collected from the six- to twelve-inch interval. The samples will be collected in accordance with USEPA SW-846 Method 5035 and analyzed for VOCs by USEPA SW-846 Method 8260 and for lead by USEPA SW-846 Method 6010.

Based on review of previous investigations, Mactec calculated the outer limits of the area that may contain soil in exceedance of the SCOs, drums, and other waste at the Site. This is the area that was identified for the proposed excavation activities. The perimeter of the excavated area will be secured with a high visibility fence until excavation activities are completed and the area has been properly backfilled. Although it is not anticipated that soil that exceeds the SCOs, drums, or other wastes will remain at the Site after excavation activities are complete, Mactec will screen soils at the perimeter of the excavation using a photoionization detector (PID) prior to backfilling the area. If, based upon the PID results and visual observations, it appears that the excavation activities have achieved the cleanup objectives, the confirmatory samples will be collected and submitted for expedited analysis. Once the analytical results indicate that the soil meets the selected SCOs, the excavation will be backfilled and restored as described in Section 6.0. If it does not appear that the activities have achieved the remedial objectives, NYSDEC will be consulted prior to backfilling the excavated area.

5.0 MANAGEMENT OF EXCAVATED SOIL AND DEBRIS

The following sections present a description of the on-Site staging and off-site disposal of waste material excavated during the remediation. Waste material will include only debris and soil surrounding leaking drums and/or soil containing acetone above the selected NYSDEC SCOs.

5.1 Soil/Debris Staging

As soil and debris is excavated from the potential drum areas, it is anticipated that it will be staged in the location presented on Figure 4. The material will be staged on plastic sheeting or in roll-off boxes and covered once characterization samples have been collected in order to avoid potential mixing of contaminated and uncontaminated soil. If a stockpile is staged on plastic sheeting, run-off/run-on controls will be implemented for the stockpile, such as constructing a berm around the perimeter of the sheeting. The stockpiles will be maintained at a manageable size so that they can be properly covered with poly sheeting or tarps, which will then be secured using sandbags or similar means. The stockpiles will remain covered during periods of inactivity, until the wastes have been characterized and removed for proper disposal. Construction of the staging area will be completed and maintenance of the area will be conducted as to prevent or minimize releases from stockpiled soil through the use of liners, covers, and run-off/run-on controls.

It is anticipated that the staging area will be constructed northeast of the proposed excavation area (Figure 4). The location for the staging area has been proposed based on Mactec's review of historical and physical information of the Site, which indicates that this is a relatively level area believed to be easily accessible. However, if a more suitable location is identified during field work activities, the staging area will be constructed in that location. After the stockpiled wastes have been properly disposed of, the staging area will be deconstructed, and the area will be returned to its original condition to the extent practicable.

5.2 Loadout and Disposal

Once the excavated material has been characterized in accordance with the procedure in Section 4.1, the resulting hazardous and non-hazardous wastes may fall into one of the following categories:

Non-hazardous waste soil and debris;

- a. Hazardous waste soil and debris, not exceeding LDR Standards;
- b. Hazardous waste soil and debris, exceeding LDR Standards;
- c. Non-hazardous drums:
- d. Hazardous waste drums, not exceeding LDR Standards; and
- e. Hazardous waste drums, exceeding LDR Standards.

Waste that falls into Category (a) above will be placed into roll-off boxes and shipped to a RCRA Subtitle D landfill for disposal. The materials that fall into Category (b) above will be manifested and shipped to a RCRA Subtitle C landfill. Materials that fall into Category (c) above will be manifested and shipped to a waste treatment facility capable of treating the waste to a level that may be disposed of in a Subtitle C landfill. Drums that fall into Category (d) will be placed into roll-off boxes and shipped to a RCRA Subtitle D landfill for disposal. Drums that fall into Category (e) will be placed into roll-off boxes and shipped to a RCRA Subtitle C landfill for disposal. Drums that fall into Category (f) will be placed into roll-off boxes or drum overpacks and shipped to a facility capable of treating the waste to levels that can be placed into a RCRA Subtitle C landfill for disposal. Sampling results for all of these materials will be provided to the waste disposal facility prior to shipment of the waste, and appropriate waste profile forms will be completed for each waste stream. Hazardous wastes will be manifested and shipped in compliance with the applicable RCRA, United States Department of Transportation, and NYSDEC Regulations.

6.0 SITE RESTORATION

Upon completion of the excavation, the Site will be restored to its pre-excavation condition to the extent practicable, including the decontamination area and the staging area. The excavation will be backfilled to grade with imported soil that meets the NYSDEC Unrestricted Use SCOs. The backfill material will be placed into the excavation in two-foot lifts and will be compacted to the extent feasible using the backhoe bucket. This sequence will be repeated until the excavation is restored to grade, at which time, the excavator tires or tracks will be used to compact the final lift. Upon completion of the backfilling, the area will be hand-seeded with a native grass seed mixture to reestablish vegetative cover.

7.0 SCHEDULE

Upon NYSDEC approval of this WP, Mactec will initiate work on the remedial action. Mactec will solicit construction bids from remedial contractors. The contractors will be asked to attend a prebid meeting and will be provided this WP for bidding purposes. Once a contractor is selected, the NYSDEC will be notified of the start date for the work. The NYSDEC notification will occur at least 30 days prior to mobilization to the field. During the 30 day notification period, the HASP will be finalized and the limited SWPP will be developed. It is anticipated that the excavation portion of the project will take no more than one week in the field to complete. During work activities, the perimeter of the excavated area will be secured with a high visibility fence until excavation activities are completed and the area has been properly backfilled. The post-excavation samples will be collected and submitted for expedited analysis. Once the analytical results indicate that the soil meets the selected cleanup standard, the excavation will be properly backfilled, and the area will be reseeded. Waste characterization samples will be collected and analyzed concurrent with the post-excavation samples. The waste will remain on the Site until profiled and accepted by the disposal facilities. Upon acceptance, the waste will be loaded and shipped to the appropriate landfill and/or treatment facility.

It is anticipated that the bidding process will take approximately two weeks to complete. The notification to the NYSDEC will be made as soon as a start date can be identified in order to compress the schedule. The excavation and backfilling is expected to take approximately two weeks in the field. Following completion of the construction, it is anticipated that the waste characterization, profiling and acceptance will take less than three weeks. Upon acceptance of the waste, the loadout and shipment will take approximately two days to complete. In total, it is anticipated that the remedial activities will take approximately 30 days to complete. Within 90 days of the completion of the excavation and site restoration (i.e., demobilization from the site), Mactec will prepare and submit a draft Final Engineering Report (FER) to document the implementation and completion of the remedial program. The FER will include a description of the constructed remedy, a summary of remedial actions completed, list of the remedial action objectives applied to the remedial action, tables and figures showing pre- and post-remedial data, and "as-built" drawings showing the surveyed limits of the excavation and location of post-excavation samples. In addition, Mactec will submit, along with the final FER, electronic copies of executed manifests documenting off-site transport of waste

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materials and results of laboratory analytical results, including laboratory data sheets and documentation of data validation conducted.

It is not anticipated that contamination will remain at the Site after the excavation activities are completed; however, if analytical results from the post-excavation samples show exceedances of subsurface soil cleanup levels, the additional reporting requirements outlined in DER-10 will be addressed at that time. In addition, if monitoring results collected for the CAMP indicate an exceedance of action levels, the results will be reported to Mr. James A. Moras, P.E., NYSDEC project manager, within two hours by phone at (518) 402-9814 or email at jamoras@gw.dec.state.ny.us. Also, if an exceedance occurs, the monitoring results and corrective actives taken will be documented in writing to the NYSDEC project manager within one week of the occurrence.



