



## **SITE MANAGEMENT PLAN**

**755 JEFFERSON ROAD FACILITY  
HENRIETTA, NEW YORK  
MONROE COUNTY  
(VCP NUMBER V00126-8)**

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755 Jefferson Road  
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Kleinfelder Job No. 119502

Quality Assurance/Quality Control

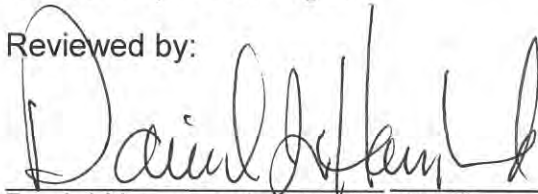
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August 3, 2011

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## 1.0 INTRODUCTION

This Site Management Plan (SMP) has been prepared for the known areas of concern at the property located at 755 Jefferson Road in the Town of Henrietta, Monroe County New York under the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP). A NYSDEC issued checklist was used to guide preparation of this SMP, and a copy of the completed checklist is included in Appendix I. It has been annotated to indicate where in this SMP or the MCA OM&M FER each checklist item is addressed.

In 1996 Medeva Pharmaceutical Manufacturing Inc. (a predecessor of UCB Manufacturing, Inc., "UCB") purchased a manufacturing and research facility located at 755 Jefferson Road in Henrietta, New York (the "Property") from Rhone-Poulenc Rorer ("RPR"). During Medeva's pre-acquisition due diligence, it discovered that prior operations on the Property had resulted in releases to the environment at the two locations discussed below. Thereafter, a Voluntary Cleanup Agreement (VCA) (Index Number D8-0001-97-07 was entered into by Medeva Pharmaceuticals Manufacturing, Inc. and the New York State Department of Environmental Conservation (NYSDEC, 1998). The Site and Property location and features are shown on Figure 1.

Under the New York State Voluntary Cleanup Program (VCP), the Volunteer is required to remediate the Site in accordance with the VCP Agreement (Agreement) made with the NYSDEC dated March 31, 1998 (Agreement Index Number D8-0001-97-07), VCP Number V00126-8). This VCA required the Volunteer to investigate and remediate the identified areas of impacted media at the VCA-defined Site. Figure 1 identifies the Site boundaries and boundaries of the Property. The boundaries of the Site will be more fully described in the deed description that is included within the Deed Restriction and the letter granting releases and covenants associated with completion of the work under the VCA (Certificate of Completion).

This SMP was prepared by Kleinfelder Engineering, P.C. on behalf of UCB, in accordance with the requirements in NYSDEC draft DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, and the guidelines provided by NYSDEC. Among other things, this SMP describes the means for implementing the Institutional Controls (ICs) that are specified in the Deed Restriction for the Site. A draft copy of the Deed Restriction has been submitted to NYSDEC for approval prior to its being filed and recorded and is included in Appendix V. The deed restriction will be recorded after NYSDEC approval of it and this SMP.

### 1.1 SITE DESCRIPTION

The Property is located in the Town of Henrietta, Monroe County New York, and identified as 5 Parcels being a part of Lots No. 6 & 8, Fourth Range, Township 12, Range 7 on the Town of Henrietta, County of Monroe, State of New York Tax Map. The Property is an approximately 40-acre area bounded by Jefferson Road to the north,

Strasenburgh Drive to the south, Clay Road to the east, and Marketplace Drive to the west (see Figure 1).

The Property is an active pharmaceutical manufacturing plant situated in a predominantly commercial area which is zoned commercial/industrial. There are three main buildings on Site. Two of the buildings, Building #1 and Building #2 are connected. Building #3 is located south of Buildings #1 and #2. There is a small building located along the western side of Building #3 near the southwestern corner of the building. This building contains the equipment used for performing the remediation at one of the identified areas of concern at the site. Figure 1 provides a general Property layout.

Two known areas of concern have been identified at the Site which is the portion of the Property which is the subject of the VCA. These areas are referred to as the:

- “Methylene Chloride Area” (MCA), and
- “Building 2 Sump Area” (B2SA).

Active remediation has been completed for both of these areas of concern. Institutional controls only apply to the MCA and are not required for the B2SA.

## 1.2 PURPOSE

The MCA portion of the Site contains residual chemicals of concern left in the area beneath and immediately adjacent to Building 3 after completion of the remedial action, hereafter referred to as ‘remaining contamination’. Institutional Controls (ICs) have been incorporated into the Site remedy for the MCA to control the potential for exposure to the remaining contamination during the use of the MCA portion of the Site to ensure protection of public health and the environment until such time as the Site specific remedial cleanup stands (see Table EWP-1 in Appendix VI) (RAOs) have been achieved in the MCA. A Deed Restriction approved by the NYSDEC, and to be recorded with the Monroe County Clerk, will require compliance with this SMP, including the specified ICs for the MCA until RAO’s are achieved. The ICs place restrictions on Site use, and mandate maintenance, monitoring and reporting measures related to each IC. Among other things, this SMP specifies the methods through which the ICs will be implemented within the MCA. Compliance with this plan by the grantor of the Deed Restriction and the grantor’s successors and assigns is required once it has been approved by the NYSDEC. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of procedures required to manage the remaining contamination beneath and immediately adjacent to Building 3 within the MCA at the Site after completion of the Remedial Action, including: (1) implementation and management of the ICs; (2) media monitoring; (3) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required as a condition of Site Closure. Failure to properly implement the SMP for the MCA may be a violation of the Deed Restriction, which is enforceable and may be grounds for revocation of the assignable release letter.
- Failure to comply with this SMP may also be a violation of Environmental Conservation Law, 6 NYCRR Part 375 and the VCA (Index #D8-0001-97-07; Site #V00126-8) for the site.

#### 1.2.1 Revisions

Revisions to this SMP will be proposed in writing to the NYSDEC's project manager. In accordance with the Deed Restriction for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files, and if such revisions relate to the Deed Restriction, the proponent shall record only such approved revisions as a modification of the Deed Restriction.

### 1.3 SITE HISTORY

The Site was developed in the 1950s for the manufacture of pharmaceuticals and has been owned by several pharmaceutical companies since 1958. Activities associated with the manufacture, research, and administration of pharmaceutical products has been conducted continuously at the Site since its construction through today. In 1996, Rhone-Poulenc-Rorer (RPR) purchased the site from Fisons Pharmaceuticals. Later in 1996, RPR sold the Site to Medeva Pharmaceutical Manufacturing, Inc. (Medeva or Volunteer).

On March 31, 1998, Medeva Pharmaceuticals Manufacturing, Inc., which is now known as UCB Manufacturing, Inc. (the Volunteer) entered into a VCA with the NYSDEC to remediate the two identified areas of concern within the estimated 32 acre site located in the Town of Henrietta, County of Monroe, New York. While the entire property is approximately 40 acres in size, the site as defined within the VCA is approximately 32 acres (Figure 1).

Methylene Chloride is still in use by UCB as part of the manufacturing process within Building 3 at the site.

### 1.4 GEOLOGY AND HYDROGEOLOGY

The Site is located in the Erie-Ontario Lowlands Physiographic Province in western New York State. The Site occupies a nearly level, glacially influenced topographic surface. Bedrock observed during previous site investigations consists of green-gray shale at approximately 55 feet below grade. The shale bedrock is consistent with the mapped



bedrock units for this part of the Upper Silurian Vernon Formation. Surficial deposits at the Site generally consist of reddish-brown silt and clay with lesser amounts of brown fine/coarse grained sand and gray, rounded gravel. These deposits were most likely derived from fine-grained lacustrine sediments and/or from glacial till associated with the most recent Pleistocene ice age. Coarser material is more abundant at depths of 0 to 6-ft below ground surface (bgs) in comparison to deeper intervals. The relative permeability of surficial deposits at the site is considered low. ERM, a former Site consultant, classified the impacted saturated and unsaturated soils in the MCA as silts and sands.

Based on the groundwater elevations obtained during monitoring events, three different groundwater zones may exist beneath the Site: shallow, intermediate, and deep. The following describes the depth intervals of monitoring well screens for each of the three aquifers.

#### 1.4.1 Shallow-Depth Wells

The shallow well group includes nine monitoring wells (MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-18 and MW-19), three piezometers (P-1S, P-4S and P-6S) and one recovery well (RW-2). Shallow wells are screened from 2 to 18 ft bgs. The top of the shallow groundwater table varies from 3 to 8 ft bgs (approximately) across the MCA. The following wells have been used for gauging of water levels during sampling events: MW-11, MW-14, MW-15 and P-6S. The following wells have been used during sampling events for collecting groundwater samples for chemical analysis and for gauging: MW-12, MW-16, MW-18 and RW-2.

#### 1.4.2 Intermediate-Depth Wells

The intermediate well group includes five vertical wells and four angled wells. The intermediate vertical wells are screened from 15 to 35 ft bgs, and the intermediate angled wells are screened from 30 to 50 ft bgs. The intermediate zone appears to be a confined formation, with a potentiometric surface at approximately 3 ft bgs. The following intermediate wells have been used for collecting groundwater samples for chemical analysis and for gauging of water levels during sampling events: MW-D8, RW-3, RW-4, RW-5 and RW-6.

#### 1.4.3 Deep-Depth Wells

The deep well group includes nine vertical wells and four angled wells. The deep vertical wells are screened from 42 to 70 ft bgs. The deep angled wells are screened within the same interval as the deep vertical wells. The depth to bedrock varies between approximately 50 and 70 ft bgs in the MCA. The deep aquifer appears to be a confined formation, with a potentiometric surface at approximately 25 ft bgs. The following deep wells have been used for gauging of water levels during sampling events: MW-D1, MW-D2, MW-D3, MW-D4 and MW-

D5. The deep wells that have been used for collecting groundwater samples for chemical analysis and gauging of water levels during sampling events: MW-D6, MW-D7, MW-D9, MW-D10, MW-D11, MW-D12 and MW-D13.

#### 1.4.4 Wells/Piezometers No Longer Used

The following wells and piezometers are no longer used and have been abandoned in accordance with NYSDEC approvals and requirements.

- In the shallow zone: MW-10, MW-11, MW-14, MW-15, MW-19, RW-2, P-1S, P-4S and P-6S.
- In the intermediate zone: MW-20A, MW-20B, MW-21, MW-22, EXSB-1, EXSB-2, P-3I, P-5I and P-7I.
- In the deep zone: MW-D1, MW-D2, MW-D3, MW-D4, MW-D5, MW-D11 and P-2D.

#### 1.4.5 Groundwater Flow

Based on groundwater elevation gauging data without the system operating, groundwater flow direction appears to vary from a northeast direction to a southeast direction. See Figure 3. Groundwater velocity at the site has been estimated based upon transmissivity values calculated within the Data Gap Investigation Report and Proposed Remedial Action Plan (DGI), dated March 1999 using data from piezometer PZ-1 and soil classification at the site. Groundwater velocity for the shallow, intermediate and deep zones has been estimated as 0.28 ft/yr. The formulas and values used to calculate groundwater velocity at the site are listed below:

##### **Given Values:**

Hydraulic Gradient ( $i$ ) = 0.06 ft/ft

Transmissivity (T) =  $1.6 \times 10^{-4}$  ft<sup>2</sup>/min

Saturated Thickness (b) = 53 ft (Overburden only)

Effective Porosity ( $N_e$ ) = 34% (Domenico & Schwartz 1990)

##### **Formulas:**

$K = T/b = (1.6 \times 10^{-4} \text{ ft}^2/\text{min}) / (53 \text{ ft})$

$K = 3.02 \times 10^{-6} \text{ ft/min} = 1.59 \text{ ft/yr}$

$V = K/iN_e = (1.59 \text{ ft/yr}) (0.06 \text{ ft/ft}) / 0.34$

$V = 0.28 \text{ ft/yr}$

#### 1.5 SUPPORTING SITE RELATED DOCUMENTS

The following documents were previously prepared for this Site:

- The "Voluntary Cleanup Work Plan - Data Gap Investigation" (VCWP), dated 1997, was prepared and submitted by ERM. The VCWP describes proposed additional investigation activities to ERM's Phase II investigation of the Site.
- The "Data Gap Investigation Report and Proposed Remedial Action Plan" (DGI), dated March 1999, was prepared and submitted by ERM. The DGI describes the Data Gap 1997 investigation activities and results.
- The "Consolidated Remediation Work Plan" (CRWP), dated April 2002, was prepared and submitted by ERM. The CRWP describes remedial techniques and protocols and presents a proposed schedule for Site remediation activities.
- "Methylene Chloride Area (MCA) Remedial Design Investigation Work Plan," (RDIWP), dated August 2002, was prepared and submitted by ERM. The RDI is an addendum to the CRWP and addresses concerns raised by the Monroe County Department of Health (MCDOH) and the New York State Department of Health (NYSDOH). It proposed additional investigations to more fully estimate the extent of affected soil and groundwater in the MCA area of concern.
- The "Remedial Action Selection Report," (RAS), dated October 2002, was prepared and submitted by ERM. The RAS was prepared to satisfy the requirements described in Section 7.4 of the NYSDEC Draft VCP Guidance. The RAS documents the engineering analysis performed to determine if the proposed remedial approach can achieve the cleanup goals for the Site. It also presented a comparison of the remedial approach against the remedial selection criteria found at 6 NYCRR 375-1.10(c).
- "The Building #2 Sump Area Final Engineering Report", Submitted in February 2006 by ERM summarizes the remedial activities completed in the sump area of building # 2.
- "The MCA Remedial Final Engineering Report", submitted in January 2008 by ERM and summarizes the results of the MCA Remedial Design Investigation, describes the remedial activities performed at the Site, and provides information describing the construction and standard operating procedures for the Multi Phase Remediation System.
- The MCA "Operations, Maintenance, and Monitoring Plan" (OM&M Plan), dated January 2008, was prepared and submitted as Appendix L to the January 2008 MCA Remedial FER by ERM. The OM&M Plan describes the operation of the MPRS, presents a schedule for maintenance activities and discusses the basic requirements for waste disposal. The reporting requirements associated with operating the system are also presented in the OM&M Plan. The OM&M Plan also includes a sampling protocol for the MCA. In addition, the OM&M Plan provides a suggested sampling protocol to monitor the effectiveness of the MPRS. The pending OM&M Plan includes an addendum submitted in August

2008 which defined an alternate method of using non-dedicated submersible pumps for collecting the groundwater samples from the monitoring wells. The contents of the OM&M Plan satisfy the requirements of a VCP site monitoring plan for the MCA.

- “MPRS Pulsing Test Summary Report” (MPTR) was submitted to the Department in August 2009. It summarizes the results of the Methylene Chloride recovery rates while pulsing the system on for seven days while shutting the system off for periods ranging from 48 hours to four weeks.
- The MCA Operational, Maintenance & Monitoring Final Engineering Report (April 2010)

## 1.6 SUMMARY OF REMEDIAL ACTIONS

Two known areas of concern have been identified at the Site (Figure 1):

- the “Methylene Chloride Area” (MCA) and
- the “Building 2 Sump Area” (B2SA).

### 1.6.1 MCA

Previous investigations at the Site identified an area of concern on the west side of Building #3 in the vicinity of a former 2,600-gallon Methylene Chloride aboveground storage tank (AST). The former AST has been removed from the Site, although Methylene Chloride is still used in manufacturing operations at the Site. The areal extent of the MCA was initially determined based on the presence of impacted soil and groundwater containing Methylene Chloride concentrations exceeding regulatory criteria. The ground surface over the MCA is occupied by an asphalt parking lot, a small vegetated area, and a portion of Building #3. The MCA was delineated by previous soil and groundwater investigations, further described in reports prepared by ERM in 1996 and 1997, which were submitted to, and approved by, the Department. A map showing the location of the MPRS remediation building is presented in Figure 2.

With Department oversight, a Multi-Phase Recovery System (MPRS) was installed and has been operating at the Site from July 2006 until July 2010. The purpose of the MPRS was to control contaminant migration, and to remediate the MCA to reduce the residual chemical concentrations in soil and groundwater following removal of the tank from this area. The MPRS included a combined groundwater treatment system and a vapor treatment system. Approval was granted by the NYSDEC (via email correspondence dated July 29, 2010) to terminate system operation following the July 2010 operational period. Methylene Chloride concentrations in the groundwater, soil vapor, and indirectly in the surrounding soil, were monitored by analyzing both groundwater and vapor samples collected from the recovery and monitoring wells associated with the

MCA and its MPRS. Additional details describing the equipment and former operation of the MPRS are provided in the Operation, Maintenance, and Monitoring Plan, presented in Appendix L of the MCA Remedial Final Engineering Report (January, 2008) which is incorporated by reference into this SMP. When the MPRS was operational, treated groundwater was discharged to the Town of Henrietta municipal sewer system. The Volatile Organic Compound (VOC) concentrations of the discharge are regulated by an Industrial Wastewater Discharge Permit issued by the Monroe County Department of Environmental Services (MCDES).

Active remediation of the MCA has been completed. Remedial actions taken are detailed in the MCA OM&M FER (Kleinfelder 2010). Due to the presence of residual contaminants in the groundwater, vapors and soils within the MCA, as discussed in the "current conditions" section below, the MCA has not achieved "unrestricted use" levels. Section 1.7 provides relevant information on Methylene Chloride, which is the primary site-related constituent left in the MCA at levels above the unrestricted use levels. The NYSDEC requires Institutional Control measures for the MCA until such time as, through natural attenuation mechanisms, the unrestricted use RAO's have been achieved. Sections 2.0 through 4.0 details the post closure work, institutional/engineering controls and monitoring related to the MCA that NYSDEC has determined is necessary for the MCA.

Possible MPRS permanent shutdown criteria discussed in the MCA Remediation FER include:

- Achievement of the Remedial Action Objectives;
- Achievement of 95% or greater mass reduction;
- Achievement of asymptotic contaminant removal rates;
- Evaluation of Methylene Chloride removal rates across the MCA;
- Consistency in concentration patterns before, during, and after pulsed operation of the system; or
- Demonstration that continued operation is not technically and/or economically feasible based on system performance and/or Site conditions.

A discussion of the current status of the MPRS relative to the original shutdown criteria presented in the 2008 FER, and the proposal for shutdown of the MPRS system is presented in the Methylene Chloride Area Operation Maintenance and Monitoring Final Engineering Report and Petition for Remedial Closeout which is being submitted concurrently with this SMP (MCA OMM FER, Quantum 2010).

Approval was granted by the NYSDEC (via email correspondence dated July 29, 2010) to terminate system operation following the July 2010 operational period. The MPRS system operation has been terminated in accordance with this approval.

As discussed in section 1.4.4, a total of 25 wells have been abandoned in accordance with NYSDEC requirements.

### 1.6.2 B2SA

With respect to the B2SA area, remediation has been completed. Remedial actions taken are detailed in the Building #2 Sump Area Final Engineering Report (ERM 2006) and in the subsequent NYSDEC response letter dated May 1, 2006. Soils have been cleaned to "unrestricted use" levels and NYSDEC has approved the Remedial FER for this area. No post-closure work, institutional/engineering controls or monitoring related to the B2SA are necessary.

## 1.7 METHYLENE CHLORIDE

According to the Occupational Health and Safety Administration (OSHA), Methylene Chloride, also called Dichloromethane, is a volatile, colorless liquid with a moderately sweet, Chloroform-like odor. Its volatility and ability to dissolve a wide range of organic compounds makes Methylene Chloride an ideal solvent for many chemical processes, including pharmaceutical manufacturing, paint stripping, paint remover manufacturing, and metal cleaning and degreasing.

The National Institute of Occupational Safety and Health (NIOSH) list the means of exposure to Methylene Chloride as inhalation, skin absorption, ingestion, and eye contact. The most common means of exposure are inhalation and skin exposure. OSHA has established a Permissible Exposure Limit for Methylene Chloride.

NIOSH consider Methylene Chloride to be a potential occupational carcinogen. According to OSHA, persons exposed to Methylene Chloride concentrations exceeding the OSHA exposure thresholds and time limits are at increased risk of developing cancer, adverse effects on the heart, central nervous system and liver, and skin or eye irritation. Symptoms of short-term exposure to Methylene Chloride concentrations above the OSHA short-term exposure thresholds include irritated eyes, weakness, exhaustion, dizziness, numbness, tingling in the limbs, and nausea.

## 1.8 REMAINING CONTAMINATION

Remediation of the B2SA has been completed. During the remediation, soils with contaminants at concentrations above the established RAOs were excavated. Excavated soils were sent off-site for appropriate disposal. The B2SA soils have been cleaned to "unrestricted use" levels. No post-closure work, institutional/engineering controls or monitoring related to the B2SA is necessary. Remedial actions are detailed

in the Building #2 Sump Area Final Engineering Report (ERM February 2006). The B2SA Remedial FER was approved in a letter by the NYSDEC dated May 1, 2006.

Remediation within the MCA extended beneath the slab of Building 3. The reduction of contamination in groundwater and soil vapor collected from beneath the building over time indicates that a reduction in contaminant levels has been achieved beneath the building. Contamination remaining in the MCA was encountered at depths of 14 feet below grade and lower during post remediation soil sampling. Based upon pre-remediation soil sampling, contamination has always been restricted to the overburden depth, the bottom of which is approximately 55 feet below grade. A demarcation layer does not exist within the MCA, therefore the Excavation Work Plan (Appendix VI) must be adhered to. Based on pre-remediation modeling and post-remediation sampling as well as the long term groundwater monitoring data, the bulk of the residual contamination appears to be present in the vicinity of recovery wells RW-4, RW-5 and MW-D8 at depths of 15 to 30 feet below ground surface.

An active water line is located within the MCA (Figure 1a) and will have to be avoided during any excavation in the area.

Post remedial soil samples indicate that Methylene Chloride concentrations within the interval of 14 to 55 feet below ground surface within a portion of the MCA can reach 90 parts per million (this sample was collected at 23 feet below grade). If utilities within the MCA are to be accessed below grade, compliance with the Excavation Work Plan is required (Appendix VI). As shown by the post remediation soil boring logs (Appendix VII), VOC soil vapor monitoring indicates that the shallowest area of contamination is first encountered at approximately 20 feet in soil boring SB-P3 (14 vertical feet below grade). Therefore, subsurface activities involving soil disturbance at depths of 10 feet and greater will require compliance with the Excavation Work Plan. Disturbance of soil which is limited to less than 10 feet below grade within the MCA is not considered a threat to human health and will not require adherence to the Excavation Work Plan.

If, in the future, a decision is made to remove either the water line or those portions of Building 3 which are located above the MCA, the soil that could be potentially disturbed by any redevelopment activities will be evaluated to determine the extent of residual contamination at that time. If precautions are required to protect construction or utility workers, these will be implemented. Any soils that will be removed will be characterized and properly disposed in accordance with applicable law. If additional institutional or engineering controls or measures (such as installing impervious cover) are required to ensure that there is no substantial risk to human health or the environment presented by such residual materials, these will be identified and implemented after discussion with the Department.

Table 1 summarizes the results of all soil samples remaining at the site after completion of the Remedial Action. The shaded concentration indicates those samples that had target analytes that exceed the unrestricted RAOs. While Methylene Chloride (and other constituents) have been removed from the MCA during the successful remediation

program, the post-remediation sampling indicates that residual contaminants above the RAOs remain. To be conservative, based on the data in Table 1, the entire area within the MCA boundaries at depths starting approximately 15 feet below the surface and extending at least 40 feet below the surface and potentially down to approximately 55 feet below the surface are deemed to potentially have residual soil contaminants at levels above the unrestricted RAOs as set out in the Remedial Action Selection report (ERM 2002) and approved by the Department in a letter dated December 19, 2002. All areas of the Site outside the MCA indicated on Figure 1 meet the RAOs for unrestricted use of the site based upon pre-remediation soil sampling.

## **2.0 POST REMEDIAL CLOSURE INSTITUTIONAL CONTROLS**

Because this Site is covered by a VCP Agreement rather than by a Brownfields Cleanup Program Agreement, a deed restriction will be filed rather than a statutory environmental easement.

It is anticipated that the Institutional Controls discussed in the sections below will be put in place until the Site Specific RAOs for the MCA are achieved. These controls will eliminate or reduce the potential for human exposure to the remaining contaminants in the MCA. The following Institutional Controls will be implemented:

- The MCA may not be used for other than a Commercial or Industrial use without the express permission of NYSDEC. This Institutional Control will be implemented with a recorded Deed Restriction (Appendix V).
- The use of the groundwater underlying or potentially impacting groundwater from the MCA for potable water purposes is prohibited by local ordinance as well as the Deed Restriction. The use for other purposes is prohibited within the MCA unless it has received treatment rendering it safe for its intended non-potable use. This Institutional Control will be implemented with a recorded Deed Restriction (Appendix V).
- Compliance with this SMP by the Grantor and the Grantor's successors and assigns and any future owners/operators of the MCA.
- Groundwater monitoring of the MCA must be performed as defined in this SMP.
- All future activities on the property that will disturb soil within the MCA must be conducted in accordance with Section 2.1 of this SMP.
- If, before the RAOs have been achieved in the MCA, UCB empties, removes from service and properly decommissions the Methylene Chloride AST, and if UCB removes Methylene Chloride from the tank and associated piping and equipment and removes all potential contributing sources of Methylene Chloride to the indoor air from production/operation areas in Building 3, the potential for



vapor intrusion will be re-evaluated applying NYSDOH vapor intrusion guidance. If based on the results of the investigation NYSDEC or NYSDOH requires mitigation measures to address vapor intrusion risks, such measures will be installed. This may consist of either a combination of sub-slab and indoor air monitoring for Methylene Chloride, or the installation of an effective sub-slab depressurization system under the MCA portion of Building 3;

- Data and information pertinent to Site Management of the Site must be reported at the frequency and in a manner defined in this SMP.
- For as long as the Institutional Controls are in place, the Site owner will periodically submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to request access to such Controlled Property at any time in order to verify the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by any person that the NYSDEC finds acceptable.

## 2.1 SOIL DISTURBANCE

Until site-specific cleanup criteria (RAOs) are met within the MCA, the removal, management and handling of soil encountered during any soil disturbance activities within the MCA will be restricted based upon this Site Management Plan and the attached Excavation Work Plan (Appendix VI). All such contemplated activities will be evaluated prior to commencement in order to reduce the risk of potential exposure of humans to contaminated soils during soil disturbance and/or groundwater encountered during associated dewatering activities within the MCA. This includes provisions to allow utilities in the MCA to be worked on without causing any unacceptable exposure to the public or workers from remaining residual contaminants.

Health and safety procedures which comply with the site specific Health and Safety Plan (Appendix II) and be consistent with the relevant provisions of 29 CFR 1910.120 until such time as RAO's are achieved in the MCA, are to be followed for all excavations or other activities within the MCA. The remedial party and/or Site owner will provide written notification to the NYSDEC prior to commencing work in this area.

If required by the NYSDEC General Stormwater SPDES Permit for Construction Activities in effect at the time, a Notice of Intent (NOI) for the soil disturbance activity within the MCA to be covered by that General SPDES Permit must be submitted and a Stormwater Pollution Prevention Plan (SWPPP) established and implemented.

If necessary, soil removed from the MCA will be characterized in accordance with applicable law and, if required by such law, transported off-Site to a permitted disposal facility. Fill brought to the Site for use within the MCA will be evaluated prior to being used as fill. All soil to be imported to or exported from the MCA portion of the Site will comply with the provisions of Section 5.4(e) of DER 10 (May 2010), including tables 5.4(e) 4 and 5.4(e)10.

Plans for the collection, management, handling and treatment of any contaminated groundwater resulting from the de-watering of excavations within the MCA will be established on a project-specific basis prior to any excavation activities within the MCA. Groundwater collected as a result of excavation de-watering activities within the MCA will be stored on Site and characterized prior to treatment and or disposal in accordance with applicable law.

## **2.2 HEALTH AND SAFETY PROGRAM**

The potential pathways for exposure to the remaining residuals at the MCA are direct exposure to the impacted soil or groundwater contact and exposure to vapors emanating from the soil into unpaved areas or inside Building #3. Because the current manufacturing that occurs in Building #3 continues to use Methylene Chloride, the potential for worker exposure to this substance is subject to OSHA regulations and is not considered under this SMP. If in the future the use of Methylene Chloride is discontinued within the MCA (which includes a portion of Building #3) this SMP will be updated and vapor intrusion as a potential pathway would be further evaluated as discussed in Section 4.6. Appendix III includes the Institutional Control/Engineering Control Certification Form for the MCA. Each year during the post-operation period, a copy of this form signed by a Qualified Environmental Professional or a Professional Engineer licensed to practice in New York will be submitted to NYSDEC.

In the event that an individual is exposed to contaminated soil or groundwater during routine groundwater monitoring activities, decontamination facilities are present inside the MPRS building and at several locations within Building #3. Appropriate Personal Protective Equipment (PPE) is stored inside the MPRS building and in Building #3. A Site-specific Health and Safety Plan is provided in Appendix II of this document.

## **3.0 POST CLOSURE SITE MONITORING**

The Post Closure Monitoring Plan describes the monitoring that is being done in order to evaluate the performance and effectiveness of the post-remediation plume management, monitored natural attenuation and affected groundwater as described below. The groundwater monitoring component of this plan has already been informally approved by NYSDEC and is being implemented. The remainder will be initiated after approval by NYSDEC. Significant changes to this Monitoring Plan must first be approved by NYSDEC.

### 3.1 PURPOSE AND SCHEDULE

The purpose of the monitoring is to verify that in the aftermath of the shut-down of the MPRS, groundwater with Site-related constituents of concern above the established RAOs is not migrating off the property and that contaminant concentrations continue to decrease. The groundwater sampling and monitoring component of this plan will continue to be performed using methods consistent with those used during the investigation and active remediation of the MCA, in order to allow meaningful comparison of the data produced through this program with historic groundwater data.

This Post Closure Monitoring Plan, including Appendix IV, describes the methods to be used for:

- Sampling and analysis of groundwater;
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Quarterly monitoring of the performance of the remedy and the overall reduction in contamination within the MCA will be conducted for the first two years after shutdown of the MRPS is approved. Thereafter, monitoring will be continued at a frequency determined by the results of the initial eight quarters of data. Changes in the frequency will be discussed with, and approved by, NYSDEC before they are implemented.

Trends in contaminant levels in groundwater in the MCA will be evaluated to determine if the plume management continues to be effective in achieving remedial goals. Monitoring programs are summarized in the following table and outlined in detail in Sections 3.2 through 3.8 below.

### ***Monitoring/Inspection Schedule***

<b>Monitoring Program</b>	<b>Frequency*</b>	<b>Matrix</b>	<b>Analysis</b>
Groundwater within the MCA	Quarterly for 2 years, then evaluated to determine future monitoring frequency	Groundwater	Selected Site Specific VOCs

\* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.

## **3.2 GROUNDWATER MONITORING**

A phased post-remediation monitoring program within and downgradient of the MCA is being implemented to monitor residual VOC concentrations and migration in the MCA. The network of monitoring wells that will be used in this program is a sub-set of the existing well network that had been installed to monitor both up-gradient and down-gradient groundwater conditions associated with the MCA.

Eight quarters of groundwater data will be used to verify that the concentrations are stable or declining and that impacted groundwater within the MCA has not migrated beyond the property boundary at levels above the groundwater standard. This assessment will be made based on the sentinel well(s) presented below. The sampling frequency may be modified with the approval of NYSDEC. The SMP will be modified to reflect all changes in sampling plans approved by NYSDEC. For at least the proposed quarterly monitoring for the first two years, one sample will be collected each quarter from each of the following wells.

- Shallow monitoring wells MW-12, MW-16, MW-18, MW-23S and RW-2,
- Intermediate monitoring wells MW-D8, MW-23I, RW-3, RW-4, RW-5 and RW-6,
- Deep wells MW-D6, MW-D7, MW-D9, MW-D10, MW-D12, MW-D13 and MW-23D.

Monitoring wells MW-23S/I/D are intended to serve as “sentinel wells” located between the known areas of impact within the MCA and the property boundary, as shown on Figures 3. Each vertical well is screened in the shallow, intermediate and deep intervals respectively. Sample collection will occur via the low flow sampling methods currently approved and used at the site.

Any Site-related VOC detected in the sentinel well will trigger further action. NYSDEC will be contacted and informed of the result(s) and the well will be re-sampled to verify that the Site-related VOC detection is real. This notification and scheduling of the re-sampling will generally occur within 48 hours of receiving the laboratory report. If any site-related VOC is present in the additional sample, then further actions may be taken. The potential further actions will be discussed with NYSDEC and a mutually agreed upon course of action will be identified and implemented.

The following Site-specific VOC list will be the analytical parameter list for the post remediation monitoring program.

- Acetone
- Benzene
- Carbon disulfide
- Chloroform
- Chloromethane
- Cis-1,2-Dichloroethene
- Dichlorodifluoromethane
- 1,1 Dichloroethylene
- Trans 1,2 Dichloroethene
- Ethyl acetate
- Isopropyl acetate
- Methylene chloride
- Methyl ethyl ketone
- Total Xylenes

For each of the initial 2 years of Post Closure Monitoring, the 4<sup>th</sup> quarter of monitoring will also include natural attenuation parameters. The final site-specific list of natural attenuation parameters will be selected based upon the type of fate and transport model used. The purpose of this model will be to facilitate the evaluation of natural attenuation on site and assist with the site specific parameters necessary for accurate modeling. A more detailed discussion of the fate and transport modeling is discussed in section 3.5.

During the post-closure monitoring period, the results of each sampling event will be reviewed after each event and a Monitoring Report will be prepared and submitted to the NYSDEC. These reviews will serve to evaluate and confirm that the existing monitoring locations and frequency are adequate. The results of the groundwater data will be placed on a table containing similar data collected since the beginning of this project. Detections of VOC compounds will be graphed on a chart comparing concentration versus time. The results will be used to determine if any statistically significant increases in concentration are occurring in any particular well, or if there is an indication that the residual VOCs are migrating beyond the MCA. Increases will be considered statistically significant if results that exceed the 95% upper confidence interval in comparison to the most recent eight quarters of post-closure data for a particular well are observed for two consecutive monitoring events.

If such an increase is observed, NYSDEC will be notified and, if deemed necessary, a meeting will be set up to discuss and agree upon next steps. Prior to the meeting, another round of samples will be collected from the well(s) that showed a potential change. This data will be used when discussing with NYSDEC the appropriate measures to be taken.

### 3.3 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

All sampling and analyses will be performed in accordance with the requirements of the Site Sampling Plan (Appendix IV).

### 3.4 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on-site, the originals will be maintained in a project file kept by Kleinfelder or other designated Post Remediation Qualified Environmental Professional(s). Copies of the completed forms, and other relevant reporting formats used during the monitoring/inspection events and the monitoring results, will be submitted to NYSDEC at the time of the Periodic Review Report (PRR), as specified in this SMP.

The monitoring results will be reported to NYSDEC annually as part of the PRR. In addition to the PRR, a letter report will also be prepared subsequent to each sampling event. The report (or letter) will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., groundwater, vapor, indoor air, outdoor air, etc.);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results compared to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all samples (these can also be submitted electronically to NYSDEC in an acceptable format);
- Any observations, conclusions, or recommendations;
- A determination as to whether groundwater conditions have changed since the last reporting event; and
- A copy of the data will also be provided in a digital format.

### 3.5 FATE AND TRANSPORT MODELING

As specified in DER-10, statistically validated and properly calibrated 3-D contaminant fate and transport modeling will be presented at the end of the initial two year post-closure monitoring phase. An appropriate modeling program will be selected at the end of the two year sampling program. The goal is to demonstrate whether the plume has reached a stable length and depth beyond which it is unlikely to expand. Currently it is anticipated that an analytical model will be used although a numerical computer based model may be required depending upon the complexity of the post remedial flow gradients and impact distributions. Typically analytical models such as BIOSCREEN

are used for uncomplicated contaminant transport calculations. If the post-closure monitoring indicates that there are complicated vertical flow gradients and multiple areal flow directions, a more substantial numerical model such as MODFLOW may be used.

### 3.6 INDOOR AIR QUALITY

Currently, an active Aboveground Storage Tank (AST) used to store Methylene Chloride is located inside Building #3, above the MCA. The AST is used in the on-Site manufacturing processes. Accordingly, OSHA indoor air quality thresholds apply to any potential indoor air exposures. The presence of this tank is expected to render ineffective any indoor air monitoring program whose objective is to determine if Methylene Chloride vapors from the underlying MCA are present at levels of potential concern inside Building #3 as a result of groundwater conditions.

UCB has developed and implemented a Methylene Chloride Management Plan (MCMP), dated July 2006 in accordance with 29 CFR 1910.1052. The MCMP applies to all UCB employees at this Site who are exposed or potentially exposed to Methylene Chloride, its solutions, and materials that release Methylene Chloride. UCB has historically collected air samples from within the building. The historic air samples indicate that Methylene Chloride concentrations inside Building #3 do not exceed the applicable OSHA limits.

If, before the unrestricted use cleanup criteria have been achieved in the MCA, UCB empties, removes from service and properly decommissions the Methylene Chloride AST, and if UCB removes Methylene Chloride from the tank and associated piping and equipment and removes all potential contributing sources of Methylene Chloride to the indoor air from production/operation areas in Building 3, the potential for vapor intrusion will be re-evaluated applying NYSDOH vapor intrusion guidance. If based on the results of the investigation NYSDEC or NYSDOH requires mitigation measures to address vapor intrusion risks, such measures will be installed. This may consist of either a combination of sub-slab and indoor air monitoring for Methylene Chloride, or the installation of an effective sub-slab depressurization system under the MCA portion of Building 3.

### 3.7 WASTE MATERIALS

Waste, which will include used PPE and disposable sampling materials, generated from the MCA during the Post-closure monitoring period will be containerized and disposed off-Site at an appropriately permitted facility via coordination with the Facility's Health and Safety Officer and Department.

### 3.8 MONITORING WELL REPAIRS, REPLACEMENT AND DECOMMISSIONING

If biofouling or silt accumulation occurs in the monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced (as per the Monitoring Plan), if an event renders

the wells unusable. If NYSDEC approves a request to close one or more wells, the wells will be properly decommissioned. Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement. The repair or decommissioning and replacement process will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well decommissioning will be performed in accordance with NYSDEC's CP-43: Commissioner Policy on Groundwater Monitoring Well Decommissioning (November 2009, or most recent version). Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless another location is approved by the NYSDEC.

### 3.9 DECOMMISSIONING OF THE MPRS AND PORTIONS OF THE MONITORING WELL SYSTEM

Approval was granted by the NYSDEC (via email correspondence dated July 29, 2010) to terminate system operation following the July 2010 operational period. Decommissioning of the MPRS, which will eventually be done, will involve removing the equipment associated with the treatment system. Whenever possible, equipment will be salvaged for future use. Equipment and components deemed to have no salvage value will be properly disposed. Any underground piping between the wells and the MPRS building have been emptied, disconnected, filled with a grout slurry mix, sealed with end caps and abandoned in place. Any pipes no longer of service that were protruding from the ground have been appropriately abandoned and cut off to below grade.

All well abandonment activities were completed in August and September of 2010, as approved in NYSDEC email correspondence dated July, 29 2010.

Vaults housing wells have been removed, the void space has been filled with clean fill and asphalt has been placed above the former vault to match the surrounding asphalt surface of the parking lot. Eight existing vaults and wells have been abandoned: MW-20A, MW-20B, MW-21, MW-22, MW-D11, EXSB-1, EXSB-2 and MW-19.

As discussed in section 1.4.4. the following wells and piezometers are no longer used and have been abandoned in accordance with NYSDEC requirements.

- In the shallow zone: MW-10, MW-11, MW-14, MW-15, MW-19, RW-2, P-1S, P-4S and P-6S.
- In the intermediate zone: MW-20A, MW-20B, MW-21, MW-22, EXSB-1, EXSB-2, P-3I, P-5I and P-7I.
- In the deep zone: MW-D1, MW-D2, MW-D3, MW-D4, MW-D5, MW-D1 and P-2D.



The flush mounted protective casings of the properly abandoned wells have been removed and backfilled with clean fill. Abandoned wells located in asphalted areas have been patched over to match the surrounding asphalt.

Wells used for the proposed post closure monitoring program will be properly abandoned after monitoring is no longer required.

## **4.0 INSPECTIONS AND NOTIFICATIONS**

### **4.1 INSPECTIONS**

A comprehensive site-wide inspection will be periodically conducted. The first inspection and report will be submitted at the end of the initial 18 month Post Closure period (March 2012) and then annually thereafter, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Compliance with requirements of this SMP and the Deed Restriction;
- Sampling and analysis of groundwater during monitoring events;
- Whether the results of the Post Closure Monitoring indicates the plume is stable;
- Whether site records required by this SMP are complete and up to date; and
- Changes, or needed changes, to the monitoring system.

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 4.2). The reporting requirements are outlined in the Periodic Review Reporting section of this Plan (Section 4.4).

Site-wide inspections will be performed on a regular schedule at a minimum of once before the end of the initial 18 months and thereafter at least once a year. The purpose of these inspections will be to assess the following:

- Visually inspect the apparent integrity of the monitoring wells;
- Compliance with all ICs, including site usage;
- General site conditions at the time of the inspection;
- The site management activities and other requirements of this SMP are being conducted including, where appropriate, confirmation sampling and health and safety inspections; and
- Confirm that site records are up to date.

The well integrity portion of the inspections will also be performed after any severe weather conditions that may affect monitoring wells.

## 4.2 NOTIFICATIONS

Until such time that the MCA achieves the Site-specific RAOs, the following notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in MCA use if required under the terms of the VCA, 6 NYCRR Part 375, and/or Environmental Conservation Law.
- 15-day advance notice of any proposed ground-intrusive activities within the MCA pursuant to the Excavation Work Plan.
- To the extent relevant to the MCA, follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days.

Until such time as the Site-specific RAOs are achieved for the MCA, any change in the ownership of the Site or the responsibility for implementing this SMP must be preceded by the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the VCA and all approved work plans and reports, including this SMP and the Deed Restriction.
- Within 15 days after the transfer of the portion of the Site which includes the MCA, the new owner's name, contact representative, and contact information will be confirmed to NYSDEC in writing.

## 4.3 CERTIFICATION OF INSTITUTIONAL CONTROLS

After the last inspection of the reporting period a Qualified Environmental Professional or Professional Engineer licensed to practice in New York State will prepare the certification below if engineering controls or monitoring components are still required. If engineering controls or monitoring components are no longer required, then the certification may be made by the site owner.

For each institutional control identified for the site, I certify that all of the following statements are true:

- The institutional control employed at the MCA portion of this Site is unchanged from the date the control was put in place, or last approved by the Department.
- Nothing has occurred that would impair the ability of the control to protect the public health and environment.
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control.

- Access to the MCA portion of the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of the institutional controls specified in this SMP.
- The information presented in this report is accurate and complete.
- Use of the site is compliant with the Deed Restriction.

If any of the above statements cannot be made, an explanation, a description of the corrective action(s) being undertaken to rectify the issue and an estimate of the date when the problem will be fully corrected must be included in the Report. Further, the following certification must be made and signed by the Owner/Owner's designated Site Representative.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] (If the site consists of multiple properties I have been authorized and designated by all site owners to sign this certification for the site.

#### 4.4 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to the Department every year, beginning eighteen months after remedial closure is issued. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the MCA portion of the Site. The report will be prepared in accordance with the Revised Draft NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results are to be appended to the Periodic Review Report.

The Report will include:

- Identification, assessment and certification of institutional controls required by the remedy for the MCA portion of the Site;
- Results of the required annual site inspections and severe condition inspections, if applicable to the MCA portion of the Site;
- All applicable inspection forms and other records generated for the MCA portion of the Site during the reporting period;
- A summary of any discharge monitoring data and/or information generated during the reporting period in connection with the MCA portion of the Site with comments and conclusions;

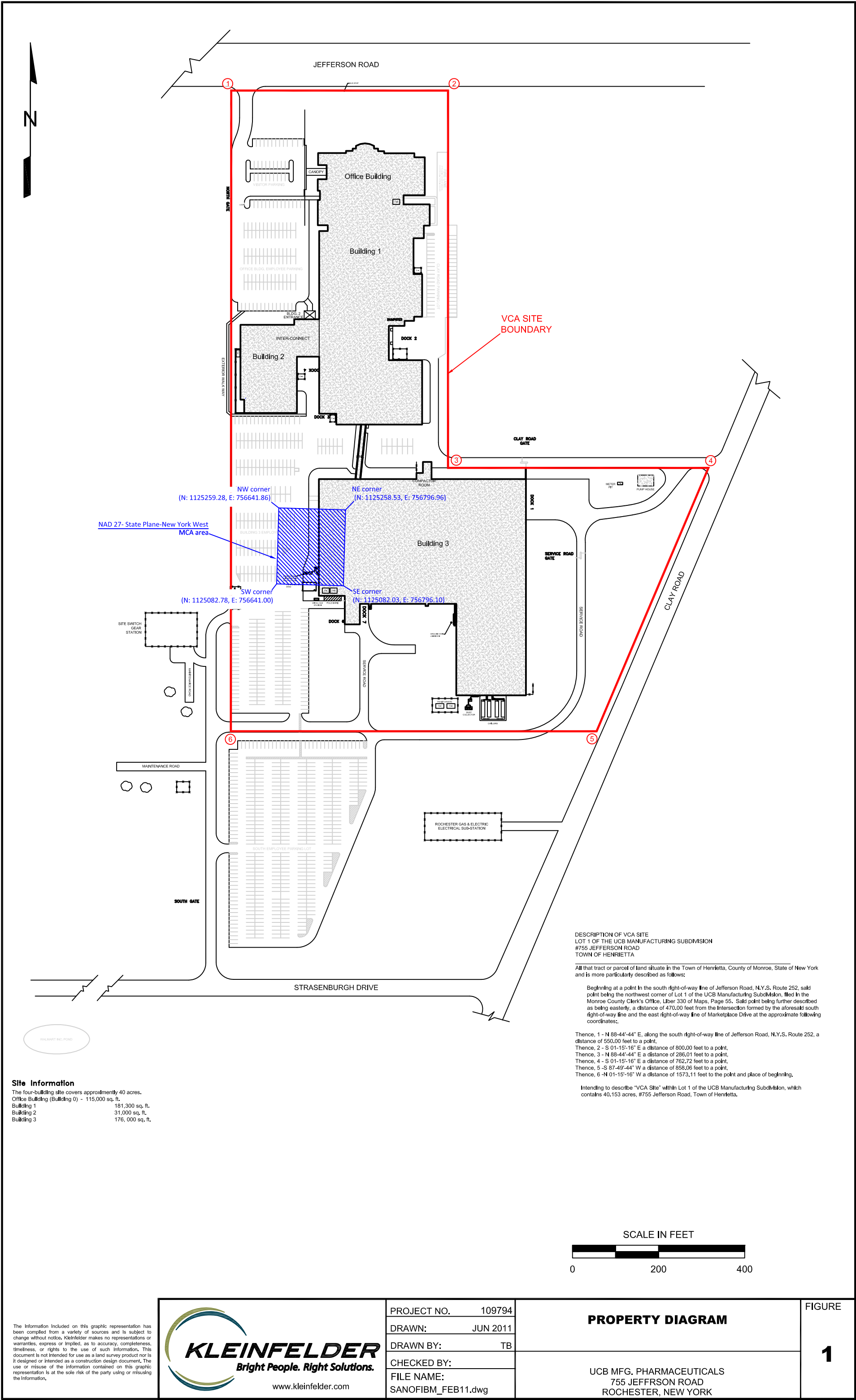
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor) in connection with the MCA portion of the Site, which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all same analyses from the MCA portion of the Site, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period;
- A Site evaluation, which includes the following in connection with the MCA portion of the Site:
  - Compliance with this Site Management Plan and the Deed Restriction;
  - Any new conclusions or observations regarding the MCA portion of the Site based on inspections or data generated by the Post Closure Monitoring Plan;
  - Recommendations regarding any necessary changes to the remedy and/or Post Closure Monitoring Plan in connection with the MCA portion of the Site; and
  - The overall performance and effectiveness of the remedy in connection with the MCA portion of the Site.

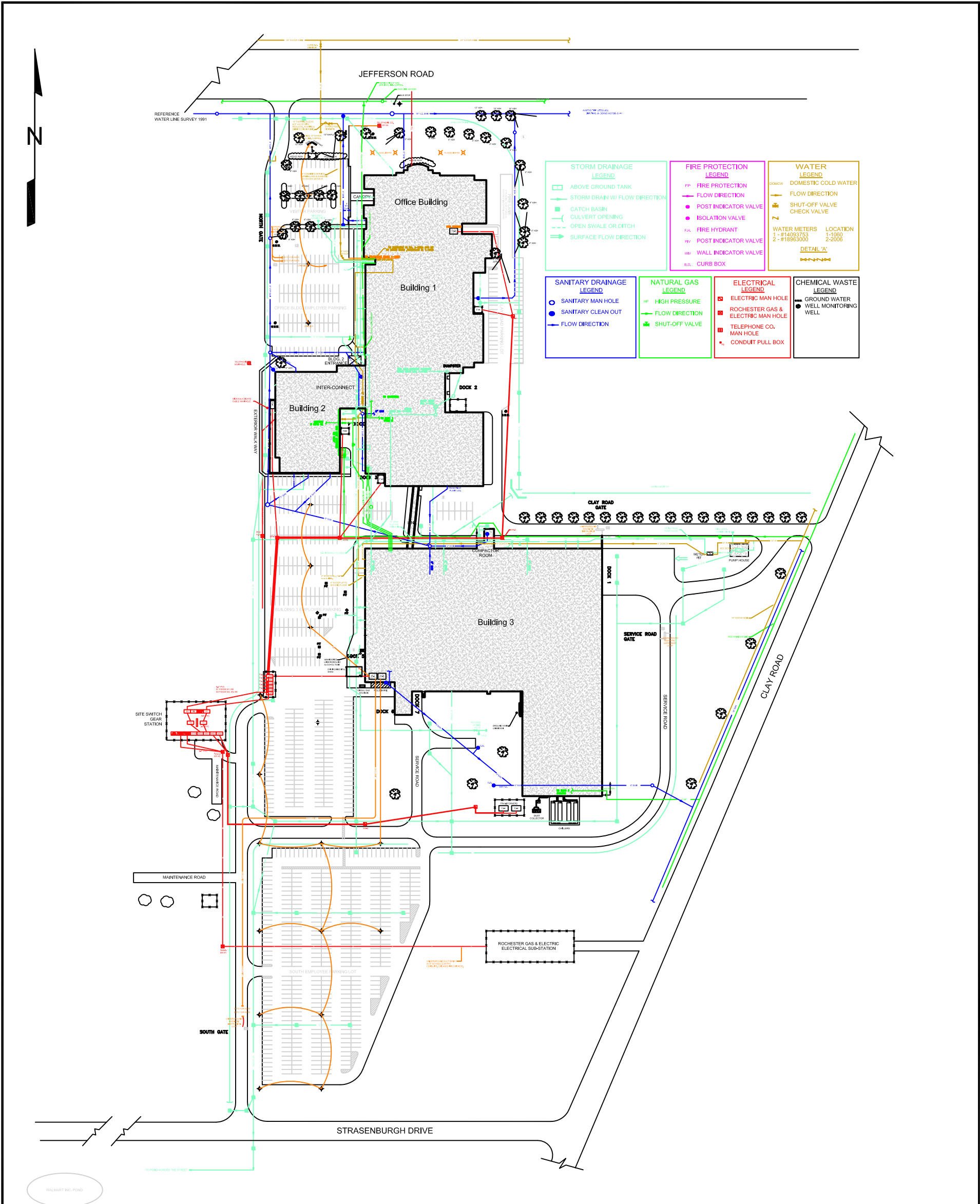
The Periodic Review Report will be submitted in hard copy and electronic format to the NYSDEC Regional Office and in electronic format the NYSDOH Bureau of Environmental Exposure Investigation.

#### 4.5 CORRECTIVE MEASURES PLAN

If any component of the remedy in connection with the MCA portion of the Site is found to have failed, or if the periodic certification cannot be made due to the failure of an institutional control, a Corrective Measures Plan will be submitted to the NYSDEC for approval. This Plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Plan until it is approved by the NYSDEC.

## FIGURES





**Site Information**

The four-building site covers approximately 40 acres.

Office Building (Building 0) - 115,000 sq. ft.

Building 1 - 181,300 sq. ft.

Building 2 - 31,000 sq. ft.

Building 3 - 176,000 sq. ft.

**Sanitary Sewage System**

A publicly owned treatment works, owned and operated by the Monroe County Division of Pure waters, collects and conveys waste water from the facility to the Frank E. Van Lare Waste Water Treatment Plant located on Lake Ontario, north of the city of Rochester. Waste water from the facility includes process and laboratory waste, and domestic sewage from toilet facilities and cafeteria.

**Storm Water Drainage**

The general storm water drainage pattern is east to west, via storm drains and over ground flow, to a drainage swale and catch basins along the west property line. These westerly catch basins drain south to a single culvert which discharges into a pond on the adjacent property to the southwest. The facility, to date, maintains a New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) Baseline Industrial Storm Water Permit No. NYR00C641.

**Domestic Water and Fire Protection System**

The Town of Henrietta provides public water to the facility. The site has connections to both Jefferson Road and Clay Road water mains. The fire protection mains are connected from both supplies with sectional control valves. There is a 6-inch domestic water line from each connection. A diesel powered fire pump exists at the Clay Road connection in order to increase fire fighting capacity to Building 3.

**Natural Gas**

Gas supplies are purchased from an independent supplier, but distributed to the plant through pipelines owned and operated by Rochester Gas & Electric Company. The main gas pipeline enters the site on the west side (Clay Road) and travels underground along the north side of Building 3, and enters the facility at the southwest corner of Building 1. Natural gas is used primarily to feed Building(s) boilers.

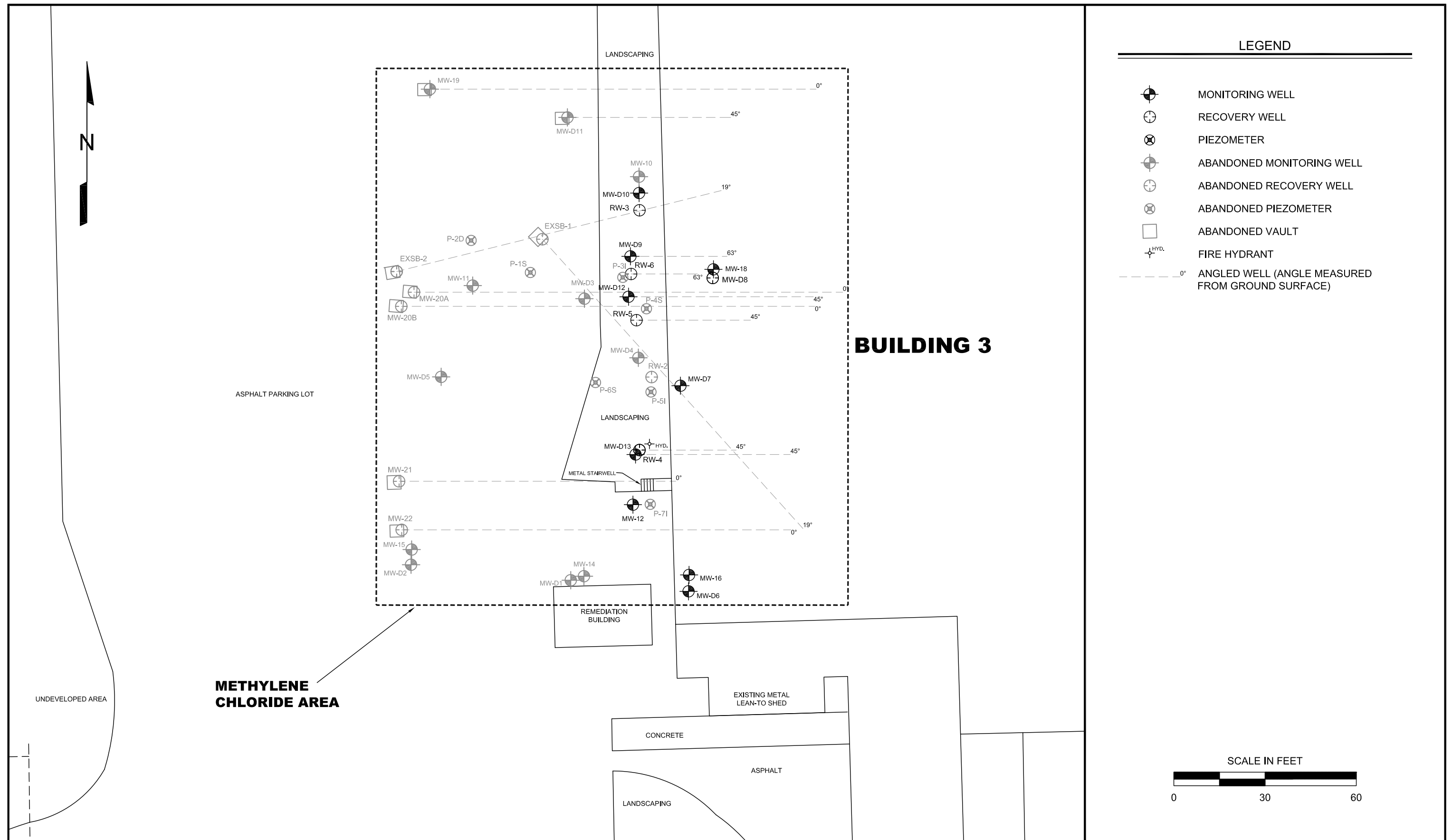
**Electrical Cable**

Electrical Power is supplied by Rochester Gas & Electric Co. From an R.G.E sub-station, underground cable is fed west through the parking lot to Manhole #1 and continues north to Manhole #2 before it connects to the 34.5 KV Switch Yard. From there it discharges to several Transformers located throughout the facility. In most cases through Electrical Man Holes.

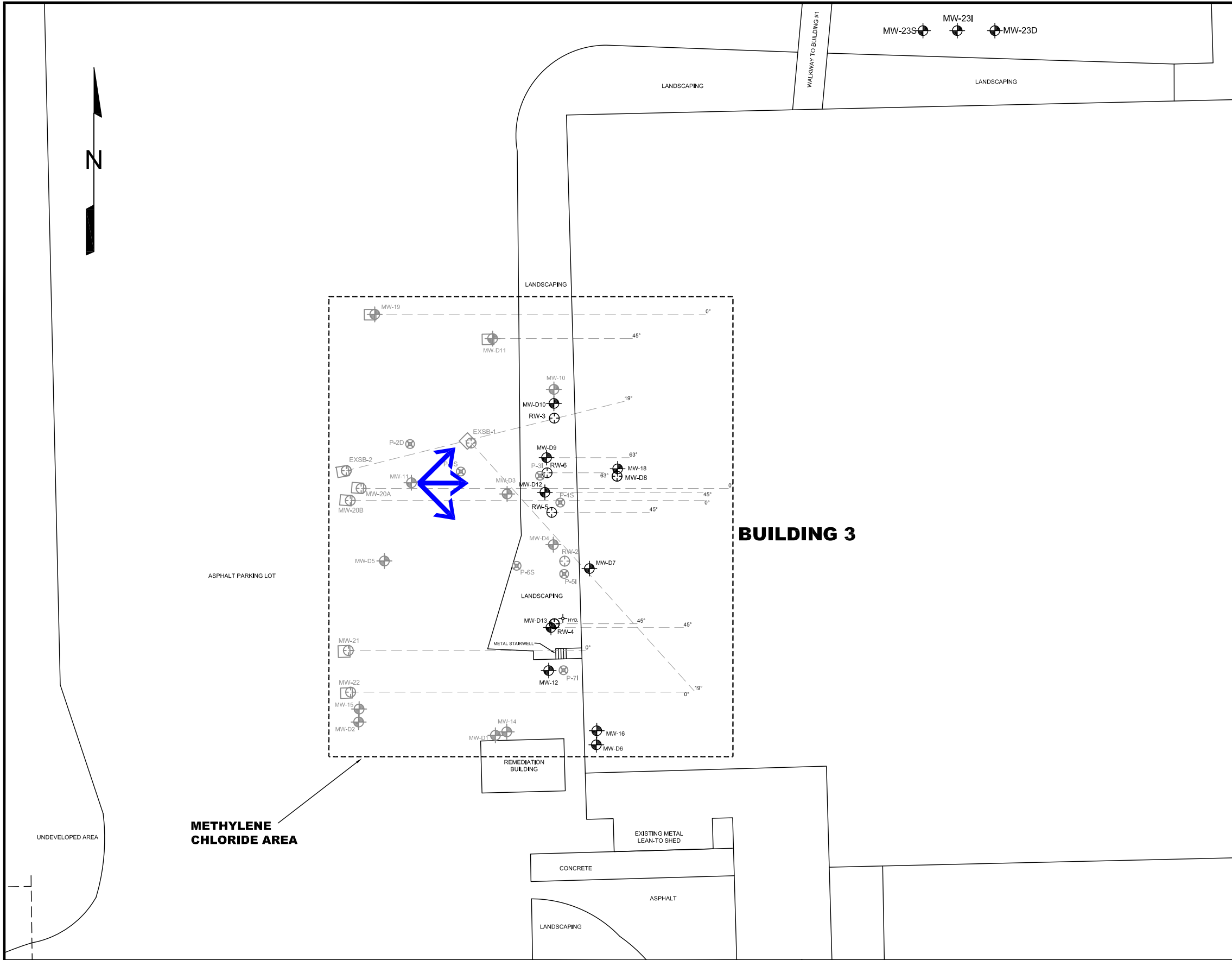
Note E1: 3-#10, 1-#10 EG, 1"C used for underground cable for Parking Lot Lights and Company Sign. Lighting Panel LP-2 located in Utility Closet 0-1008, located on ground floor of the Office Building.

Note E2: (1) 1" conduit and (1) 2" conduit exists underground for each Security Gate.









LEGEND

MONITORING WELL

RECOVERY WELL

PIEZOMETER

ABANDONED MONITORING WELL

ABANDONED RECOVERY WELL

ABANDONED PIEZOMETER

ABANDONED VAULT

FIRE HYDRANT

ANGLED WELL (ANGLE MEASURED FROM GROUND SURFACE)

GROUNDWATER FLOW DIRECTION

SCALE IN FEET

0

40

80

GROUNDWATER FLOW DIRECTION PLAN

UCB FACILITY  
NYSDEC VCP# V00126-8  
755 JEFFERSON ROAD  
ROCHESTER

MONROE COUNTY

NEW YORK

FIGURE

3

The Information Included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

- REFERENCES:
1. "WELL LOCATION MAP" PREPARED BY ERM, DATED SEPTEMBER, 2006.
  2. KLEINFELDER FIELD RESEARCH.

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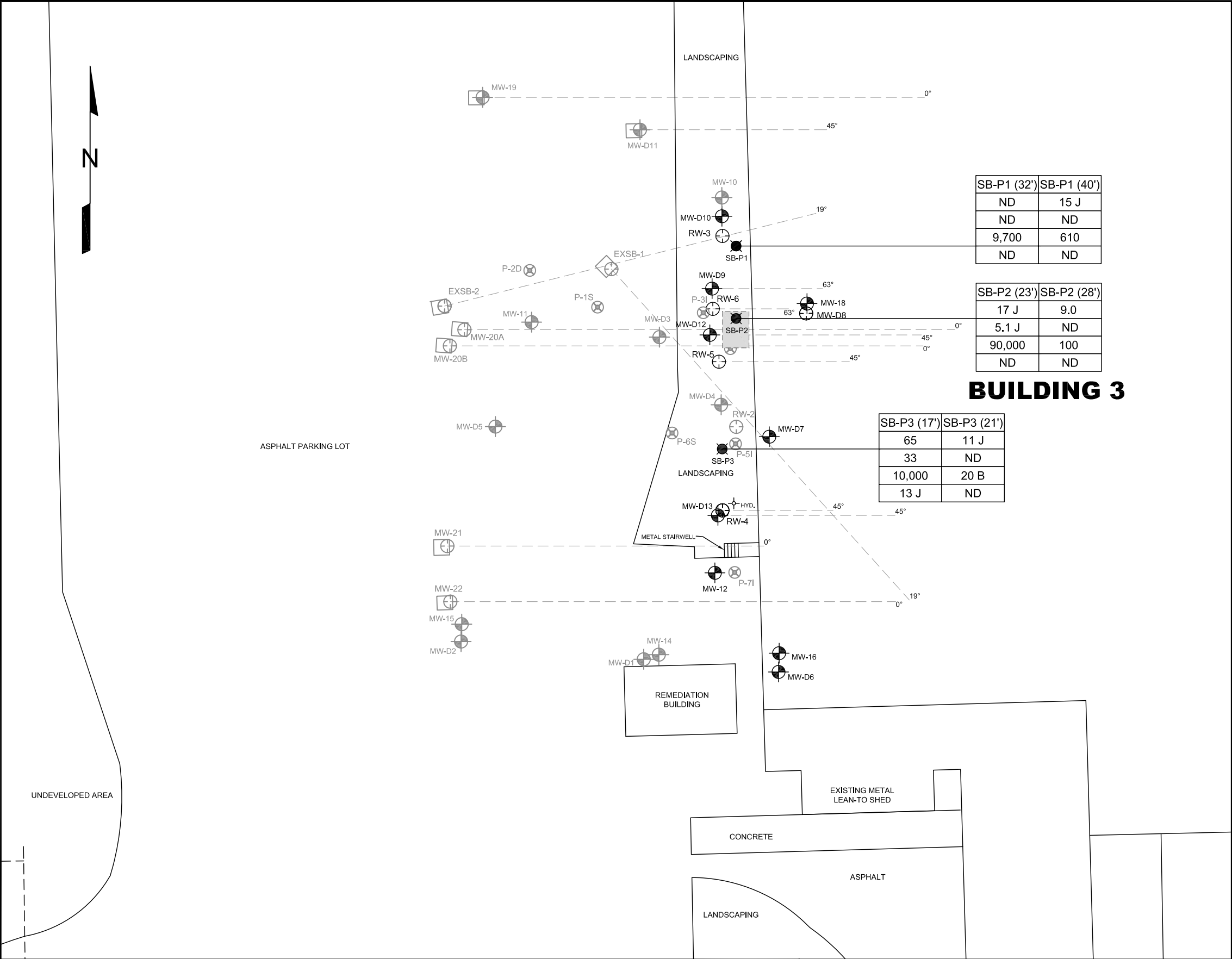
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PROJECT NO.	105651
DRAWN:	02/09/11
DRAWN BY:	CTH
CHECKED BY:	AW
FILE NAME:	SANOI_FEB11.dwg

GROUNDWATER FLOW DIRECTION PLAN		FIGURE 3
MONROE COUNTY	UCB FACILITY NYSDEC VCP# V00126-8 755 JEFFERSON ROAD ROCHESTER	
NEW YORK		

NEWBURGH, NY



LEGEND

MONITORING WELL

RECOVERY WELL

PIEZOMETER

ABANDONED MONITORING WELL

ABANDONED RECOVERY WELL

ABANDONED PIEZOMETER

ABANDONED VAULT

FIRE HYDRANT

ANGLED WELL (ANGLE MEASURED FROM GROUND SURFACE)

SOIL BORING

FORMER MeCl AST LOCATION (APPROXIMATE)

SB-P3 (17')
65
33
10,000
13 J

SAMPLE ID (VERTICAL DEPTH OF SAMPLE)

65

ACETONE (µg/kg)

33

CARBON DISULFIDE (µg/kg)

10,000

METHYLENE CHLORIDE (µg/kg)

13 J

2-BUTANONE (µg/kg)

ND

NOT DETECTED ABOVE LABORATORY REPORTING LIMITS

J

ESTIMATED VALUE

NOTE:

1. ONLY COMPOUNDS ABOVE SITE-SPECIFIC OR NYSDEC STANDARDS ARE INDICATED ON THE FIGURE.



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- REFERENCES:
- "WELL LOCATION MAP" PREPARED BY ERM, DATED SEPTEMBER, 2006.
  - KLEINFELDER FIELD RESEARCH.

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PROJECT NO.	105651
DRAWN:	02/09/11
DRAWN BY:	CTH
CHECKED BY:	AW
FILE NAME:	SANOFI_FEB11.dwg

SOIL BORING PLAN			
MONROE COUNTY	UCB FACILITY		
	NYSDEC VCP# V00126-8		
	755 JEFFERSON ROAD		
	ROCHESTER		
	NEW YORK		

## TABLES

Table 1  
SOIL ANALYTICAL DATA

Sanofi Aventis

December 22, 2010 through January 3, 2011

SAMPLE ID		SB-P1 (32)	SB-P1 (40)	SB-P2 (32)	SB-P2 (40)	SB-P3 (24)	SB-P3 (30)
SAMPLE DEPTH (fbg)		32	40	32	40	24	30
SAMPLE DATE		12/22/2010	12/22/2010	12/23/2010	12/23/2010	1/3/2011	1/3/2011
PARAMETER	NYSDEC UUSCOs or Site- Specific Standard						
1,1-Dichloroethene	270	<110	<5.4	<5.4	<5.6	<5.4	<5.4
Methyl Ethyl Ketone	120	<540	<27	<27	<28	13 J	<27
Acetone	50	<540	15 J	17 J	9.0	65	11 J
Benzene	60	<110	<5.4	<5.4	<5.6	<5.4	<5.4
Carbon disulfide	~	<110	<5.4	5.1 J	<5.6	33	<5.4
Chloroform	370	<110	<5.4	<5.4	<5.6	<5.4	<5.4
Chloromethane	~	<110	<5.4	<5.4	<5.6	<5.4	<5.4
cis-1,2-Dichloroethene	250	<110	<5.4	<5.4	<5.6	<5.4	<5.4
Dichlorodifluoromethene	~	<110	<5.4	<5.4	<5.6	<5.4	<5.4
Ethyl Acetate	~	<110	<5.4	<5.4	<5.6	<5.4	<5.4
Methylene Chloride	26	9700	610	90000	100 B	10000	20 B
trans-1,2-Dichloroethene	20	<110	<5.4	<5.4	<5.6	<5.4	<5.4
Xylenes, total	260	<210	<11	<11	<11	<11	<11

Notes:

All concentrations are presented in micrograms per kilogram (µg/kg).

fbg - feet below grade

Shading - Reported concentration detected above the applicable standard(s) or guidance value(s).

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B - Analyte found in the associated blank, as well as in the sample.

UUSCO - Unrestricted Use Soil Cleanup Objectives

## **APPENDICES**

## **APPENDIX I**

### **Annotated New York State Department of Environmental Conservation Site Management Plan Checklist for BCP, SMP, SSF, and VCP Sites**

**Site Management Plan (SMP) Checklist  
for BCP, ERP, SSF and VCP sites**

**Site Name:** 755 Jefferson Road Facility

**Location:** Henrietta, NY

**Site No.:** VCP: V00126-8

**Project Manager:** Rick Bethel, Quantum Management Group

The SMP for a site remedial program must include at a minimum an Institutional and Engineering Control Plan as well as provision for the periodic certification of the institutional control and engineering controls (IC/EC certification) and may include, as required by the remedy, a Site Monitoring Plan and Operation & Maintenance Plan. Each of these individual areas of reporting will need to meet the minimum requirements detailed below.

The SMP being reviewed addresses:

- ☒ The entire site (**All known areas of concern**)
- ☐ An operable unit of the site identified as: \_\_\_\_\_
- ☐ An IRM for operable unit \_\_\_\_ identified as \_\_\_\_\_
- ☐ A groundwater restriction or short term engineering control for an otherwise unrestricted use site

The SMP period for this site, after an initial 18 month review, will be:

☒ **Annually**   ☐ **Every 3 years**   ☐ **Every 5 years**   ☐ **Every 10 years**

Institutional and Engineering Control Plan:

- ☒ Must include a complete description of all institutional and/or engineering controls employed at the site, including the mechanisms that will be used to continually implement, maintain, monitor, and enforce such controls both by the applicant, the applicant's successors and assigns, and by state or local government is presented.
- ☒ Appropriate plans for implementation of the engineering and institutional controls, such as for handling soils removed from beneath a soil cover or cap during maintenance or redevelopment of the site. This includes media-specific implementation plans, such as plans for:
  - ☒ Soil management which detail procedures for handling soil excavated from below a soil cover or cap during maintenance or redevelopment of the site (e.g., a soils management plan); or
  - ☐ Installation/operation of sub-slab vapor depressurization systems, or other types of systems to address vapor intrusion;
  - ☐ Engineering control inspection plans, for the remedy as implemented or to be installed as part of the site development, such as for a cap or cover system.

- x** A periodic review report which includes the IC/EC certification as well as all other reporting of the IC/ECs, site monitoring and/or operation and maintenance of the remedy.

Institutional Control and Engineering Control (IC/EC) Certification: The applicant or site owner must make a periodic certification of the IC/EC to the Department. The requirements of this periodic IC/EC certification will be described in the SMP and the certification must be included in the periodic review report, which is prepared and submitted for the Department-approved certification period. The IC/EC certification will clearly identify the periodic review period and certify that:

- x** The institutional controls and/or engineering controls employed at such site are:
  - unchanged from the date the control was put in place, unless otherwise approved by the Department;
  - in place and effective;
  - performing as designed;
  - nothing has occurred that would impair the ability of the controls to protect the public health and environment; and
  - nothing has occurred that constitutes a violation or failure to comply with any operation and maintenance plan for such controls.
- ☐ Use of the site complies with the deed restriction.
- x** Access to the site will be provided to the Department to evaluate the remedy and verify continued maintenance of such controls.
- x** If a financial assurance mechanism is required, the mechanism remains valid and sufficient for the intended purpose.

If the remedy requires only institutional controls, the certification may be made by the property owner. If the remedy includes engineering controls, the certification must be made by a qualified environmental professional or, if engineering evaluations are required, a licensed professional engineer.

- ☐ For BCP sites: For those sites determined to be non-significant threat sites, but where contaminants in groundwater contravene drinking water standards at the site border, in addition to the items noted above; the remedial party will also have to certify:
  - ☐ That no new information has come to the site owner`s attention, including groundwater monitoring data from wells located at the site boundary, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid; and
  - ☐ Every five years, that the assumptions made in the qualitative exposure assessment remain valid.

Site Monitoring Plan: Includes, as appropriate for the site remedy, sampling and analysis plans for monitoring groundwater, soil vapor or another media as identified by the decision



document for the site, designed to:

- ☐ If none is required for the remedy which is the subject of this SMP, check here.
- ☒ Assess the remedy's compliance with groundwater standards.
- ☐ Assess the remedy's compliance with the cleanup objectives of any other impacted media.
- ☒ Evaluate site information periodically to confirm that the remedy continues to be effective for the protection of public health and the environment.
- ☒ Prepare the necessary reports of the results of this monitoring for a period determined by the Department.

Operation & Maintenance Plan: Includes, as appropriate for the site remedy, a plan(s) which:

- ☐ If none is required for the remedy which is the subject of this SMP, check here
- ☐ Identify the operation and maintenance activities necessary for the continued operation of the components of the remedy, including provision for evaluation of the systems and recommendations to optimize performance.
- ☒ Evaluating site information periodically to confirm that the remedy continues to be effective for the protection of public health and the environment.
- ☒ Preparing the necessary reports of the results of this evaluation for a period determined by the Department.

\*\*\*\*\*

For DEC Internal Use Only:

## **UIS Updates**

### **Remedial Site Information page**

**Verify/Update Remedial Site Information** - Project update guidance for sites descriptions, environmental assessments as well as basis for classification/threat statements may be found at the following internal web address : [http://internal/home/der/comp/update.html\\\\cs1-data3\\DATA3\\DER\\eDocs\\DER-General\\DER\\_Program\\_Memos.memo.2004-11-08.Project\\_Updates.pdf](http://internal/home/der/comp/update.html\\\\cs1-data3\\DATA3\\DER\\eDocs\\DER-General\\DER_Program_Memos.memo.2004-11-08.Project_Updates.pdf)

- ☐ **Site Description**
- ☐ **Site Environmental Assessment**
- ☐ **Site Health Assessment:** request from DOH by the DER PM, entered by SCS
- ☐ **Site Name, Address, & Size:** verify and notify SCS to make adjustments
- ☐ **View Contacts:** verify that all affiliation information is accurate, up-to-date, and complete
- ☐ **Agreement/Order Ref. No.** (Cross Refs page link from main site page): enter corresponding identifying reference number.
- ☐ **Significant threat** (on main page): verify status, contact SCS to make adjustments
- ☐ **Allowable Use** (on main site page): verify most restrictive use allowed via drop down, entered by SCS

For BCP sites only:

- ☐ **BCP Clean Up Track** (on main site page for BCP sites): enter track via drop down, selection available in remedial projects only
- ☐ **Percent En-zone** (via Extra Details link on main site page) verify and/or select via drop down
- ☐ **BCP Off-Site Status** (enter in the Extra Details link on main site page) select via drop down (for sites with off-site issues)

**Projects** (confirm status (ACT/PLN) for all projects, especially:

- ☐ Remedial Investigation/Design (ACT/ACT)
- ☐ Remedial Action (ACT/PLN)
- ☐ Certificate of Completion (PLN/PLN)
- ☐ Site Management (PLN/PLN)
- ☐ Periodic Review (PLN/PLN)

## **IC/EC Module**

- ☐ **Site Property Information Summary Page**
  - Verify that property information is complete and accurate for all parcels (*see also IGP-8, Reference 7*)
  - Verify that “owner information” is complete and accurate for all parcels
  - Verify that “contact information” is complete and accurate (this will be the certifying party)

☐ **Control Details Page**

Add Control information as follows:

- Initial options for Controls will be: Legacy Restriction, Environmental Easement, Other
- ICs - indicate all types used for the site
  - ECs - indicate all types used for the site
  - Control Description - provide a summary of restrictions from the easement/deed restriction language as per IGP-8

**Documents required in Edocs**

- ☐ Agreement/Order/SAC, ROD, SMP (upon approval), and any other appropriate and pertinent documents pertaining to verifying IC/ECs

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_  
Project Manager

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_  
Section Chief/Regional HWR Engineer

## **APPENDIX II**

### **Health and Safety Plan**



## **SITE-SPECIFIC HEALTH AND SAFETY PLAN**

**SANOFI-AVENTIS  
755 JEFFERSON ROAD  
ROCHESTER, NEW YORK**

**PREPARED BY:**

**Kleinfelder**

**KLEINFELDER**  
**SITE SPECIFIC HEALTH AND SAFETY PLAN**

Sanofi-Aventis  
755 JEFFERSON ROAD  
ROCHESTER, NEW YORK

**HASP REVISION 1**  
**Revision Date: September 14, 2008**

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HASP prepared by:

HASP approval:

Project Manager Approval:

**REVISION HISTORY:**

**06-15-07 Original**

## **KLEINFELDER**

### **SITE HEALTH AND SAFETY PLAN — FOR METHYLENE CHLORIDE INVESTIGATION/REMEDICATION ONLY**

(For specific Procedures, refer to Kleinfelder's Health and Safety Procedures Manual)

#### **I. PROJECT IDENTIFICATION**

Project Name: Sanofi-Aventis Jefferson Road

Address of Site: 755 Jefferson Road  
Rochester, New York

Site ID No.: \_\_\_\_\_

Site Contact: Greg Light/Loren Keim

Phone: 585-274-5518

Client Contact: Rick Bethel

Phone: 513-314-7543

Kleinfelder Project Manager: Alex Wirth

Phone: (845) 567-6530

Health and Safety Oversight: Matthew Pickard

Phone: (845) 567-6530

#### **II. EMERGENCY CONTACTS**

Police: 911 Fire: 911 Ambulance: 911

National Poison Control Center: 800-222-1222

Utilities: Gas 1-800-743-1702 Electric 1-800-743-1701 Water 1-585-442-2009

Phone: 1-585-777-7577 One call/equivalent: 1-800-962-7962

Medical Treatment Facility: Strong Hospital

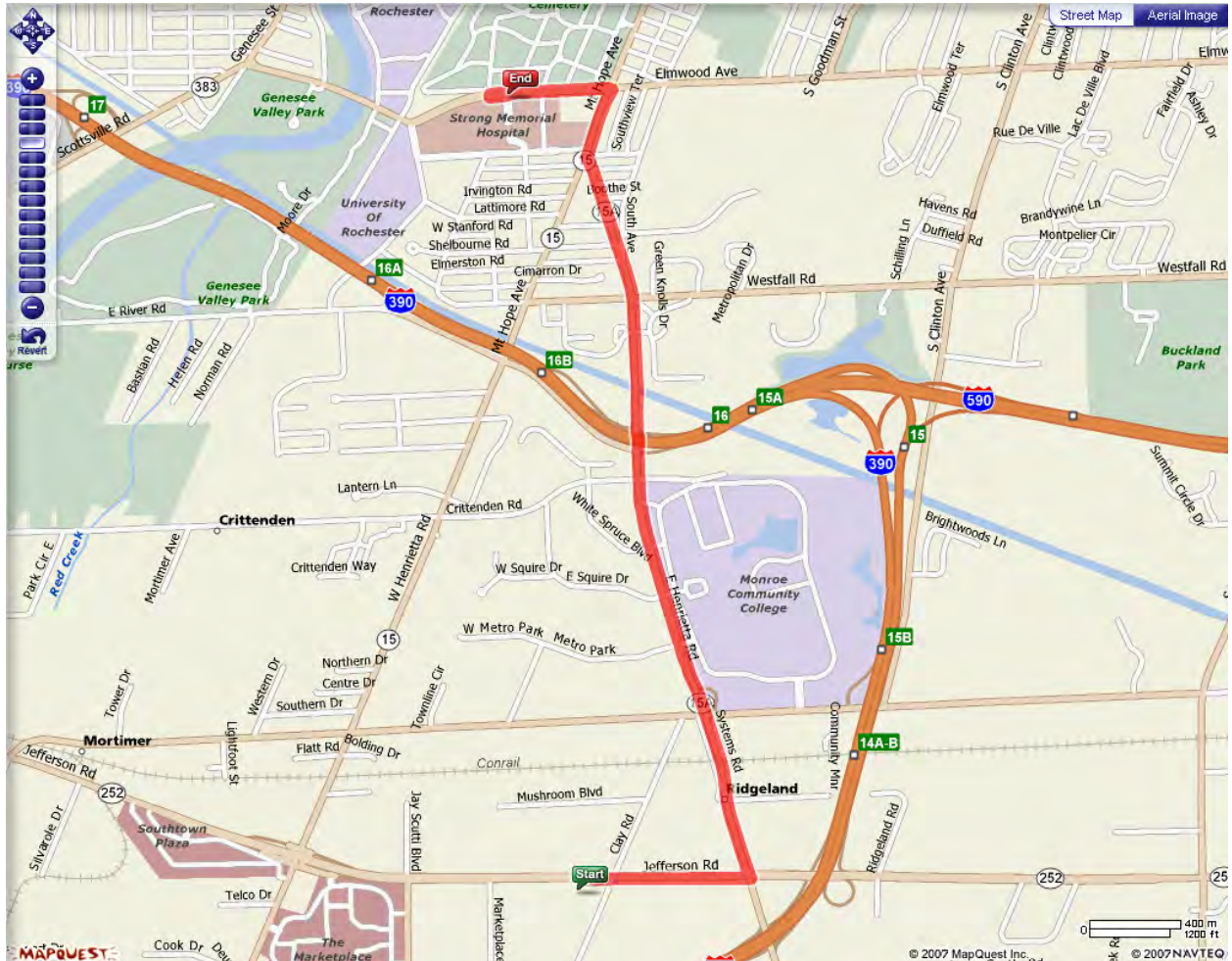
Phone #: (585) 275-2100

Address: 601 Elmwood Avenue  
Rochester, New York 14642

Directions from Site: (see attached map showing location of hospital relative to Site)



## MAP TO HOSPITAL



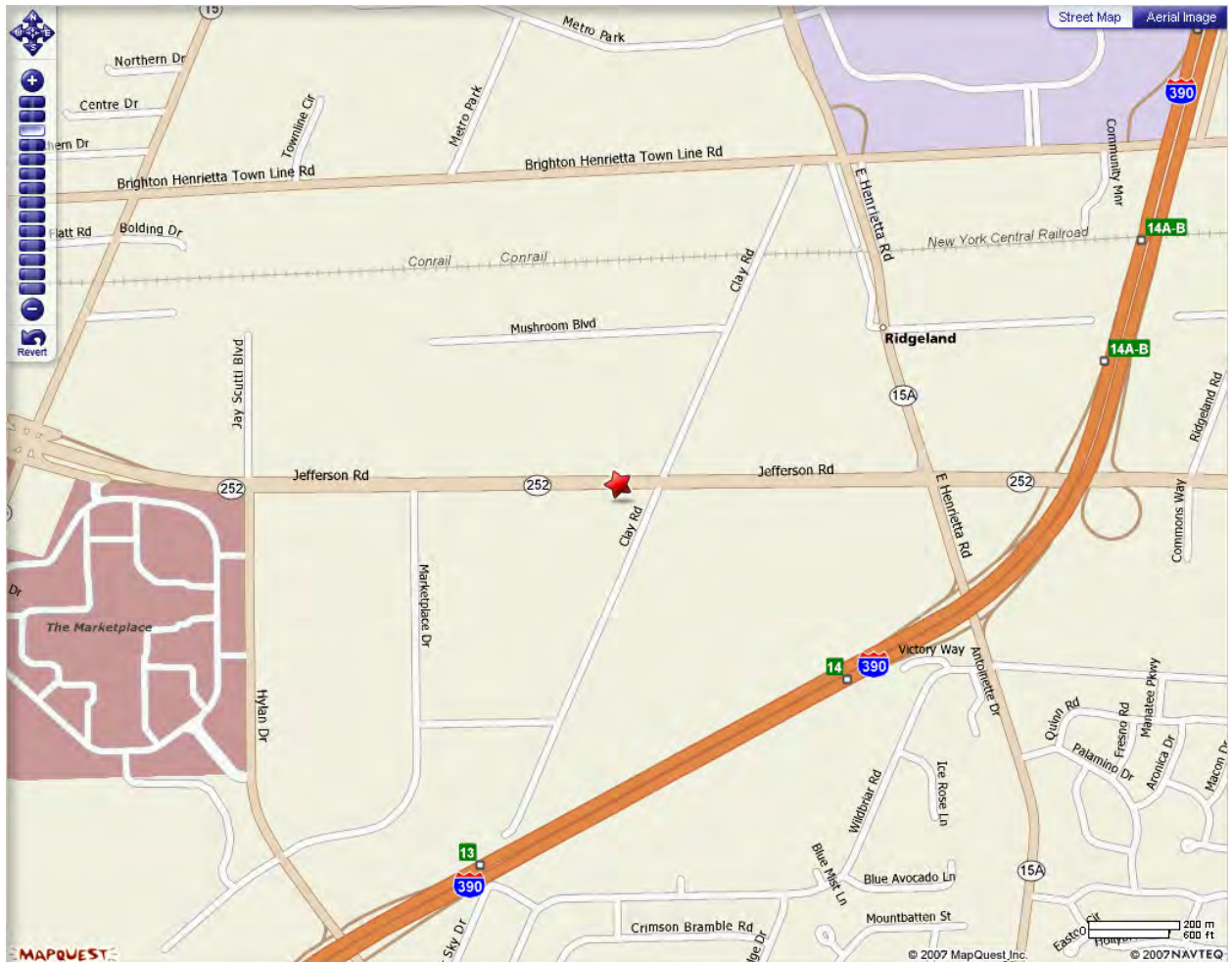
- 1: Start out going EAST on JEFFERSON RD / NY-252 E toward CLAY RD. 0.4 miles
- 2: Turn LEFT onto NY-15A N / E HENRIETTA RD. Continue to follow NY-15A N. 2.4 miles
- 3: Turn SLIGHT RIGHT onto MT HOPE AVE / NY-15. 0.2 miles
- 4: Turn LEFT onto ELMWOOD AVE. 0.3 miles
- 5: Make a U-TURN onto ELMWOOD AVE. <0.1 miles

6: End at 601 Elmwood Ave  
Rochester, NY 14642-0001, US

Total Est. Time: 8 minutes    Total Est. Distance: 3.59 miles

### III. SITE BACKGROUND INFORMATION (See attached Site Plan and map, page 6)

#### SITE LOCATION



**IV. ANTICIPATED TASKS TO BE PERFORMED** (Check all appropriate tasks)

<b>Task</b>	<b>Personnel/Contractors Performing Task</b>
<input type="checkbox"/> Supervision of Soil Boring/Monitoring Well Installation	
<input checked="" type="checkbox"/> Gauging/Sampling of Monitoring Well	<u>Kleinfelder Personnel</u>
<input type="checkbox"/> Assessment of Tank Excavation	
<input type="checkbox"/> Supervision of General Construction	
<input type="checkbox"/> Trenching	
<input type="checkbox"/> Dry well excavation	
<input type="checkbox"/> Line replacement	
<input type="checkbox"/> Soil loading and transport, etc.	
<input type="checkbox"/> Other	
<input type="checkbox"/> Collection of Soil Samples	
<input type="checkbox"/> Split spoon	
<input type="checkbox"/> Hand auger	
<input type="checkbox"/> Grab samples	
<input type="checkbox"/> Jar headspace	
<input type="checkbox"/> Sampling Liquids/Sludge	
<input type="checkbox"/> Oil/water separation	
<input type="checkbox"/> Dry well	
<input type="checkbox"/> Drums	
<input type="checkbox"/> Other	
<input checked="" type="checkbox"/> Remedial System Operation & Maintenance	<u>Kleinfelder Personnel assisting Quantum</u>
OTHER: _____	
_____	
_____	

**SITE MAP INSERT**

**(print out the latest Site Plan and attach behind this sheet)**

**See Attached**

**V. CHEMICAL HAZARDS/PPE** (also refer to Kleinfelder Site Health and Safety Procedures sections 6.0, 7.0 and 9.0)

Level of PPE Required:        X   D      Zones established:             NA  
                                         C             Support (52)             Decontamination (CRZ)  
                                         B\*             Ground Intrusive (no eating, drinking smoking) (EZ)

\*Level C and B work MAY NOT be done under this HASP. Contact HSO for further direction and assistance!

**Specific Site Entry/Access Procedures:** If LEL concentrations are >10%LEL, all work must cease and area(s) evacuated.

**Potential/Expected Exposure Constituents: (MSDS's are Attached as Appendix)**

Contaminant	Source/ Location	Acute Exposure Symptoms	PEL/TLV Established	Action Level	Level of PPE/Specific PPE required
Methylene Chloride (MeCl)		Light-headedness, fatigue, confusion, nausea, vomiting, skin irritation and burn, eye irritation.	PEL 25 ppm	12.5 ppm	< <b>Action Level</b> – Level D > <b>Action Level</b> – Consult PM and HSO

**NOTE: IF ANY LEVELS EXCEED THE PEL/TLV BY MORE THAN 10X, ALL WORK MUST CEASE AND SPECIFIC VENTILATION PRACTICES OR RESPIRATORY PROTECTION METHODS EMPLOYED.**

**Air Monitoring Instruments to be Employed: (also refer to Kleinfelder HASP Manual, section 9.0)**

Monitoring Instrumentation To Be Used:(SEE INDIVIDUAL PROCEDURES FOR MONITORING BELOW)

☐ Combustible Gas Indicator ☐ Radiation Survey Meter w/probe  
☐ Oxygen Meter ☐ Particulate Monitor  
☐ Dual CGI and O2 ☐ Dosimeter Badges  
☐ Flame Ionization Detector (calibration date:\_\_\_\_)  
☐ Photo Ionization Detector (calibration date:\_\_\_\_)  
☐ Hydrogen Sulfide Detector  
☐ Colorimetric Indicator Tubes  
☐ Personnel Sampling Pump w/ media  
 OTHER: \_\_\_\_\_

**Specific Personnel Air Monitoring Procedures to be employed:** Personnel air monitoring samples are to be collected in workers' breathing zone (18"-24" from mouth/nose) using the monitoring instruments specified above. Air monitoring shall be conducted prior to site activities and at least once every 2 hours. Sampling shall be conducted continuously for 15 minutes per collection. Any sustained readings above the action level shall require notification of the Project Manager and Health & Safety Officer.

**VI. Physical Hazards/Traffic Control** (refer to Kleinfelder Site Health and Safety Procedures, section 5.0, 6.0, 7.0, and 8.0)

Hazard Description	Location	Control Methods/ Protective Equipment
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Confined Space Entry? Y N (If Y, then a completed Confined Space Permit must be attached)

Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Illumination: \_\_\_\_ Adequate \_\_\_\_ Inadequate (if inadequate, describe illumination methods to be utilized): \_\_\_\_\_  
\_\_\_\_\_

Hot Work? Y N (If Y, then a Hot Work Permit MUST be completed and attached)

Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**VII. Decontamination Procedures** (also refer to Kleinfelder Site Health and Safety Procedures section 12.)

Decontamination required: Personnel?      Y   N                      Equipment? Y   N

Method of Decontamination/Procedures to be Implemented: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Method of disposal for Contaminated Materials: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**VIII. Training Requirements for Site Personnel** (See Kleinfelder Site Health and Safety Procedures, Sect. 10)

In addition to initial site specific health and safety training, all Kleinfelder Project Field Team Members shall be required to be trained in accordance with 29CFR 1910.120, Hazardous Waste Operations and Emergency Response. Any other personnel visiting the site must check in with the HSO, or designee, for orientation and briefing of site hazards.

Supervisory personnel on-site and specialized site workers may be required to have been trained in accordance with 29CFR 1910.120, depending on the nature of their work, exposure potential, and specific type of activities being conducted. However, each will be trained on site-specific hazards, site conditions and emergency operating procedures as well as other pertinent topics prior to job initiation in the areas of environmental concern (AOEC). All personnel on-site are required to attend pre-work "tailgate" meetings. These meetings shall discuss Health and Safety items related to those activities.

In the event hazardous waste or other conditions are encountered in the AOEC requiring upgrade from level D, all activities in the AOEC will be stopped. Continuation of work and entry into the AOEC will be conducted by personnel trained in accordance with 29 CFR 1910.120.

If respiratory protection is required, certification of mandatory training, medical monitoring and documentation of respirator fit testing shall be provided to the HSO before personnel are permitted on site. These records will be maintained as part of the permanent record.



## **IX. Loss/Near Loss/Injury Reporting**

In the event of an injury, near miss, or incident, site personnel must **IMMEDIATELY**:

- Determine the need for medical treatment and administer First Aid. Immediately call 911 if an injury or illness is obviously serious.
- IMMEDIATELY stop operations and notify Kleinfelder contact on site.
- IMMEDIATELY notify Kleinfelder Project Management/Operations Manager.
- Complete ExxonMobil Global Remediation Loss/Near Loss Investigation report as soon as possible, describing the incident IN DETAIL.
- Refer to Kleinfelder Health and Safety Procedures for detailed responsibilities.

## **X. HASP REVISIONS/SITE CONDITION CHANGE FORM**

Non-Conformance of Health and Safety Procedures/Comments regarding implementation: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Change in Site Conditions: \_\_\_\_\_

\_\_\_ Site personnel notified and informed of changes on: Date/Time notified: \_\_\_\_\_

\_\_\_ Contractor Notification and Consent Form updated. Date performed: \_\_\_\_\_

Plan of Action for Non-routine task/HASP Non-Conformance Issues/Change in conditions: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Incident Summary: \_\_\_ NA \_\_\_ Evacuation \_\_\_ Hazardous Material Over Exposure

Loss \_\_\_ Near Loss \_\_\_ OTHER: \_\_\_\_\_

(complete ExxonMobil Global Remediation Loss/Near Loss investigation form, see Kleinfelder SOP Manual, SOP#15 for a complete analysis)

\_\_\_ PM notified \_\_\_ Client notified \_\_\_ OSHA notified

\_\_\_ HASP Revision Document Submitted to H&S Department for HASP revision:

Name of Submitter: \_\_\_\_\_ DATE: \_\_\_\_\_

Received By: \_\_\_\_\_ DATE: \_\_\_\_\_

FORWARD TO HSO FOR HASP REVISION AS NECESSARY; FILE A COPY UNDER "SITE INSPECTION" IN AUDIT FILE

**ATTACHMENT A – Air Monitoring Data Observation Record**

**INSERT HARD COPY**

**ATTACHMENT B: AUTHORIZATION FOR MEDICAL TREATMENT/PHYSICIAN'S  
REPORT**

PLEASE RENDER TREATMENT TO: Employee \_\_\_\_\_  
for the illness/injury that occurred on: (Date) \_\_\_\_\_

\_\_\_\_\_ Conduct an alcohol and drug screen (reasonable cause).

Describe nature and cause of illness/injury including the object, equipment or substance inflicting  
injury/illness: (**Attach copy of MSDS when a hazardous material is involved**)  
\_\_\_\_\_  
\_\_\_\_\_

Authorized by:

\_\_\_\_\_  
Signature & Title

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Date

**PHYSICIAN'S REPORT**

\_\_\_\_\_  
MEDICAL FACILITY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

Treating Physician: \_\_\_\_\_ Date of illness/injury: \_\_\_\_\_

Previously treated? (Y / N) If yes, give dates \_\_\_\_\_

Diagnosis:(Industrial illness/injury only) \_\_\_\_\_

Treatment:(Industrial illness/injury only) \_\_\_\_\_

\_\_\_\_\_  
Prescription medication prescribed? Yes \_\_\_\_\_ No \_\_\_\_\_

Can employee return to work on next scheduled period? Yes \_\_\_\_\_ No \_\_\_\_\_

If no, what date can employee return to work? \_\_\_\_\_

List any medical/physical restrictions: \_\_\_\_\_

Number of days of restricted activity: \_\_\_\_\_

The employee is able to return to regular work on: \_\_\_\_\_

Follow-up treatment required? Yes \_\_\_\_\_ No \_\_\_\_\_; Date \_\_\_\_\_

Physician's signature: \_\_\_\_\_

**EMPLOYEE MUST RETURN THIS RELEASE TO OPERATIONS OFFICE WITHIN 24  
HOURS.**

**ATTACHMENT C: GLOBAL REMEDIATION LOSS/NEAR LOSS INVESTIGATION  
REPORT**

### **APPENDIX III**

#### **Annual Institutional Control/Engineering Control Certification Form**

**APPENDIX D****ANNUAL INSTITUTIONAL CONTROL / ENGINEERING CONTROL CERTIFICATION****SITE MANAGEMENT PLAN - METHYLENE CHLORIDE AREA****Annual Certification Period:**

755 JEFFERSON ROAD, HENRIETTA, NEW YORK

/ / to / /

**INSTITUTIONAL CONTROLS**

<b>Control Method</b>	<b>Mechanisms of Implementation, Monitoring, Maintenance, or Enforcement</b>	<b>Evaluation of IC/EC Effectiveness</b>	<b>Inspection Date</b>
<b>1. Post Remedial Groundwater Monitoring</b>			
<b>2. Deed Restriction</b>			
<b>4. Decontamination Facilities</b>			
<b>5. Waste Disposal</b>			

Professional Certification: I certify under penalty of law that I am a Professional Engineer in the State of New York or am otherwise a qualified environmental professional. I certify that the institutional controls and engineering controls employed at this site are:

- Unchanged from the previous certification, unless otherwise approved by the Department, consistent with the SMP,
- In place and effective, and
- Performing as designed, and nothing has occurred that would impair the ability of the controls to protect the public health and environment or constitute a violation or failure to comply with any operation and maintenance plan for such controls.

\_\_\_\_\_  
Signature\_\_\_\_\_  
Print Name\_\_\_\_\_  
Date

**APPENDIX IV**  
**Site Sampling Plan**





**METHYLENE CHLORIDE AREA  
SITE SAMPLING PLAN**

**UCB Manufacturing, Inc.  
755 Jefferson Road Facility  
Henrietta, New York  
Monroe County**

*Prepared By:*

Kleinfelder Engineering, P.C.  
1279 Route 300, 2<sup>nd</sup> Floor 2  
Newburgh, New York 12550  
(845) 567-6530

*Prepared For:*

UCB Manufacturing, Inc.  
755 Jefferson Road  
Henrietta, New York 14623

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**SITE SAMPLING PLAN**

Prepared for:

**UCB Manufacturing, Inc.**  
755 Jefferson Road  
Henrietta, NY 14623

**SITE SAMPLING PLAN  
755 JEFFERSON ROAD FACILITY  
HENRIETTA, NEW YORK  
MONROE COUNTY**

Kleinfelder Job No. 119502

Quality Assurance/Quality Control

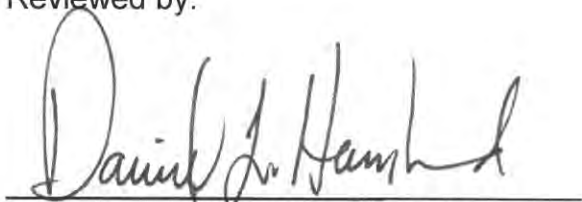
The following personnel have reviewed this report for accuracy, content and quality of presentation:

Prepared by:

A handwritten signature in dark ink, appearing to read "Alexander Wirth", with a long, sweeping horizontal stroke extending to the right.

Alexander Wirth  
Senior Project Geologist

Reviewed by:

A handwritten signature in dark ink, appearing to read "Daniel J. Harpstead", with a large, stylized initial "D" and a horizontal line underneath.

Daniel Harpstead, P.E., #086069  
President

**Kleinfelder**  
1279 Route 300  
Second Floor  
Newburgh, New York 12550  
o| 845.567.6530  
f| 845.567.6542

August 3, 2011

## Site **SAMPLING PLAN**

### Water Level Measurements

At the frequency specified in the Post Closure Monitoring Plan (Section 3.0 of the SMP as modified thereafter by agreement between NYSDEC and UCB), the depth to water in each of the wells within the MCA listed below will be measured to the nearest 0.01-foot using a water level indicator. From this data, the elevation of the groundwater table will be calculated and used to prepare groundwater elevation maps that visually depict the groundwater levels in and around the MCA. The quarterly maps will monitor groundwater flow direction in each of the shallow, intermediate and deep zones.

### Groundwater Sampling and Procedures

Groundwater will be sampled in the wells listed below, unless this list is subsequently modified by agreement between NYSDEC and UCB. Due to the variety of well diameters, well depths and vertical azimuth, the sampling procedures for each well will vary but will remain consistent with the procedure used during the investigation and remediation phases.

### LIST OF QUARTERLY GROUNDWATER MONITORING SAMPLING LOCATIONS

Well ID	Depth of Highest VOC reading ft btoc	Well Azimuth	Depth to Screen Interval ft btoc	Type of Pump Used to Purge	Historical Intake Setting ft btoc
MW-12	21-22	Vertical	2	Peristaltic	10.75
MW-16	13.5	Vertical	8	Peristaltic	13.5
MW-18	5-5.6	Vertical	5	Peristaltic	9.5
MW-23S	NA	Vertical	5	Grundfos	NA
MW-23I	NA	Vertical	25	Grundfos	NA
MW-23D	NA	Vertical	45	Grundfos	NA
MW-D6	57.5	Vertical	55	Grundfos	57.5
MW-D7	20-21.5	Vertical	55	Grundfos	57.5
MW-D8	25.5-25	Vertical	25	Grundfos	27
MW-D9	19-21	63°	60	Grundfos	65
MW-D10	14-16	Vertical	50	Grundfos	55
MW-D12	21-23	45°	76	Grundfos	81
MW-D13	16-18	45°	62	Grundfos	67.5
RW-2	12.5	Vertical	3	Peristaltic	12.5
RW-3	20-22	Vertical	13	Grundfos	21
RW-4	30	45°	10	Grundfos	30
RW-5	34	45°	10	Grundfos	35
RW-6	29	63°	10	Grundfos	29

"btoc": Below Top of Casing, NA= Not Applicable/Not Available

As the post closure monitoring continues and data is evaluated, the wells included in the monitoring program may be changed (which may include the removal of some wells from the program). Any significant change to the monitoring program will be discussed and approved in advance with the NYSDEC Project Manager and reported in the annual report.

All groundwater monitoring data will be recorded on Low-Flow Groundwater Sampling Forms. These protocols may be changed based upon site-related experience, advances in sampling methods or analytical techniques etc. An example of this form is included in Attachment A.

At least initially, a total of 18 wells will be sampled using four Grundfos pumps. Which pump will be used in which wells during each sampling event will be dependent on the historic Methylene Chloride concentration in the well. A detailed concentration based summary of each well group for the four Grundfos pumps is provided in the table below. Based upon a consistent (e.g. at least two quarters in a row) change relative to the concentration categories included below, the pump for a well may be switched to the one designated based upon its most recent monitoring results.

#### LIST OF QUARTERLY GROUNDWATER MONITORING PUMP AND WELL ASSIGNMENTS:

Grundfos Pump	Pump #1	Pump #2	Pump #3	Pump #4
<b>Historical Methylene Chloride Concentration Range</b> (ug/L)	Non Detect	0.1-100	101-1000	1,001-200,000
<b>Monitoring/Recovery Well</b>	RW-3 MW-D9 RW-6 MW-23S MW-23I MW-23D	MW-D6 MW-D12 MW-D13 MW-D10	RW-5 RW-4 MW-D7	MW-D8

#### Decontamination

Decontamination of all field investigation sampling equipment will be performed as follows.

1 *Heavy Equipment* - The drill rig and all downhole tools will be steam cleaned between each field activity location. If necessary, equipment will be scrubbed manually to remove heavy soils prior to steam cleaning. Equipment will also be steam cleaned

prior to leaving the site. All water generated during decontamination activities will be collected, stored and profiled by the Field Team for proper disposal.

2     *Sampling Equipment (e.g., knives, hand-auger, bowls, bailers)* – All disposable sampling equipment will be cleaned before each use by washing with solutions in the following order:

- phosphate-free detergent wash;
- potable water rinse using distilled or analyte-free lab water;
- air dry.

Potable water will be obtained from a municipal water source.

Heavily affected tools may also be rinsed with methanol, followed by a hexane rinse. If used, the methanol and hexane will be pesticide grade solvents and the spent wash solution will be contained for subsequent proper disposal.

After the final rinse with distilled water, equipment will be wrapped in aluminum foil and stored in a clean area until use.

3     *Meters and Probes* - All meters and probes that are used in the field will be cleaned between uses by washing with a detergent/potable water solution followed by rinsing with distilled or analyte-free water.

4     *Submersible Pumps* –

- Both the pump and its lead will be submerged in a phosphate-free detergent wash. The pump will then be operated for a period of at least approximately 15 seconds (while submerged);
- both the pump and lead will be submerged in a potable water rinse. The pump will then be operated for a period of at least approximately 15 seconds (while submerged);
- both the pump and lead will be submerged in distilled or analyte-free lab water. The pump will then be operated for a period of at least approximately 15 seconds (while submerged);
- both the pump and lead will be wiped down with a disposable (single-use) towel prior to re-spooling;
- all cleaned pumps and leads will be individually stored in dedicated container until next use.

## Ground Water Sampling Protocol

1. Collect a PID reading upon initial well cap removal.
2. Collect groundwater levels.
3. All wells must have the pump intake at the area where the highest PID readings were collected during the RDI (See Table above).
4. Purge at an initial flow rate of approximately 0.2 liters per minute. If drawdown appears to be significant at 0.2 liters per minute at the onset of purging, purge flow rate will be decreased to approximately 0.1-liter per minute goal is to achieve minimum drawdown during purging.
5. Monitor water level, pumping rate, pH, temperature, oxidation-reduction potential (ORP), turbidity and dissolved oxygen (DO) every three to five minutes using a water quality meter with a flow-through cell.
  - a. Purging will be deemed complete and the well stabilized and ready for sample collection when the indicator parameters have stabilized for three consecutive readings as follows (Puls and Barcelona 1996):
    - $\pm 0.1$  pH
    - $\pm 0.5$  degrees C
    - $\pm 10$ mV ORP
    - $\pm 10\%$  DO - < 50NTU's and within  $\pm 10\%$  turbidity readings
6. A field decision will be made as to whether to purge a well completely (place pump at the bottom of the well and remove all water). Considerations in making this decision include:
  - a. Stabilization of parameters is not attainable in a well at a flow rate of 0.1 liter per minute or less.
  - b. Low-flow purging continues for 90-minutes without achieving minimal drawdown and stabilization in field parameters.
  - c. Minimal drawdown is not attainable and drawdown progresses to within five feet of the top of the screened interval.

If pumping a well dry is necessary, the Field Team will collect a ground water sample from the well after the ground water level has recovered at least 90%, the ground water level has recovered to an elevation at least five feet above the top of the screened interval, but if these benchmarks have not been reached, within 24-hours of pumping the well dry.

7. Sampling will be conducted at the same flow rate as purging.
8. Samples will be placed on ice immediately after sample collection.
9. All coolers will include a trip blank.
10. Completion of the Chain of Custody.
11. Purged water will be contained on site within the MCA for subsequent treatment and or disposal at an approved facility.
12. Sampling equipment will be either decontaminated or sealed in poly sheeting and dedicated to a single labeled well.

### **Analytical Parameters**

Unless noted differently on the Chain of Custody or in an update to the well sampling Standard Operating Procedure all ground water, duplicate, equipment blank, and trip blank samples should be analyzed by USEPA Method 624 for the following site-specific compound list:

- Acetone
- Benzene
- Carbon disulfide
- Chloroform
- Chloromethane
- Cis-1,2-Dichloroethene
- Dichloro-difluoromethane
- 1,1 Dichloroethylene
- Trans 1,2 Dichloroethene
- Ethyl acetate
- Isopropyl acetate
- Methylene chloride
- Methyl ethyl ketone
- Total Xylenes

## LOW FLOW DATA SHEET

Well ID: \_\_\_\_\_ Date: \_\_\_\_\_ Project Name: \_\_\_\_\_ Project Number: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

MW Condition: \_\_\_\_\_

Notes: \_\_\_\_\_

Pump Used

Static water level before lowflow: \_\_\_\_\_ (feet below top of casing)  
Bottom of well: \_\_\_\_\_ (feet below top of casing)

Time Started: \_\_\_\_\_ Time Finished: \_\_\_\_\_

[illegible]



## **APPENDIX V**

### **Deed Restriction**

## **DECLARATION of COVENANTS and RESTRICTIONS**

**THIS COVENANT** is made the \_\_\_\_ day of \_\_\_\_\_ 20\_\_, by UCB Technologies, Inc, a corporation organized and existing under the laws of the State of New York and having an office for the transaction of business at 755 Jefferson Road, Rochester, New York 14623.

WHEREAS, UCB Technologies, Inc. is the owner of real property located on 755 Jefferson Road in the Town of Henrietta, County of Monroe, State of New York, conveyed by County of Monroe Industrial Development Agency to UCB Technologies, Inc. by deed dated 10th day of March, 2011 and recorded in the Monroe County Clerk's Office in Book 10982 Page 445 of Deeds, and being more particularly described in Appendix "A," attached to this declaration and made a part hereof, and hereinafter referred to as "the Property"; and

**WHEREAS**, a portion of the Property at the 755 Jefferson Road Property is the subject of a Voluntary Cleanup Agreement bearing Index No. D8-0001-97-07 (the "VCA") executed by Medeva Pharmaceutical Mftg., Inc. as part of the New York State Department of Environmental Conservation's (the "Department's") Voluntary Cleanup Program, namely that portion of the Property legally described in Appendix "B," attached to this declaration and made a part hereof, and hereinafter referred to as "the VCA Site"; and

**WHEREAS**, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination at a portion of the VCA Site known as the Methylene Chloride Area as described in the Methylene Chloride Area Operation Maintenance and Monitoring Final Engineering Report and Petition for Remedial Closeout as approved by the Department ("Remedy") and such Remedy requires that this portion of the VCA Site be subject to restrictive covenants.

**NOW, THEREFORE**, UCB Technologies, Inc., for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is the Methylene Chloride Area ("MCA") portion of the VCA Site as shown by a shaded area with GPS reference points on a map attached to this declaration as Appendix "C" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains above Site-specific remedial

cleanup standards at the MCA portion of the VCA Site subject to the provisions of the Site Management Plan ("SMP"), as approved by the Department, there shall be no construction, use or occupancy of the MCA portion of the VCA Site that results in the disturbance or excavation of the MCA portion of the VCA Site which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils except in compliance with Sections 2.0 and 2.1 of the SMP as approved by the Department.

Third, the owner of the VCA Site shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy of the MCA portion of the VCA Site, which are described in Sections 2.0 and 2.1 of the Department approved SMP, unless in each instance the owner first obtains a written waiver of such prohibition from the Department or Relevant Agency or the MCA portion of the VCA Site achieves the Site-specific remedial cleanup standards.

Fourth, the owner of the Property shall prohibit the MCA portion of the VCA Site from ever being used for purposes other than for Commercial or Industrial use without the express written waiver of such prohibition by the Department or Relevant Agency or the MCA portion of the VCA Site achieves the Site-specific remedial cleanup standards.

Fifth, the owner of the Property shall prohibit the use of the groundwater underlying the MCA portion of the VCA Site without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency or the MCA portion of the VCA Site achieves Site-specific remedial cleanup standards.

Sixth, until the MCA portion of the VCA Site achieves the Site-specific remedial cleanup standards, the owner of the Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which, consistent with the Department approved form in Section 4.3 of the SMP, will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.

Seventh, until the MCA portion of the VCA Site achieves the Site-specific remedial cleanup standards, the owner of the Property shall continue in full force and effect any institutional and engineering controls required in the MCA portion of the VCA Site for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the approved SMP, which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency.

Eighth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the MCA portion of the VCA Site, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions that the Voluntary Cleanup Agreement requires to be recorded, and hereby covenant not to contest the authority of the Department or Relevant Agency to seek enforcement.

Ninth, any deed of conveyance that includes the MCA portion of the VCA Site, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

**IN WITNESS WHEREOF**, the undersigned has executed this instrument the day written below.

\_\_\_\_\_

STATE OF NEW YORK     )

) s.s.:

COUNTY OF MONROE     )

On the \_\_\_\_\_ day of \_\_\_\_\_, in the year 2011, before me, the undersigned, personally appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

\_\_\_\_\_

Notary Public State of New York

**Attachment A**

MONROE COUNTY CLERK'S OFFICE

ROCHESTER, NY

THIS IS NOT A BILL. THIS IS YOUR RECEIPT

Receipt # 515419

Index DEEDS

Book 10982 Page 445

No. Pages : 9

Instrument DEED OTHER

Date : 03/30/2011

Time : 04:21:05PM

Control # 201103300830

TT # TT0000009999

Ref 1 #

Employee : RoseM

Return To:  
BOX 30-K JONES

COUNTY OF MONROE INDUSTRIAL DEVELOPMENT AGENCY  
UCB TECHNOLOGIES INC

COUNTY FEE TP584	\$	5.00
MISCELLANEOUS COUNTY FEE	\$	0.00
COUNTY FEE NUMBER PAGES	\$	40.00
RECORDING FEE	\$	45.00
RP5217 COUNTY FEE	\$	9.00
RP5217 STATE EQUAL ADDIT FEE	\$	241.00
STATE FEE TRANSFER TAX	\$	0.00

Total \$ 340.00

State of New York

MONROE COUNTY CLERK'S OFFICE

WARNING - THIS SHEET CONSTITUTES THE CLERKS  
ENDORSEMENT, REQUIRED BY SECTION 317-a(5) &  
SECTION 319 OF THE REAL PROPERTY LAW OF THE  
STATE OF NEW YORK. DO NOT DETACH OR REMOVE.

CHERYL DINOLFO

MONROE COUNTY CLERK

TRANSFER AMT

TRANSFER AMT \$1.00



8 H2

# BARGAIN AND SALE DEED

THIS BARGAIN AND SALE DEED, made this 10<sup>th</sup> day of March, 2011, between the COUNTY OF MONROE INDUSTRIAL DEVELOPMENT AGENCY, a public benefit corporation having a mailing address of 8100 CityPlace, 50 West Main Street, Rochester, New York 14614 ("Grantor") and UCB TECHNOLOGIES, INC., a New York corporation (as successor in interest to Cell Tech Technologies, Inc.) having an address of 755 Jefferson Road, Rochester, New York 14623 ("Grantee").

## WITNESSETH:

That the Grantor, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, does hereby grant and release unto the Grantee, its successors and assigns forever, all right title and interest of the Grantor in and to the following:

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Henrietta, County of Monroe and State of New York, more particularly described on Exhibit A attached hereto and made a part hereof.

Being and hereby intending to convey the same premises conveyed to the Grantor herein by a deed dated October 1, 1997 and recorded in the Monroe County Clerk's office on September, 28, 1998 in Liber 9066 of Deeds, at page 140.

SUBJECT TO all easements, covenants and restrictions of record.

Property Address: 755 Jefferson Road, Town of Henrietta,  
mailing address Monroe County, New York

Tax Account No.: 162.09-1-2.1

2011 MAR 30 AM 10:24  
MONROE COUNTY CLERK

RECORDED

TOGETHER with the appurtenances and all the estate and rights of the Grantor in and to said premises.

TO HAVE AND TO HOLD the premises herein granted unto the Grantee, its successors and assigns forever.

AND THE GRANTOR COVENANTS that it has not done or suffered anything whereby the said premises have been encumbered in any way whatever. The Grantor covenants further that, in compliance with Section 13 of the Lien Law, the Grantor will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

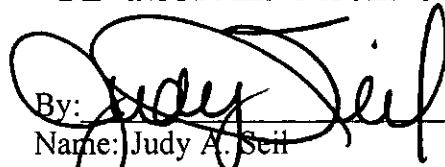
Box 30 - K. Jones

**THIS CONVEYANCE** does not render the Grantor insolvent and is not made in defraud of creditors.

**THIS CONVEYANCE** is made in the ordinary course of Grantor's business and does not constitute all or substantially all of the assets of the Grantor.

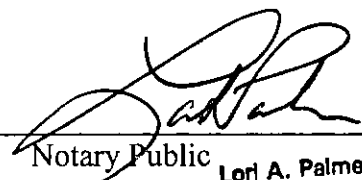
**IN WITNESS WHEREOF**, the Grantor has caused this instrument to be executed and delivered as of the day and year first above written.

**COUNTY OF MONROE INDUSTRIAL  
DEVELOPMENT AGENCY**

By:   
Name: Judy A. Seil  
Its: Executive Director

STATE OF NEW YORK )  
COUNTY OF MONROE ) ss.:

On the 10<sup>th</sup> day of March, 2011, before me, the undersigned, a Notary Public in and for said State, personally appeared **Judy A. Seil**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity, and that by her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

  
Notary Public **Lori A. Palmer**  
Notary Public, State of New York  
Qualified in Monroe County  
Commission Expires May 31, 2011



## EXHIBIT A

### Legal Description of Premises

#### PARCEL 1

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Henrietta, County of Monroe and State of New York, being a part of Lot No. 6, Fourth Range, Township 12, Range 7, more particularly described as follows:

Beginning at a point on the south line of Jefferson Road a distance of 812.21 feet west of the northeast corner of property conveyed to South Gate Development Co. Inc. by deed recorded in Monroe County Clerk's Office in Liber 2974 of Deeds, at page 102, and being the northwest corner of land now or formerly occupied by Photostat Corporation; thence (1) southerly and making a right angle with the south line of Jefferson Road, a distance of 800 feet to a point, which is the southwest corner of said land occupied by Photostat Corporation; thence (2) westerly and making a right angle with course (1) a distance of 550 feet to a point; thence (3) northerly and making a right angle with course (2) a distance of 800 feet to a point on the south line of Jefferson Road; thence (4) easterly and along the south line of Jefferson Road and making a right angle with course (3) a distance of 550 feet to the point or place of beginning.

#### PARCEL 2

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Henrietta, County of Monroe and State of New York, being a part of Lot No. 6, Fourth Range, Township No. 12, Range No. 7, more particularly described as follows: Beginning at a point in the west line of Clay Road, said point being the southeast corner of lands conveyed by South Gate Development Co., Inc. to Emil Muller and Ray Hylan by deed recorded in Monroe County Clerk's Office on September 28, 1955 in Liber 2998 of Deeds, at page 309 and now or formerly occupied by Photostat Corporation;

EXHIBIT A (continued)

thence (1) westerly at an interior angle of  $67^{\circ} 40'$  with the westerly line of Clay Road and running along the southerly line of lands so conveyed to Muller and Hylan and along the southerly line of lands conveyed by Emil Muller and Ray Hylan to Chemgate Realty Corporation by deed recorded in Monroe County Clerk's Office on April 7, 1958 in Liber 3150 of Deeds, page 280 a distance of 1122.02 feet to the southwest corner of lands so conveyed to Chemgate Realty Corporation; thence (2) southerly making a right angle with the last course a distance of 300 feet; thence (3) easterly making a right angle with the last course a distance of 998.78 feet to a point in the westerly line of Clay Road; thence (4) northerly at an interior angle of  $112^{\circ} 20'$  and running along the westerly line of Clay Road a distance of 324.33 feet to the point of beginning. The intersection of the center line of Clay Road with the easterly extension of the first course of the above described premises is located 900.55 feet southwesterly of the intersection of the center line of Clay Road with the center line of Jefferson Road.

PARCEL 3

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Henrietta, County of Monroe and State of New York, being a part of Lot No. 6, Fourth Range, Township No. 12, Range No. 7, more particularly described as follows:

Beginning at the southwest corner of property conveyed to R. J. Strassenburgh Company by deed recorded in the Monroe County Clerk's Office in Liber 3199 of Deeds, at page 420;

thence (1) southwesterly and along the west line of Clay Road a distance of 334.90 feet to a point; thence (2) westerly in a line making an interior angle of  $112^{\circ} 20'$  with course (1) a distance of 871.52 feet to a point; thence (3) northerly in a line making a right angle with course (2) a distance of 309.78 feet to a point; thence (4) easterly in a line making a right angle with course (3) a distance of 998.78 feet to a point on the west line of Clay Road, the point or place of beginning.

EXHIBIT A (continued)

PARCEL 4

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Henrietta, County of Monroe and State of New York, being parts of Lots 6 and 8 of the Fourth Range, Township 12, Range 7 more particularly described as follows:

Beginning at a point in the westerly line of Clay Road, said point being 1436.33 feet southerly from the southernmost point of land conveyed for Jefferson Road by Frank Lesinik and wife to County of Monroe by deed recorded in Monroe County Clerk's Office in Liber 1672 of Deeds, at page 268; thence running the following courses and distances:

- (1) Southwesterly along the westerly line of Clay Road a distance of 247.32 feet to its intersection with the north line of land conveyed by Cornelius S. DeWitt and wife to James Mullen by deeds recorded in Monroe County Clerk's Office in Liber 229 of Deeds, page 422 and Liber 249 of Deeds, page 457;
- (2) Westerly at an interior angle of  $113^{\circ} 15'$  with the preceding course and along the north line of lands so conveyed to Mullen a distance of 417.24 feet to the northwest corner of lands conveyed to said Mullen by Liber 249 of Deeds, page 457 marked by an iron pipe;
- (3) Southwesterly parallel with the westerly line of Clay Road and along the west line of land so conveyed to said Mullen by Liber 249 of Deeds, page 457 and said line continued, a total distance of 357.10 feet to a point;
- (4) Westerly at an interior angle of  $113^{\circ} 15'$  with the preceding course a distance of 224.68 feet to a point in the southerly continuation of the west line of land conveyed to R. J. Strassenburgh Company by deed recorded in Monroe County Clerk's Office on March 31, 1959 in Liber 3199 of Deeds, page 428;
- (5) Northerly at an interior angle of  $89^{\circ} 05'$  with the preceding course and along the said southerly continuation of the west line of land so conveyed to Strassenburgh a distance of 569.35 feet to a point;

EXHIBIT A (continued)

(6) Easterly at right angles to the preceding course, and parallel with and 309.78 feet southerly from the south line of lands so conveyed to Strassenburgh and said line continued, a distance of 871.52 feet to the point and place of beginning; the last course making an interior angle with the first course of  $67^{\circ} 40'$ .

PARCEL 5

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Henrietta, County of Monroe, and State of New York, being parts of Lots 6 and 8, Fourth Range, Township 12, Range 7, more particularly described as follows:

Beginning at a point located 365 feet southerly of the northwest corner of property conveyed to R. J. Strassenburgh Company by deed dated March 31, 1959 and recorded in Monroe County Clerk's Office in Liber 3199 of Deeds, at page 428, as measured along the westerly boundary line of said parcel and continuation thereof, which point is also located 1165 feet southerly of the south boundary line of Jefferson Road as measured along the west boundary line of said parcel and continuations thereof; thence (1) in a westerly direction making an interior angle of  $90^{\circ}$  with the said continuation of the west boundary line of said parcel a distance of 470 feet to a point; thence (2) in a southerly direction at an interior angle with the preceding course of  $90^{\circ}$  a distance of 881.66 feet to a point on the southerly line of property conveyed to Rochester Engraving Works, Inc. by instrument recorded in Liber 3645 of Deeds, at page 595 on June 10, 1965; thence (3) in an easterly direction at an interior angle of  $89^{\circ} 05'$  with the preceding course a distance of 1087.16 feet along said southerly line to a point located on the west line of Clay Road; thence (4) in a northeasterly direction at an interior angle with the preceding course of  $113^{\circ} 05'$  a distance of 65.30 feet along the west line of Clay Road to a point; thence (5) in a westerly direction at an interior angle with the preceding course of  $66^{\circ} 45'$  a distance of 641.92 feet to a point located at the southwest corner of property conveyed to R.J. Strassenburgh Company by deed dated January 6, 1960 and recorded in said Clerk's Office in Liber 3254 of Deeds, at page 259;

EXHIBIT A (continued)

thence (6) northerly making an angle in the northeast quadrant of  $89^{\circ} 05'$  a distance of 814.13 feet to the place of beginning, and there forming an interior angle of  $90^{\circ}$  with the first course set forth herein.

Excepting from the above parcels, that portion of the above described premises which is now known as Fison Drive.

The demised premises may be alternatively described as:

All that tract or parcel of land situate in parts of Town Lots 6 & 8, in the fourth range of lots, Township 12, seventh range of Townships, in the Town of Henrietta, County of Monroe, State of New York, and being more particularly described as follows:

Commencing at the intersection of the easterly line of Market Place Drive (60 feet Right of Way) with the southerly line of Jefferson Road (100 feet Right of Way); thence North  $88^{\circ} -44' -36''$  East, in the southerly line of said Jefferson Road a distance of 470.00 feet to the point and place of beginning;

- 1) thence, continuing in the southerly line of said Jefferson Road North  $88^{\circ} -44' -36''$  East, a distance of 550.00 feet to a point;
- 2) thence, South  $01^{\circ} -15' -25''$  East, a distance of 800.00 feet to a point;
- 3) thence, North  $88^{\circ} -44' -36''$  East, a distance of 572.02 feet to a point in the westerly line of Clay Road (49.5 feet Right of Way);
- 4) thence, South  $21^{\circ} -04' -36''$  West, in the westerly right of way of said Clay Road, a distance of 906.55 feet to a point;
- 5) thence, South  $87^{\circ} -49' -36''$  West, a distance of 417.24 feet to a point;
- 6) thence, South  $21^{\circ} -04' -36''$  West, a distance of 357.10 feet to a point;

EXHIBIT A (continued)

- 7) thence, North  $87^{\circ} -49' -36''$  East, a distance of 417.24 feet to the westerly right of way of the aforesaid Clay Road;
  - 8) thence, South  $21^{\circ} -04' -36''$  West, in the said westerly line of Clay Road a distance of 7.45 feet to a point of curvature;
  - 9) thence, in a curve to the right, having a radius of 30.00 feet, a delta of  $86^{\circ} -45' -00''$  an arc length of 47.60 feet to a point of tangency in the northerly right of way of Fisons Drive (60.00 feet Right of Way);
  - 10) thence, South  $87^{\circ} -49' -36''$  West, in the said northerly right of way of Fisons Drive, a distance of 1,051.41 feet to a point of curvature;
  - 11) thence, on a curve to the right having a radius of 30.00 feet, a delta of  $90^{\circ} -55' -00''$  an arc length of 47.60 feet to a point of tangency in the easterly line of the aforesaid Market Place Drive;
  - 12) thence, North  $01^{\circ} -15' -24''$  West in the said easterly line of Market Place Drive a distance of 816.18 feet to a point;
- 
- 13) thence, North  $88^{\circ} -44' -36''$  East, a distance of 470.00 feet to a point;
  - 14) thence, North  $01^{\circ} -15' -24''$  West, a distance of 1165.00 feet to the point and place of beginning.

**Attachment B**

DESCRIPTION OF VCA SITE  
LOT 1 OF THE UCB MANUFACTURING SUBDIVISION  
#755 JEFFERSON ROAD  
TOWN OF HENRIETTA

---

All that tract or parcel of land situate in the Town of Henrietta, County of Monroe, State of New York and is more particularly described as follows:

Beginning at a point in the south right-of-way line of Jefferson Road, N.Y.S. Route 252, said point being the northwest corner of Lot 1 of the UCB Manufacturing Subdivision, filed in the Monroe County Clerk's Office, Liber 330 of Maps, Page 55. Said point being further described as being easterly, a distance of 470.00 feet from the intersection formed by the aforesaid south right-of-way line and the east right-of-way line of Marketplace Drive at the approximate following coordinates:,

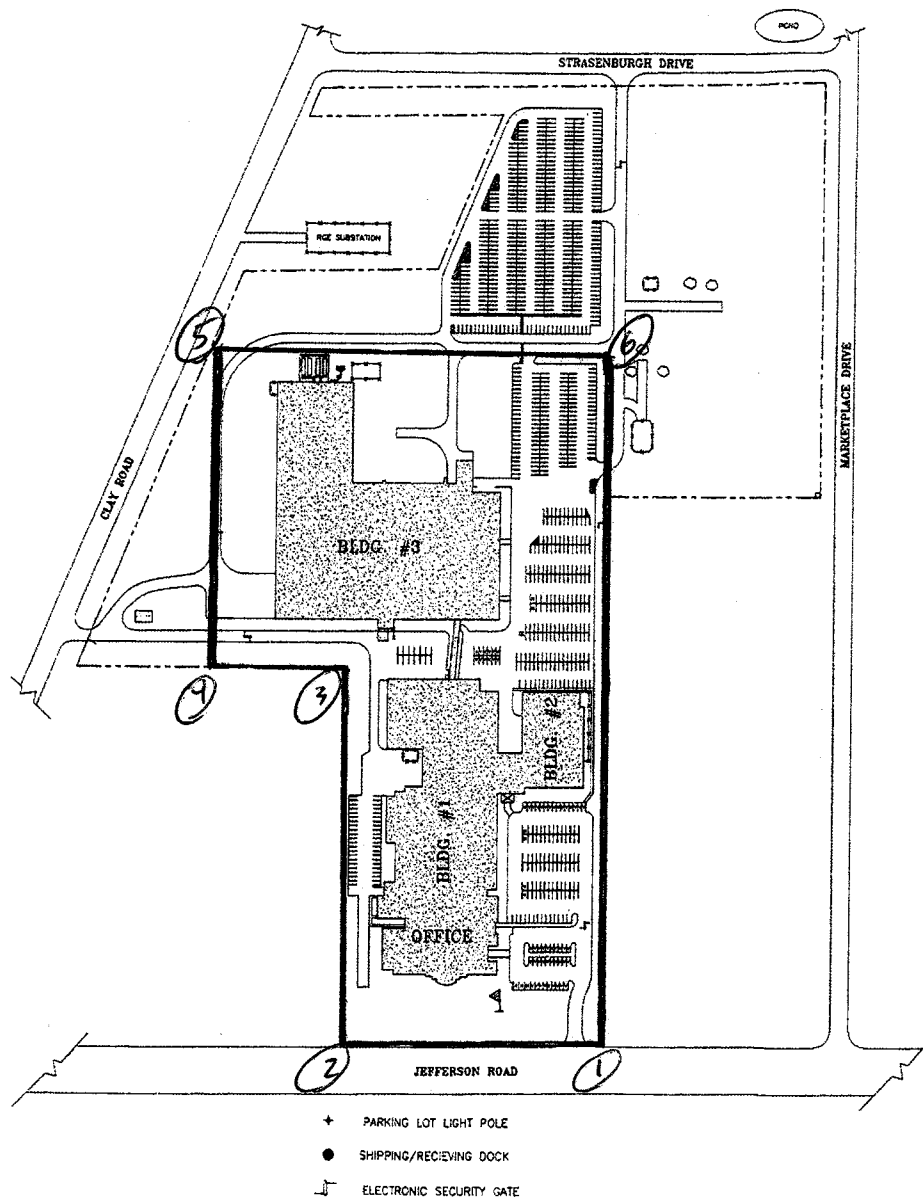
- Thence, 1 - N 88°-44'-44" E, along the south right-of-way line of Jefferson Road, N.Y.S. Route 252, a distance of 550.00 feet to a point,
- Thence, 2 - S 01°-15'-16" E a distance of 800.00 feet to a point,
- Thence, 3 - N 88°-44'-44" E a distance of 286.01 feet to a point,
- Thence, 4 - S 01°-15'-16" E a distance of 762.72 feet to a point,
- Thence, 5 - S 87°-49'-44" W a distance of 858.06 feet to a point,
- Thence, 6 - N 01°-15'-16" W a distance of 1573.11 feet to the point and place of beginning.

Intending to describe "VCA Site" within Lot 1 of the UCB Manufacturing Subdivision, which contains 40.153 acres, #755 Jefferson Road, Town of Henrietta.



**Figure 2**  
**Facility Layout Map**  
**755 Jefferson Road**  
**Rochester, New York**

TO DEFINE "VCA SITE"



**Attachment C**



## **APPENDIX VI**

### **Excavation Work Plan**



**METHYLENE CHLORIDE AREA  
EXCAVATION WORK PLAN**

**UCB Manufacturing, Inc.  
755 Jefferson Road Facility  
Henrietta, New York  
Monroe County**

*Prepared By:*

Kleinfelder Engineering, P.C.  
1279 Route 300, 2<sup>nd</sup> Floor 2  
Newburgh, New York 12550  
(845) 567-6530

*Prepared For:*

UCB Manufacturing, Inc.  
755 Jefferson Road  
Henrietta, New York 14623

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PROJECT FOR WHICH THIS REPORT WAS PREPARED.**

## EXCAVATION WORK PLAN

Prepared For:

**UCB Manufacturing, Inc.**

755 Jefferson Road  
Henrietta, NY 14623

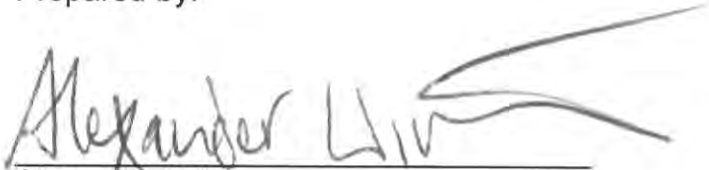
**EXCAVATION WORK PLAN  
755 JEFFERSON ROAD FACILITY  
HENRIETTA, NEW YORK  
MONROE COUNTY**

Kleinfelder Job No. 119502

Quality Assurance/Quality Control

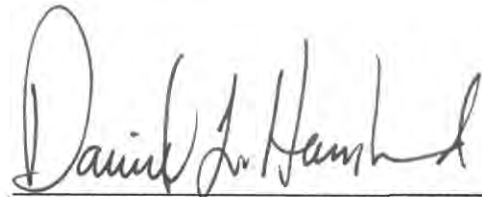
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August 3, 2011

## **APPENDIX VI – EXCAVATION WORK PLAN METHYLENE CHLORIDE AREA**

### **A-1 AREA COVERED BY THIS WORKPLAN**

This Excavation Work plan (EWP) must be followed during any excavation within the area formerly designated the “Methylene Chloride Area” or “MCA”. It involves a portion of the area west of Building 3 as well as some of the area beneath Building 3. Its approximate boundaries are shown on Figure 1. The following table includes the coordinates of the boundaries of the MCA.

**NAD 27- State Plane-New York West**  
**MCA area**

- NE corner (N: 1125258.53, E: 756796.96)
- SE corner (N: 1125082.03, E: 756796.10)
- SW corner (N: 1125082.78, E: 756641.00)
- NW corner (N: 1125259.28, E: 756641.86)

### **A-2 RESTRICTIONS ON WORK ALLOWED WITHIN THE MCA**

In accordance with the recorded Deed Restriction for the property, where contamination remains above Site-specific remedial cleanup standards within the MCA (see Table EWP-1), there shall be no construction that results in the disturbance or excavation which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils except in compliance with Sections 2.0 and 2.1 of the SMP as approved by the Department.

**TABLE EWP-1**  
**APPROVED MCA SOIL CLEAN-UP OBJECTIVES<sup>1</sup>**

<b>Parameter</b>	<b>Approved Soil Clean Up Objective (ug/kg)</b>
Acetone	27
Benzene	20
2- Butanone	55
Carbon disulfide	661
Chloroform	53
Cis-1,2- Dichloroethene	135
Methylene Chloride	26
Total Xylenes	294

<sup>1</sup>As set forth in Table 1-4 of the *Remedial Action Selection Report* for the site. ERM October 2002. Approved by NYSDEC in a letter **December 19, 2002**. While semi-volatiles compounds (SVOCs) were also included in Table 1-4, SVOCs have never driven the remediation.

### A-3 NOTIFICATION

At least seven days prior to the start of an excavation that is anticipated to be 10 feet in depth or greater within the MCA, the site owner or their representative will submit a written notification to the Department of Environmental Conservation ("NYSDEC" or the "Department"). Currently, this notification will be made to:

Bartholomew H. Putzig, P.E.  
Regional Hazardous Waste Remediation Engineer  
NYSDEC, Division of Environmental Remediation - Region 8  
6274 East Avon-Lima Road, Avon, NY 14414

The Department may change the person to whom notifications is to be made by informing the current owner of the site. A change in the Department contact will not necessitate a change in this Excavation Work plan.

This notification will include each of the following to the extent they are applicable to the proposed work:

- The name and address of the site and the Department's site identification number [755 Jefferson Road Site, 755 Jefferson Rd, Henrietta NY 14623, VCP # V00126-8.]
- A detailed description of the work to be performed within the MCA, including the (i) location and areal extent, (ii) any intrusive elements or utilities to be installed below the ground surface of the MCA and (iii) any work that may impact an engineering control applicable to the MCA.
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, and potential presence of contaminated soil or groundwater;
- The anticipated schedule for the work, including the start and the projected completion dates for all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and, if required, with 29 CFR 1910.120 (Hazardous Waste Operations and Emergency Response).
- A copy of the contractor's Health and Safety Plan, in electronic format, if it differs from the HASP provided in Appendix II of the Site management Plan,



- Identification of potential waste streams and disposal facilities for EWP-related wastes which require special management,
- Identification of sources of any anticipated backfill, along with all required soil testing results (see Section A-14 below).

#### **A-4 RESPONSIBILITY FOR COMPLIANCE**

A Qualified Environmental Professional<sup>2</sup> or person under their supervision will oversee all invasive work and the excavation and load-out of all MCA-related excavated material with constituents at levels higher than the site-specific cleanup criteria. The owner of the property and contractors performing work under this EWP are solely responsible for safe execution of all invasive and other work performed under this Plan.

#### **A-5 UTILITY LOCATION and CLEARANCE**

The identification of utilities and easements on the site is the responsibility of the contractor, and must be done to the satisfaction of the Qualified Environmental Professional overseeing the project. The Qualified Environmental Professional will determine whether a risk or impediment to the planned work under this SMP is posed by utilities, easements or the in-place Institutional Controls (ICs) and Deed Restrictions within the MCA.

#### **A-6 SOIL SCREENING METHODS**

Until the MCA portion of the Site achieves the Site-specific remedial cleanup standards, visual, olfactory and instrument-based soil screening will be performed under the direction of the Qualified Environmental Professional during all MCA-related remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will include all excavation and invasive work, such as excavations for foundations and utility work occurring at depths greater than 10 feet below ground surface.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface and material that can be used as cover soil. In accordance with DER-10, an appropriate number of samples will be collected from both piles. The soil samples will be physically characterized and qualitatively screened with a photoionization detector (PID) equipped with a 11.7 electron volt (eV) lamp calibrated to isobutylene span gas to yield total volatile organic compounds (VOCs) in parts per million by volume (ppmv).

Soils will be further segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires additional testing, material that can be returned to the subsurface, and, if needed, material that can be used as cover soil.

<sup>2</sup> For purposes of this Excavation Work Plan, a "Qualified Environmental Professional" is an individual who meets the definition included in §1.3 (49) of DER-10 *Technical Guidance For Site Investigation and Remediation* (May 3, 2010 or latest version promulgated by NYSDEC). This is available on the NYSDEC web site (<http://www.dec.ny.gov/>).

## **A-7 STOCKPILE METHOD**

Stormwater pollution prevention is discussed in Section A-14 below. Those requirements, if applicable, must also be met for soil stock-piles from, or stored within, the MCA, even if a full Stormwater Prevention Plan and Stormwater Construction SPDES Permit is not needed. These MCA-related soil stockpiles will be continuously encircled with a berm and/or silt fence, except when soil is being added or removed. Hay bales or other methods to filter stormwater will be used as needed near catch basins, surface waters and other discharge points.

Except when soil is being added or removed, MCA-related stockpiles will be kept covered at all times with appropriately anchored tarps and damaged tarp covers will be promptly replaced. At a minimum of once each week and after every storm, MCA-related stockpiles will be inspected, with a goal of identifying and rectifying issues that could cause sediment runoff. Results of inspections will be recorded in a logbook, maintained at the site and made available for inspection by NYSDEC.

## **A-8 MATERIALS EXCAVATION AND LOAD OUT**

A Qualified Environmental Professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The presence of utilities and easements on the site will be investigated by the Qualified Environmental Professional who will determine whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site carrying soil or other material excavated from the MCA will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with applicable Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

Locations where vehicles exit the site shall be inspected daily when off-site soil transportation is being done for evidence of off-site soil tracking. If a potential for off-site tracking of soil is identified, appropriate measures will be implemented to prevent further off-site tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities.

## **A-9 MATERIALS TRANSPORT OFF-SITE**

All transport of excavated MCA-related materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. If required by applicable law, haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes will be determined based upon the ultimate destination of the material being transported and will be finalized prior to work commencing. All trucks loaded with site materials will exit the vicinity of the site using only approved truck routes. Routes will be selected by taking into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport;

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during the EWP project.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

#### **A-10 MATERIALS DISPOSAL OFF-SITE**

All EWP project related excavated material removed from the site having constituents above the Table EWP-1 MCA soil clean-up objectives will be transported and disposed in accordance with all local, State (including 6 NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include (as applicable): waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated MCA-related soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6 NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

#### **A-11 MATERIALS REUSE ON-SITE**

Soils considered for reuse on-site will be sampled and analyzed for the Table EWP-1 constituents and compared to the MCA soil clean-up objectives listed in that Table. Analysis will be by EPA Method 8260B or other method pre-approved by NYSDEC.

The Qualified Environmental Professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Soils with one or more constituents above the Table EWP-1 MCA - Specific Soil Clean-up Objectives will not be returned to the excavation and will be disposed of at an off-site facility. Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

## **A-12 FLUIDS MANAGEMENT**

All excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, but will be disposed off-site.

## **A-13 COVER SYSTEM RESTORATION**

After the completion of each project which triggered this Plan, if a change in the surface topography and/or building coverage within the MCA has occurred, a figure showing the modified surface will be included in the next Periodic Review Report and in the next update to the Site Management Plan.

## **A-14 BACKFILL FROM OFF-SITE SOURCES**

All materials proposed for import and use within the MCA will be approved by the project's Qualified Environmental Professional and will be in compliance with provisions in this SMP prior to receipt at the site.

Consistent with 6 NYCRR §375-6.7(d) and DER-10 §5.4(e), (1), soil brought to the site for use as a soil cover or backfill must:

- be free of extraneous debris or solid waste;
- be recognizable soil or other unregulated material as set forth in 6 NYCRR Part 360; and
- not exceed the allowable constituent levels for imported fill or soil for use on and commercial/industrial site which are provided in DER-10 Appendix 5.

The following cannot be imported for use within the MCA.

- Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site for use within the MCA without prior approval by NYSDEC.

- Solid waste will not be imported onto the site.
- Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.
- Soils that do not meet the allowable constituent levels per 6 NYCRR Part 375-6.5 Soil cleanup objectives for the protection of groundwater.

Sampling is required for all imported soil for use as backfill or cover material. Sampling frequency of the material will be determined considering DER-10 §5.4 (e)(10). Sampling will be performed consistent with DER-10 sections 2.1 through 2.3.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

## **A-15 STORMWATER POLLUTION PREVENTION**

A Stormwater Pollution Prevention Plan (SWPPP) that conforms to the requirements of NYSDEC Division of Water guidelines and NYS regulations will be included as part of the Excavation Work Plan if a NYSDEC Construction-related Stormwater SPDES permit is needed. If a Construction permit is required, no soil disturbance can be initiated until permit coverage is obtained.

Whether or not a Construction Stormwater permit is needed, the following stormwater pollution prevention measures will be implemented within the affected portions of the MCA during excavation activities on site.

- Barriers and hay bales or other sediment barriers will be installed around the entire perimeter of the construction area and inspected once a week and after every storm event whenever MCA-related excavated areas have not been stabilized. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.
- Accumulated sediments will be removed as required to keep the barriers and hay bale check functional.
- All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.
- Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.
- Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters
- Silt fencing or hay bales will be installed around the entire perimeter of any MCA-related excavation area.

## **A-16 CONTINGENCY PLAN**

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface MCA-related excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for full a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive MCA-related work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Reports prepared pursuant to Section 4.4 of the SMP.

## **A-17 COMMUNITY AIR MONITORING PLAN**

If the EWP project activities will be at a depth greater than 10 feet below grade, then the Community Air Monitoring Plan (CAMP) attached as Appendix A1 will be implemented. A figure showing the location of air sampling stations is shown in Figure 1 of the Community Air Monitoring Plan. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations. The Appendix A1 CAMP can be modified as appropriate for the specific EWP project, as long as it the modified CAMP complies with DER-10 §6.2.1(b)(4) and §1.9(c).

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

## **A-18 ODOR CONTROL PLAN**

An Odor Control Plan will be developed as necessary per section 2.2 of the CAMP. The requirement for an Odor Control Plan is not anticipated based upon the current impact distribution within the MCA.

## **A-19 DUST CONTROL PLAN**

A project specific dust suppression plan that addresses dust management during invasive on-site work within the MCA will be derived; it will include, at a minimum, the use of appropriate dust suppression techniques.

**APPENDIX A1**  
**Community Air Monitoring Plan**



**METHYLENE CHLORIDE AREA  
COMMUNITY AIR MONITORING PLAN**

**UCB Manufacturing, Inc.  
755 Jefferson Road Facility  
Henrietta, New York  
Monroe County**

*Prepared By:*

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*Prepared For:*

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PROJECT FOR WHICH THIS REPORT WAS PREPARED.**



**COMMUNITY AIR MONITORING PLAN**

Prepared for:

**UCB Manufacturing, Inc.**  
755 Jefferson Road  
Henrietta, NY 14623

**COMMUNITY AIR MONITORING PLAN  
755 JEFFERSON ROAD FACILITY  
HENRIETTA, NEW YORK  
MONROE COUNTY**

Kleinfelder Job No. 119502

Quality Assurance/Quality Control

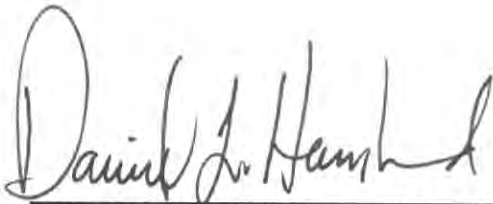
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August, 3 2011

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## LIST OF TABLES, FIGURES, AND ATTACHMENT

### **FIGURES**

Figure 1      -      Site Plan with Proposed Air Monitoring Locations

## 1.0 INTRODUCTION

Kleinfelder East, Inc. (Kleinfelder) was retained by Sanofi Aventis Inc., on behalf of UCB Manufacturing Inc., to prepare a Community Air Monitoring Plan (CAMP) for the post-remediation Methylene Chloride Area (MCA) located at 755 Jefferson Road, Rochester, New York (Figure 1). This CAMP was prepared consistent with Appendices 1A and 1B of NYSDEC's DER-10 (*Technical Guidance for Site Investigation and Remediation*) to protect downwind potential receptors from airborne volatile organic compound (VOC) vapors and airborne particulates that may migrate from the Site during post-remediation ground intrusive excavation activities.

This CAMP requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated excavation area whenever active excavation is occurring within the MCA. However, excavation, grading, or placement of known clean fill within the MCA does not trigger the need for VOC or particulate monitoring. The intent of the CAMP is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of post-remediation excavation activities within the MCA. Exceedances of the action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP will help to confirm that activities did not spread contamination off-site through the air.

The CAMP is intended only for monitoring of the Site for the duration of excavation and removal of soil from within the MCA. The location of the MCA is depicted in the Figure and Table EWP-1 included in section A-2 of the Excavation Work Plan to which this CAMP is an Appendix. The area in the vicinity of the MCA consists of commercial property and open space (Figure 1). The MCA is bordered to the east by Building #3. The MCA is bordered to the north by Buildings 1 and 2. The MCA is bordered to the south by a UCB facility parking area, to the west by an undeveloped parcel and beyond that commercial/industrial properties.

## 2.0 AIR MONITORING

The owner/operator of the Site will appoint an experienced health and safety trained individual, who has completed a 40-hour Occupational Safety and Health Administration (OSHA) training course that meets with the requirements of 29 CFR Part 1910.120 to monitor air quality both on and off Site during MCA-related excavation activities. This individual will either be a Qualified Environmental Professional, as defined in DER-10, or will be working under the supervision of such a Professional.

### 2.1 Pre-Excavation Ambient Air Monitoring

Prior to commencing excavation, air monitoring will be conducted at the Site which will consist of the collection of ambient air screening data for VOCs and airborne

particulates at an upwind location. This initial air monitoring event will be conducted to establish Site-specific baseline ambient air VOC and airborne particulate levels, which will be used as reference for background levels once work begins. Air will be monitored for the presence of VOC vapors with a MiniRAE 2000 (or equivalent) photoionization detector (PID) with a 11.7 ev lamp capable of displaying 15-minute running averages. Prior to monitoring, the PID will be calibrated to a 100 parts per million by volume (ppm<sub>v</sub>) isobutylene span gas according to the manufacturer's specifications.

In addition, a Personal Dust Ram (PDR) 1000 Dust Monitor (or equivalent) will be used to monitor particulate concentrations at the Site. The PDR will be factory calibrated and zeroed in a zero bag each day prior to the commencement of work.

A minimum of three monitoring locations will be utilized during all excavation activities and background monitoring. The selection of monitoring locations will be dependent on where the excavation will occur and the direction of the prevailing wind during excavation. The results of the background monitoring will be recorded and remain on Site during excavation activities.

## 2.2 VOC Monitoring, Action Levels, and Response Measures

Upon the start of work, a PID will be positioned at the downwind perimeter of the excavation work area. The PID will be utilized to collect a continuous 15-minute running time average of VOC concentrations in ppm<sub>v</sub>. The PID utilized to monitor VOC levels will be calibrated in the same manner as set out in § 2.1 prior to commencing work. The downwind location will be determined using a wind sock (or equivalent) which will be positioned on Site prior to commencing work, and will be continually monitored throughout the work day. Average VOC levels will be recorded at 15-minute intervals at the air monitoring locations surrounding work area. The PID will sound an alarm if VOC concentrations exceed the 15-minute running time average of 5 ppm<sub>v</sub> above background levels.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million by volume (ppm<sub>v</sub>) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm<sub>v</sub> over background, work activities can resume with continued monitoring.
2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm<sub>v</sub> over background but less than 25 ppm<sub>v</sub>, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm<sub>v</sub> over background for the 15-

minute average.

3. If the total organic vapor level is above 25 ppm<sub>v</sub> at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

## 2.3 Particulate Monitoring, Action Levels, and Response Measures

Reasonable fugitive dust suppression techniques must be employed during all MCA-related excavation activities which may generate fugitive dust, except those involving only clean fill. Particulate monitoring must be employed when planned excavation within the MCA may generate fugitive dust from exposed MCA-related waste or contaminated soil. Excavation, grading, or placement of known clean fill within the MCA does not trigger the need for particulate monitoring.

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the designated excavation work zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (ug/m<sup>3</sup>) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed (see Section 2.4 below). Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 ug/m<sup>3</sup> above the upwind level and provided that no visible dust is migrating from the work area.
  - a. If particulate levels are detected in excess of 150 ug/m<sup>3</sup>, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m<sup>3</sup> above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques.
2. If, after implementation of dust suppression techniques, downwind PM-10

particulate levels are greater than  $150 \text{ mcg/m}^3$  above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and/or other controls are successful in reducing the downwind PM-10 particulate concentration to within  $150 \text{ mcg/rn}^3$  of the upwind level and in preventing visible dust migration. Should the action level of  $150 \text{ ug/m}^3$  continue to be exceeded, work must stop and DEC-DER must be notified as provided in Section 5.0 below.

All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM-10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed.

## 2.4 Mitigation Actions

Implementation of the CAMP does not preclude other simple, common-sense measures from being implemented which are intended to keep VOCs, dust and odors at a minimum around the work areas.

During the soil removal activities, excavated soils will either be stockpiled and covered with polyethylene sheeting, or loaded directly onto trucks and removed for off-site disposal.

If the working site particulate measurement is greater than  $100 \text{ ug/m}^3$  above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques, such as some of those listed below. Should the action level of  $150 \text{ ug/m}^3$  continue to be exceeded, work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

- (a) Applying water on haul roads;
- (b) Wetting equipment and excavation faces;
- (c) Spraying water on buckets during excavation and dumping;
- (d) Hauling materials in properly tarped or watertight containers;

- (e) Restricting vehicle speeds to 10 mph;
- (f) Covering excavated areas and material after excavation activity ceases;  
and
- (g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150 ug/m<sup>3</sup> action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. For example, using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

### **3.0 QUALITY ASSURANCE/QUALITY CONTROL**

In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the Qualified Environmental Professional to adequately implement QA/QC Plans which include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

### **4.0 REPORTING**

All air monitoring readings will be recorded and kept readily available on Site for inspection by the NYSDEC and NYSDOH officials during work activities.

Third-party inquiries related to air quality at the Site will be referred to the Division of Environmental Remediation at NYSDEC, Mr. Greg MacLean at (585) 226-5356 (Office) or the NYSDEC Spill Hotline at 1-800-457-7362.

Persistent excavation Work Area VOC or particulate levels above the action levels established in this CAMP will be reported to Mr. Greg MacLean of the NYSDEC at (585) 226-5356. The notification shall include a description of the control measures implemented to prevent further exceedances.

### **5.0 REFERENCE**

Appendices 1-A and 1-B of DER -10 (*Technical Guidance for Site Investigation and Remediation*) NYSDEC November, 2009.

### **6.0 LIMITATIONS**

*"Kleinfelder performed the services for this project under the Master Agreement for Professional Services between Kleinfelder Engineering, P.C. and Sanofi-aventis US, Inc. dated June 7, 2007. Kleinfelder states that the services performed are consistent with professional standard of care defined as that level of services provided by similar professionals under like circumstances. This report is based on the regulatory*

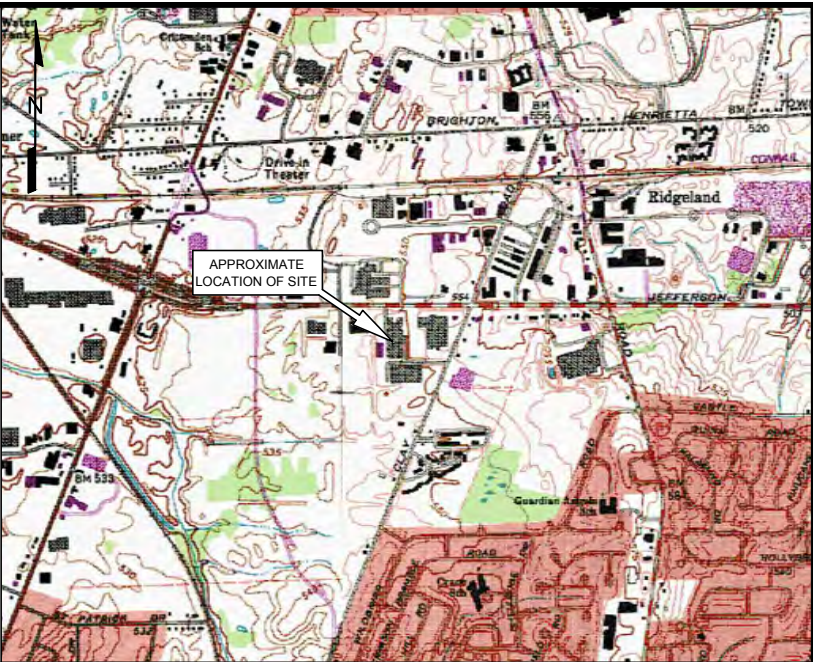
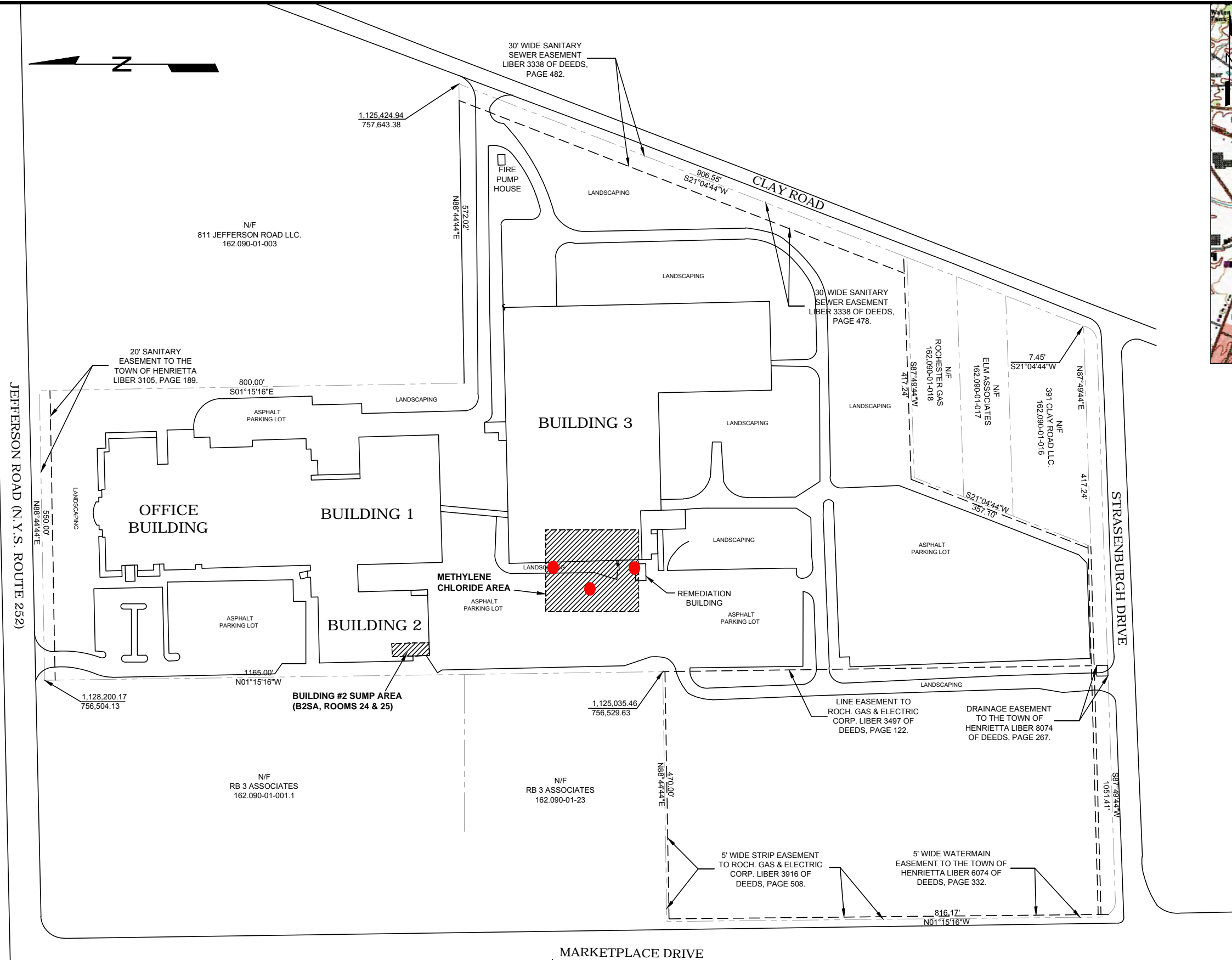


UCB Manufacturing, Inc.  
Henrietta, New York

Kleinfelder Engineering PC.  
Newburgh, New York

*standards in effect on the date of the report. It has been produced for the primary benefit of sanofi-aventis US, Inc. and its affiliates and UCB and its affiliates."*

## FIGURES



VICINITY MAP  
SCALE 1"=3000'  
USGS 7.5' SERIES TOPOGRAPHIC MAP:  
PITTSFORD, NY QUADRANGLE

LEGEND

- PROPERTY LINE
- EASEMENT
- BUILDING
- CURB

● Monitoring locations

REFERENCES:  
1. "SUBDIVISION MAP" PREPARED BY PARRONE  
ENGINEERING, DATED 12/29/2006.

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PROJECT NO.	105651
DRAWN:	02/09/11
DRAWN BY:	CTH
CHECKED BY:	AW
FILE NAME:	SANOFI_FEB11.dwg

SITE PLAN	
UCB FACILITY NYSDEC VCP# V00126-8 755 JEFFERSON ROAD ROCHESTER	
MONROE COUNTY	NEW YORK

## **APPENDIX VII**

### **Post Remedial Soil Boring Logs**

**KLEINFELDER**

1279 Route 300, Newburgh, New York, 12550  
Phone: (845) 567-6530 Fax: (845) 567-6542

**Boring Log**

<b>Project:</b>	119502	<b>Casing Elevation:</b>	547.77
<b>Client:</b>	sanofi-aventis	<b>Total Depth:</b>	15' BGS
<b>Location:</b>	755 Jefferson Road, Rochester, NY	<b>Water Level:</b>	5.18'
<b>Boring ID:</b>	MW-23S	<b>Drilling Co.:</b>	Paragon Drilling
<b>Screen Length:</b>	10'	<b>Driller:</b>	Doug H.
<b>Diameter:</b>	2"	<b>Method:</b>	Hollow Stem Auger
<b>PVC Type:</b>	Schedule 40	<b>Start Date:</b>	12/21/10
<b>Slot Size:</b>	0.010	<b>End Date:</b>	12/21/10
<b>Casing Length:</b>	5'	<b>Notes:</b>	
<b>Diameter:</b>	2"		
		<b>Log by:</b>	AW
		<b>Checked by:</b>	



Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description	Depth (ft.)	Well Diagram
			0.0	Hand Clear	Hand Clear	Asphalt	1	
1			0.0	NA	NA	Backfill/crushed stone	1	
2			0.0	NA	NA	SAA	2	
3			0.0	NA	NA	Brown, SILT, some clay, trace cobbles, trace fine gravel, dry	3	
4			0.0	NA	NA	SAA	4	
5			0.0	NA	NA	Brown, SILT and clay, little fine sand, trace fine gravel, dry	5	
6			0.0	NA	NA	SAA	6	
7			0.0	NA	NA	SAA	7	
8			0.0	3/4/6/5	13"	SAA	8	
9			0.0	NA	NA	SAA	9	
10			0.0	NA	NA	SAA	10	
11			0.0	6,6,7,12	21"	Brown, SILT and clay, little fine sand, trace fine gravel, moist	11	
12			0.0	NA	6"	SAA	12	
13			0.0	11,9,13,17	18"	Cobble	13	
14			0.0	NA	NA	NA	14	
15			0.0	12,12,12,12	17"	Brown, SILT, little fine sand, trace fine gravel, trace clay, moist	15	
16			0.0	0	NA	SAA	16	
17			0.0	6,9,10,14	13"	SAA	17	
18			0.0	NA	NA	SAA	18	
19			0.0	NA	NA	SAA	19	
20			0.0	NA	NA	SAA	20	
21			0.0	NA	NA	SAA	21	
22			0.0	NA	NA	SAA	22	
23			0.0	NA	NA	SAA	23	
24			0.0	NA	NA	SAA	24	
25			0.0	NA	NA	SAA	25	
26			0.0	NA	NA	SAA	26	
27			0.0	NA	NA	SAA	27	
28			0.0	NA	NA	SAA	28	
29			0.0	NA	NA	SAA	29	
30			0.0	NA	NA	SAA, boring termination	30	

**Notes:**

Water Table

NA

Not Applicable

bgs

Below ground surface

SAA

Same as above

# KLEINFELDER

1279 Route 300, Newburgh, New York, 12550  
Phone: (845) 567-6530 Fax: (845) 567-6542

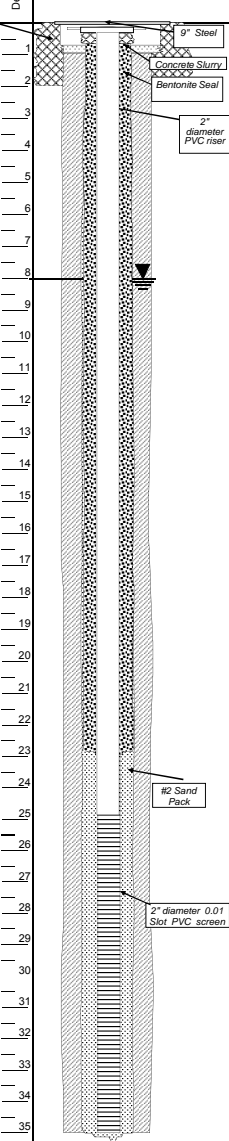
## Boring Log

<b>Project:</b>	119502	<b>Casing Elevation:</b>	547.76
<b>Client:</b>	sanofi-aventis	<b>Total Depth:</b>	35' BGS
<b>Location:</b>	755 Jefferson Road, Rochester, NY	<b>Water Level:</b>	8.14'
<b>Boring ID:</b>	MW-23I	<b>Drilling Co.:</b>	Paragon Drilling
<b>Screen Length:</b>	10'	<b>Driller:</b>	Doug H.
<b>Diameter:</b>	2"	<b>Method:</b>	Hollow Stem Auger
<b>PVC Type:</b>	Schedule 40	<b>Start Date:</b>	12/21/10
<b>Slot Size:</b>	0.010	<b>End Date:</b>	12/21/10
<b>Casing Length:</b>	25'	<b>Notes:</b>	
<b>Diameter:</b>	2"	<b>Log by:</b>	AW
		<b>Checked by:</b>	



Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Bows / 6"	Recovery / Penetration (inches)	Description	Depth (ft.)
						Concrete Collar	
1			0.0	Hand Clear	Hand Clear	Asphalt	1
2			0.0	NA	NA	Backfill/crushed stone	2
3			0.0	NA	NA	SAA	3
4			0.0	NA	NA	Brown, SILT, some clay, trace cobbles, trace fine gravel, dry	4
5			0.0	NA	NA	SAA	5
6			0.0	NA	NA	Brown, SILT and clay, little fine sand, trace fine gravel, dry	6
7			0.0	NA	NA	SAA	7
8			0.0	NA	NA	SAA	8
9			0.0	NA	NA	SAA	9
10			0.0	3/4/6/5	13"	SAA	10
11			0.0	6,6,7,12	21"	Brown, SILT and clay, little fine sand, trace fine gravel, moist	11
12			0.0	NA	6"	SAA	12
13			0.0	11,9,13,17	18"	Cobble	13
14			0.0	12,12,12,12	17"	NA	14
15			0.0	6,9,10,14	13"	NA	15
16			0.0	13,10,10,13	24"	Brown, SILT, little fine sand, trace fine gravel, trace clay, moist	16
17			0.0	3,5,7,12	0"	SAA	17
18			0.0	15,12,5,7	9"	SAA	18
19			0.0	8,7,6,10	16"	SAA	19
20			0.0	5,5,7,12	24"	SAA	20
21			0.0	6,8,11,11	6"	SAA	21
22			0.0	4,6,13,8	16"	SAA	22
23			0.0	4,7,8,9	8"	SAA	23
24			0.0	7,9,11,12	5"	SAA	24
25			0.0	8,8,10,11	12"	SAA	25
26			0.0			SAA, Boring terminated	26

### Well Diagram



#### Notes:

- Water Table
- NA Not Applicable
- bgs Below ground surface
- SAA Same as above

# KLEINFELDER

1279 Route 303, Hamdenburg, New York, 12090  
Phone: (845) 967-6530 Fax: (845) 967-6542

## Boring Log MW-23D



Project:	119502	Casing Elevation:	547.62
Client:	sanofi-aventis	Total Depth:	55' BGS
Location:	755 Jefferson Road, Rochester, NY	Water Level:	26.15'
Boring ID:	MW-23D	Drilling Co.:	Paragon Drilling
Screen Length:	10'	Driller:	Doug H.
Diameter:	2"	Method:	Hollow Stem Auger
PVC Type:	Schedule 40	Start Date:	12/22/10
Slot Size:	0.010	End Date:	12/22/10
Casing Length:	45'	Notes:	
Diameter:	2"	Log by:	AW
		Checked by:	

Depth (ft.)	Sample ID	Sample Interval (ft.)	P.D. Holes (ft.)	Bore / (ft.)	Remarks / Penetration (ft.)	Description	Well Diagram
1		0.0	Hand Clear	Hand Clear	Asphalt	Concrete Collar	
2		0.0	NA	NA	Backfill/crushed stone		
3		0.0	NA	NA	SAA		
4		0.0	NA	NA	Brown, SILT, some clay, trace cobbles, trace fine gravel, dry		
5		0.0	NA	NA	SAA		
6		0.0	NA	NA	Brown, SILT and clay, little fine sand, trace fine gravel, dry		
7		0.0	NA	NA	SAA		
8		0.0	NA	NA	SAA		
9		0.0	NA	NA	SAA		
10		0.0	NA	NA	SAA		
11		0.0	NA	NA	SAA		
12		0.0	NA	NA	SAA		
13		0.0	NA	NA	SAA		
14		0.0	NA	NA	SAA		
15		0.0	NA	NA	SAA		
16		0.0	NA	NA	SAA		
17		0.0	NA	NA	SAA		
18		0.0	NA	NA	SAA		
19		0.0	NA	NA	SAA		
20		0.0	NA	NA	SAA		
21		0.0	NA	NA	SAA		
22		0.0	NA	NA	SAA		
23		0.0	NA	NA	SAA		
24		0.0	NA	NA	SAA		
25		0.0	NA	NA	SAA		
26		0.0	NA	NA	SAA		
27		0.0	NA	NA	SAA		
28		0.0	NA	NA	SAA		
29		0.0	NA	NA	SAA		
30		0.0	NA	NA	SAA		
31		0.0	NA	NA	SAA		
32		0.0	NA	NA	SAA		
33		0.0	NA	NA	SAA		
34		0.0	NA	NA	SAA		
35		0.0	NA	NA	SAA		
36		0.0	NA	NA	SAA		
37		0.0	NA	NA	SAA		
38		0.0	NA	NA	SAA		
39		0.0	NA	NA	SAA		
40		0.0	NA	NA	SAA		
41		0.0	NA	NA	SAA		
42		0.0	NA	NA	SAA		
43		0.0	NA	NA	SAA		
44		0.0	NA	NA	SAA		
45		0.0	NA	NA	SAA		
46		0.0	NA	NA	SAA		
47		0.0	NA	NA	SAA		
48		0.0	NA	NA	SAA		
49		0.0	NA	NA	SAA		
50		0.0	NA	NA	SAA		
51		0.0	NA	NA	SAA		
52		0.0	NA	NA	SAA		
53		0.0	NA	NA	SAA		
54		0.0	NA	NA	SAA		
55		0.0	NA	NA	SAA		
56		0.0	NA	NA	SAA		

### Notes:

Water Table

NA Not Applicable

bgs Below ground surface

SAA Sam e as above

**KLEINFELDER**

1279 Route 300, Newburgh, New York, 12550  
Phone: (845) 567-6530 Fax: (845) 567-6542

**Boring Log  
SB-P1**

Project:	119502	Casing Elevation:	NA
Client:	sanofi-aventis	Total Depth:	40' BGS
Location:	755 Jefferson Road, Rochester, NY	Water Level:	NA
Boring ID:	SB-P1	Drilling Co.:	Paragon Drilling
Screen Length:	NA	Driller:	Justin N.
Diameter:	NA	Method:	Direct Push
PVC Type:	NA	Start Date:	12/22/10
Slot Size:	NA	End Date:	12/22/10
Casing Length:	NA	Notes:	* Denotes sample submitted for laboratory analysis
Diameter:	NA	Log by:	AW
		Checked by:	



Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description	Depth (ft.)
1			0.0	NA	36"	Grass/organic material	1
2			0.0			Brown, SILT some fine to med sand, trace gravel, dry	2
3			0.0			SAA	3
4			0.0			SAA	4
5			0.0		12"	SAA, Moist	5
6			0.0			SAA	6
7			0.0			Brown, CLAY and silt, trace gravel, dry	7
8			0.0			SAA	8
9			0.0		48"	SAA	9
10			0.0			Brown, SILT and clay, trace gravel, dry	10
11			0.0			SAA	11
12			0.0		48"	SAA	12
13			0.0			SAA	13
14			0.0			SAA	14
15			0.0			SAA	15
16			0.0		48"	SAA	16
17			0.0			SAA	17
18			0.0			SAA	18
19			0.0			Gray, SILT and clay, trace fine to med sand, trace gravel, moist	19
20			0.0			SAA	20
21			65		48"	SAA	21
22			46			SAA	22
23			0.0			SAA	23
24			0.0			SAA	24
25			0.0		48"	SAA, moist to wet	25
26			0.0			SAA	26
27			6.9			SAA	27
28			14.5			SAA	28
29			20.2		48"	SAA	29
30			55.3			SAA	30
31			97			SAA	31
32	SB-P1 (32)"	31.5'-32'	116			SAA	32
33			14.1		48"	SAA, wet	33
34			0.0			SAA	34
35			0.0			SAA	35
36			0.0			SAA	36
37			0.0		48"	SAA	37
38			0.0			SAA	38
39			0.0			SAA	39
40	SB-P1 (40)"	39.5'-40'	0.0			SAA, boring terminated	40
41							41

**Notes:**

- Water Table
- NA Not Applicable
- bgs Below ground surface
- SAA Same as above



**KLEINFELDER**

1279 Route 300, Newburgh, New York, 12550  
Phone: (845) 567-6530 Fax: (845) 567-6542

**Boring Log**

Project:	119502	Casing Elevation:	NA
Client:	sanofi-aventis	Total Length:	40' BGS
Location:	755 Jefferson Road, Rochester, NY	Water Level:	NA
Boring ID:	SB-P2	Drilling Co.:	Paragon Drilling
Screen Length:	NA	Driller:	Doug H.
Diameter:	NA	Method:	Direct Push
PVC Type:	NA	Start Date:	12/22/10
Slot Size:	NA	End Date:	12/22/10
Casing Length:	NA	Notes:	* Denotes sample submitted for laboratory analysis, boring was drilled at a 45 deg angle
Diameter:	NA	Log by:	AW
		Checked by:	



Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description	Depth (ft.)
1			0.0	NA	18"	Grass/organic material	1
2			0.0			Brown, SILT and clay, trace fine gravel, dry	2
3			0.0			SAA	3
4			0.0			SAA	4
5			0.0		27"	SAA	5
6			0.0			SAA	6
7			0.0			SAA	7
8			0.0			SAA	8
9			0.0			SAA	9
10			0.0		2"	Brown, SILT and clay, trace fine gravel, moist	10
11			0.0			SAA	11
12			0.0			NA, very little recovery	12
13			0.0			NA	13
14			0.0			NA	14
15			0.0		2"	NA	15
16			0.0			NA, very little recovery	16
17			0.0			NA	17
18			0.0			NA	18
19			0.0			NA	19
20			0.0		60"	NA	20
21			0.0			Brown, SILT, some clay, some gravel, moist to wet	21
22			0.0			SAA	22
23			0.0			SAA	23
24			0.0			SAA	24
25			0.0		60"	SAA	25
26			0.0			SAA	26
27			0.0			SAA	27
28			0.0			SAA	28
29			37			SAA	29
30			116		38"	SAA	30
31			345			SAA	31
32	SB-P2 (32)*	31.5'-32'	960			SAA	32
33			195			SAA	33
34			3.2			SAA	34
35			0.0		35"	SAA	35
36			1.9			SAA	36
37			0.0			SAA	37
38			0.0			SAA	38
39			0.0			SAA	39
40	SB-P2 (40)*	39.5'-40'	0.0			SAA, boring terminated	40
41							41

**Notes:**

Water Table  
NA Not Applicable  
bgs Below ground surface  
SAA Same as above

**KLEINFELDER**

1279 Route 300, Newburgh, New York, 12550  
 Phone: (845) 567-6530 Fax: (845) 567-6542

**Boring Log**

<b>Project:</b>	119502	<b>Casing Elevation:</b>	NA
<b>Client:</b>	sancofi-aventis	<b>Total Length:</b>	30' BGS
<b>Location:</b>	755 Jefferson Road, Rochester, NY	<b>Water Level:</b>	NA
<b>Boring ID:</b>	SB-P3	<b>Drilling Co.:</b>	Paragon Drilling
<b>Screen Length:</b>	NA	<b>Driller:</b>	Doug H.
<b>Diameter:</b>	NA	<b>Method:</b>	Direct Push
<b>PVC Type:</b>	NA	<b>Start Date:</b>	1/3/11
<b>Slot Size:</b>	NA	<b>End Date:</b>	1/3/11
<b>Casing Length:</b>	NA	<b>Notes:</b>	* Denotes sample submitted for laboratory analysis, boring was drilled at a 45 deg angle
<b>Diameter:</b>	NA	<b>Log by:</b>	AW
		<b>Checked by:</b>	



Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description	Depth (ft.)
1			0.0	NA	18"	Grass/organic material	1
2			0.0			Brown, SILT and clay, trace fine gravel, dry	2
3			0.0			SAA	3
4			0.0			SAA	4
5			0.0		27"	SAA	5
6			0.0			SAA	6
7			0.0			SAA	7
8			0.0			SAA	8
9			0.0			SAA	9
10			0.0		2"	Brown, SILT and clay, trace fine gravel, moist	10
11			0.0			SAA	11
12			0.0			NA, very little recovery	12
13			0.0			NA	13
14			0.0			NA	14
15			0.0		2"	NA	15
16			0.0			NA, very little recovery	16
17			0.0			NA	17
18			0.0			NA	18
19			0.0			NA	19
20			44.7		60"	NA	20
21			298			Brown, SILT, some clay, some gravel, moist to wet	21
22			295			SAA	22
23			189			SAA	23
24	SB-P3 (24)*	23.5'-24'	314			SAA	24
25			45.9		60"	SAA	25
26			3.0			SAA	26
27			1.2			SAA	27
28			0.0			SAA	28
29			0.0			SAA	29
30	SB-P3 (30)*	29.5'-30'	0.0			SAA, boring terminated	30
							31
							32
							33
							34
							35
							36
							37
							38
							39
							40
							41

**Notes:**

Water Table  
 NA Not Applicable  
 bgs Below ground surface  
 SAA Same as above