

CONSTRUCTION COMPLETION REPORT D9 AREA

COTTAGE GROVE SITE COTTAGE GROVE, MINNESOTA

JANUARY 18, 2011

Prepared for

3M Company St. Paul, Minnesota 55144

Prepared by Weston Solutions, Inc. West Chester, Pennsylvania 19380

W.O. No. 02181.002.212

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Exhibit 2318 State of Minnesota v. 3M Co., Court File No. 27-CV-10-28862

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COTTAGE GROVE D9 AREA CONSTRUCTION COMPLETION CERTIFICATIONS

- Construction mobilization commenced the week of May 24, 2010. Excavation activities . were completed on August 19, 2010, with hauling of excavated material completed on October 5, 2010.
- Notification to MPCA of project completion, November 19, 2010.
- Site decommissioning activities were completed on December 17, 2010. .
- The limits of removal, as specified in the November 2009 Remedial Design/Response Action (RD/RA) Plan for the Cottage Grove Site, were all met or exceeded.
- 464 truckloads, equaling 7,482 cubic yards (11,074 tons) of material, were hauled to SKB Landfill in Rosemount, Minnesota.
- 57 truckloads, equaling 961 cubic yards (1,307 tons) of material, were hauled to the EO . Landfill (Wayne Disposal, Inc.) in Belleville, Michigan.
- The work was performed with no lost time, injuries, or near misses. .

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LIST OF ACRONYMS

3 M	3M Company
AOC	area of contamination
bgs	below ground surface
Bolander	Carl Bolander and Sons, Inc.
BTEX	benzene, toluene, ethylbenzene, and xylene
CCR	Construction Completion Report
CRZ	Contamination Reduction Zone
CSP	Construction Sampling Plan
EQ	Environmental Quality Company
FC	fluorochemical
HASP	Health and Safety Plan
IRA	Interim Response Action
IRAP	Interim Response Action Plan
MDD	Minnesota Decision Document
mg/kg	milligrams per kilogram
MPCA	Minnesota Pollution Control Agency
NPDES	National Pollutant Discharge Elimination System
PCB	polychlorinated biphenyl
pDR	personal DataRam
PFC	perfluorochemical
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
PID	photoionization detector
PPE	personal protective equipment
QAPP	Quality Assurance Project Plan
RD/RA	Remedial Design/Response Action
RI/FS	Remedial Investigation/Feasibility Study
SKB	SKB Industrial Landfill
SRV	Soil Reference Value
SVOC	semivolatile organic compound
TCLP	toxicity characteristic leaching procedure
VOC	volatile organic compound
WESTON	Weston Solutions, Inc.

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1. INTRODUCTION

On behalf of the 3M Company (3M), Weston Solutions, Inc. (WESTON_®) has prepared this Construction Completion Report (CCR) for the Perfluorochemical (PFC) Remediation at the D9 Area at the 3M Cottage Grove, Minnesota Site. 3M is submitting this document to the Minnesota Pollution Control Agency (MPCA) in compliance with the May 2007 Agreement and Consent Order (Agreement) between 3M and the MPCA and the requirements of the approved *Remedial Design/Response Action Plan for the Cottage Grove Site* (RD/RA Plan) (WESTON, 2009c). All construction activities were completed in accordance with the RD/RA Plan submitted to the MPCA on December 1, 2009 and information provided in this report.

1.1 BACKGROUND

1.1.1 Site History

The 3M Cottage Grove, Minnesota facility, formerly the 3M Chemolite facility, has been in operation since 1947. The facility currently manufactures a range of products, some of which include adhesive products, specialty paper, industrial polymers, abrasives, and reflective road sign materials. The facility also engages in research and development of a proprietary nature.

Since the 1980s, 3M has worked cooperatively with state and local authorities in conducting investigation and remediation programs for various environmental media at the 3M Cottage Grove facility located in Cottage Grove, Minnesota (the Site). More recently, 3M has been involved in assessments of the presence of PFCs in these media.

Three former waste disposal areas at the Site, known as the D1, D2, and D9 Areas, were found to contain PFCs at concentrations greater than the Minnesota Industrial Soil Reference Values (SRVs). Remedial construction activities to remove soils containing PFCs at concentrations greater than the Industrial SRVs at the Dl and D2 Areas were conducted from December 2009 to May 2010. The *Construction Completion Report - D1 and D2 Areas, Cottage Grove Site* (D1 and D2 Areas CCR) was submitted to MPCA on July 23, 2010 to document the performance of remediation activities at the D1 and D2 Areas in accordance with the RD/RA Plan and information provided in the report.

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The D9 Area is located west and in the vicinity of the D1 and D2 Areas as depicted in Figure 1-1. The performance of remedial construction activities at the D9 Area is the subject of this report.

1.1.2 Perfluorochemical (PFC) Program

Since 2004, 3M has been working with the MPCA to assess the presence and extent of PFCs at the Site. Specifically, field activities were conducted by 3M to assess the presence of PFCs in groundwater, surface water, sediment, and soils as part of a site remedial investigation. On April 7, 2006, 3M submitted the *Fluorochemical (FC) Data Assessment Report* (Data Assessment Report) (WESTON, 2006) to the MPCA. This document contained a summary of the assessment activities, the results of these activities, identification of data needs and recommendations for the future course of action.

3M and the MPCA also entered into a Settlement Agreement and Consent Order (Agreement) with the MPCA for the purpose of conducting remedial investigations and response actions to address PFCs at the Site. The Agreement became effective on May 22, 2007. It required that 3M conduct a Remedial Investigation/Feasibility Study (RI/FS) and prepare a Remedial Design/Response Action (RD/RA) Plan with respect to the release or threatened release of PFCs at and from the Site.

The Remedial Investigation Report (Phase 2 Fluorochemical (FC) Data Assessment Report) (RI Report) (WESTON, 2007) was submitted by 3M to MPCA on June 29, 2007. The RI Report, together with the April 2006 Data Assessment Report, met the RI requirements of the Agreement, as stated by MPCA.

On March 13, 2008, 3M submitted the *Feasibility Study for the Cottage Grove Site, Cottage Grove, Minnesota* (FS Report) (WESTON, 2008a) to the MPCA. The FS Report was followed by Addendum 1 in April 2008 (WESTON, 2008b) and Addendum 2 in January 2009 (WESTON, 2009a), which were prepared and submitted to the MPCA in response to MPCA's requests for more information on the FS alternatives and additional PFC investigation.

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FS Addendum No. 1, entitled Addendum to the Feasibility Studies for the Oakdale, Woodbury, and Cottage Grove Sites, Minnesota (WESTON, 2008b), was submitted by 3M to the MPCA on April 16, 2008. It was prepared to provide a description of off-site disposal locations reviewed and considered, along with a recommended disposal facility, for soil and sediment excavated from the Oakdale, Woodbury and Cottage Grove Sites under the MPCA-approved soil and sediment response action alternatives. The recommended disposal facility was the SKB Industrial Landfill (SKB) in Rosemount, Minnesota, where a separate, engineered cell would be constructed to contain the excavated PFC-containing materials.

In a letter to 3M dated April 30, 2008, the MPCA provided to 3M conditional approval of the Cottage Grove FS Report and FS Addendum No. 1. MPCA indicated its concurrence on the recommended Sitewide Alternative SW-2 and provided specific requirements for the implementation of the institutional controls. The MPCA concurred that an enhanced groundwater recovery system is needed at the Site to control migration of groundwater containing PFCs, and granted approval to proceed with pre-design activities regarding the proposed system in Groundwater Alternative GW-1. The MPCA also recommended that Soil and Sediment Alternative S/S-3 be implemented and indicated that 3M had approval to conduct additional activities to refine the areas of soil and sediment removal.

On January 6, 2009, 3M submitted to the MPCA FS Addendum No. 2, entitled *Feasibility Study Report Addendum No. 2 (Pre-Design Data Report and Alternative Refinement) for Cottage Grove Site, Cottage Grove, Minnesota* (WESTON, 2009a). FS Addendum No. 2 contained a description of the pre-design activities completed in 2008 and the associated results. In addition, FS Addendum No. 2 contained a description of Refined Soil and Sediment Alternative S/S-3 and a justification for the Groundwater Alternative GW-1. In a letter to 3M dated February 19, 2009, the MPCA approved FS Addendum No. 2.

From May to October 2009, 3M worked with MPCA and obtained approval to implement components of Refined Alternative S/S-3 that address the D1 and D2 areas as an Interim Response Action (IRA). During this timeframe, the Site continued through the RD/RA process. Specifically, on May 20, 2009, the MPCA issued the *Proposed Cleanup Plan for PFCs* (Proposed Plan) (MPCA, 2009a) for the Cottage Grove Site, placed a public notice in the *South*

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Washington County Bulletin, and held a public meeting on May 27, 2009 to present its recommended alternatives (Sitewide Alternative SW-2, Groundwater Alternative GW-1, and Refined Soil and Sediment Alternative S/S-3). The public was given the opportunity to provide written and oral comments on the proposed remedy.

On August 28, 2009, the MPCA indicated its selection of final response actions in the Minnesota Decision Document (MDD) (MPCA, 2009b) for the Cottage Grove Site. The selected final response actions are a combination of alternatives consistent with those presented in the Proposed Plan and are described as follows:

- Sitewide Alternative SW-2 Institutional controls, access restriction and groundwater monitoring.
- Groundwater Alternative GW-1 Enhanced groundwater recovery with treatment prior to discharge.
- Refined Soil and Sediment Alternative S/S-3 Remove D1 Area concrete basin structure and overlying soils; excavate soil with PFC concentrations that exceed Industrial SRVs at the Eastern Disposal Areas (D1, D2 and D9 Areas) in accordance with the MPCA-approved RD/RA Plan; stabilize the flow channel and remove PFC-containing sediments throughout the East Cove; remove portions of the sandbar at the cove outlet; transport excavated materials to the SKB Landfill in Rosemount, Minnesota; backfill excavations with clean soil, grade for positive drainage, and revegetate; and collect leachate at SKB for treatment at the 3M Cottage Grove facility.

The MPCA also indicated in the MDD that the selected remedy (i.e., disposal at the SKB Landfill) meets the requirements of the Agreement for an isolated, engineered permitted facility to contain the excavated PFC-containing material. 3M submitted to the MPCA the RD/RA Plan on December 1, 2009 and the MPCA approved the RD/RA Plan with comments on February 1, 2010.

As presented in the RD/RA Plan, the response action for the D-9 Area at the Cottage Grove Site includes:

• Excavation and off-site disposal of soils from the D9 Area in accordance with Refined Soil and Sediment Alternative S/S-3.

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Due to the length of time required for implementation and completion of the entire RD/RA Plan program, it was agreed between 3M and MPCA that Construction Completion Reports (CCRs) would be prepared for each major response action element when completed. Thus, four CCRs would be submitted to MPCA, one each for: the D1 and D2 Area soils, the D9 Area soils, the East Cove and sandbar sediments, and site groundwater and institutional controls.

The excavation and off-site disposal of soils from the D1 and D2 Areas was performed in winter 2010 in accordance with the MPCA-approved *Interim Response Action Plan* (IRAP) (WESTON, 2009b) and RD/RA Plan. Final grading and backfill of disturbed areas was completed in spring 2010 and the *Construction Completion Report – D1 and D2 Areas* (WESTON, 2010) (D1 and D2 Areas CCR) was submitted to the MPCA in July 2010. It is important to note that the graded D1 and D2 Areas were used for stockpile staging during the subsequent D9 Area activities, and thus, were not revegetated upon completion of removal activities.

This D9 Area CCR provides documentation of the completion of the D9 Area response action activities under Refined Soil and Sediment Alternative S/S-3. To summarize, the excavation and off-site disposal of soils from the D9 Area was performed in summer 2010. Final backfill and grading of disturbed areas was completed in December 2010. In preparation for upcoming East Cove remedial construction activities in summer 2011, the D9 Area was covered with stone so it can serve as a construction equipment laydown area. A native seed mix was applied to the D1 and D2 Areas and covered with straw. More detail regarding site restoration is provided in Section 3.9 of this CCR.

1.2 REFINED SOIL ALTERNATIVE S/S-3: D9 AREA

For the D9 Area, Refined Soil and Sediment Alternative S/S-3 includes the excavation of the D9 Area soils with PFC concentrations that exceed the Industrial SRVs. The PFC soil characterization data for the D9 Area are shown in Figure 1-2. It is important to note that SRVs for PFOA and PFOS were revised on June 22, 2009 after FS Addendum No. 2 was submitted to and approved by MPCA. The Industrial SRV for perfluorooctanoic acid (PFOA) was revised from 23 to 13 milligrams per kilogram (mg/kg) (or parts per million [ppm]). The Industrial SRV for perfluorooctane sulfonate (PFOS) was revised from 12 to 14 ppm. As noted in its letter to 3M dated October 7, 2009, the MPCA indicated that for the D1, D2 and D9 Areas, 3M shall excavate

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PFC-contaminated material that exceeds the revised Industrial SRV for PFOA of 13 ppm. Although the revised Industrial SRV for PFOS is 14 ppm, MPCA required 3M to remove PFC-contaminated material that contains PFOS concentrations greater than 12 ppm.

In the FS Report, it is stated that soils containing PFOS concentrations that exceed the Industrial SRV in the D9 Area between 10 and 25 ft bgs will be targeted for removal and off-site disposal. Considering the additional pre-design PFC analytical data and the target PFC concentrations, Alternative S/S-3 was refined with respect to removal of soil from the D9 Area. Specifically, soils to a depth of 10 ft bgs do not contain PFOA or PFOS concentrations that exceed the target PFC concentrations. Therefore, these soils would be removed and stockpiled on-site for subsequent backfill. Soils between 10 and 25 feet bgs that exceed the target PFC concentrations would be removed for off-site disposal as shown in Figure 1-3. In the area of borings MW106, MW107, D918, D919, D923, and D925 through D928, the excavation would extend to 25 feet bgs; and in the area of soil boring D916, the excavation would extend to a depth of 15 feet bgs.

At soil boring D9B04, a PFOA concentration of 13.4 ppm was detected in a soil sample collected from the 10 to 15 feet bgs depth interval. This location would not be excavated for the following reasons:

- This PFOA concentration is very close to the revised target concentration of 13 ppm and is located below accessible soils (0 to 4 feet bgs) and near the bottom of or below the range of potentially accessible soils (4 to 12 feet bgs).
- The remainder of the soil samples from boring D9B04, which were collected to a depth of 25 feet bgs, indicated low PFOA concentrations ranging from 0.0326 to 1.32 ppm.
- The occurrence of this concentration is isolated and not contiguous to the excavation limits of the D9 Area. As shown in Figures 1-2 and 1-3, soil boring D915 is located east of soil boring D9B04 and west of the excavation limits. Soil samples collected at D915 did not contain any PFC concentrations greater than the Industrial SRVs or PFOS concentrations greater than 12 ppm.

Geotechnical information collected during a soil boring program conducted in December 2008 indicated that soil properties below 15 ft bgs in the D9 Area could restrict the vertical extent of excavation. The actual limits and final extent of excavation would depend on field conditions encountered during excavation and an excavation decision tree was provided in the RD/RA Plan

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for an "open excavation" approach, if such an approach was used. Any remaining PFC mass in the D9 Area that may potentially migrate to groundwater would be captured by the groundwater extraction system to be implemented in accordance with Groundwater Alternative GW-1, which will capture/contain the groundwater beneath the D9 Area.

Based on this information, the Refined Soil and Sediment Alternative S/S-3 includes the following components at the D9 Area:

- Excavate soil that exceeds the PFOA and PFOS Industrial SRVs or a PFOS concentration of 12 ppm. This would include selective removal of the soils in the D9 Area between 10 and 25 ft bgs.
- Transport excavated soil and other encountered debris to an existing permitted off-site landfill to provide engineered isolation and containment of PFCs for these materials.
- Backfill the excavation with clean fill and grade the area to facilitate stormwater drainage.

Excavated soils would be transported to the SKB Environmental (SKB) Landfill in Rosemount, Minnesota, subject to the landfill's acceptance criteria. Soil not meeting SKB's permit criteria would be segregated and disposed at a separate and appropriate off-site facility.

1.3 PURPOSE OF THE CONSTRUCTION COMPLETION REPORT

The purpose of this CCR is to document the response actions that have been completed at the D9 Area at the Cottage Grove, Minnesota Site. This CCR will be followed by separate CCRs for the response actions at the East Cove and for groundwater extraction and treatment as they are completed in accordance with the RD/RA Plan.

1.4 **RESPONSE ACTION OBJECTIVES**

In accordance with the MDD, the objectives of the response actions at the Cottage Grove Site that will be met by the D9 Area removal include the following:

- To eliminate unacceptable human risk exposure to PFCs in soil.
- To reduce unacceptable human or environmental risk exposure to PFCs in groundwater.
- To control migration of PFC contaminated groundwater to adjacent surface water.
- To reduce unacceptable human or environmental risk exposure to PFCs in surface water.

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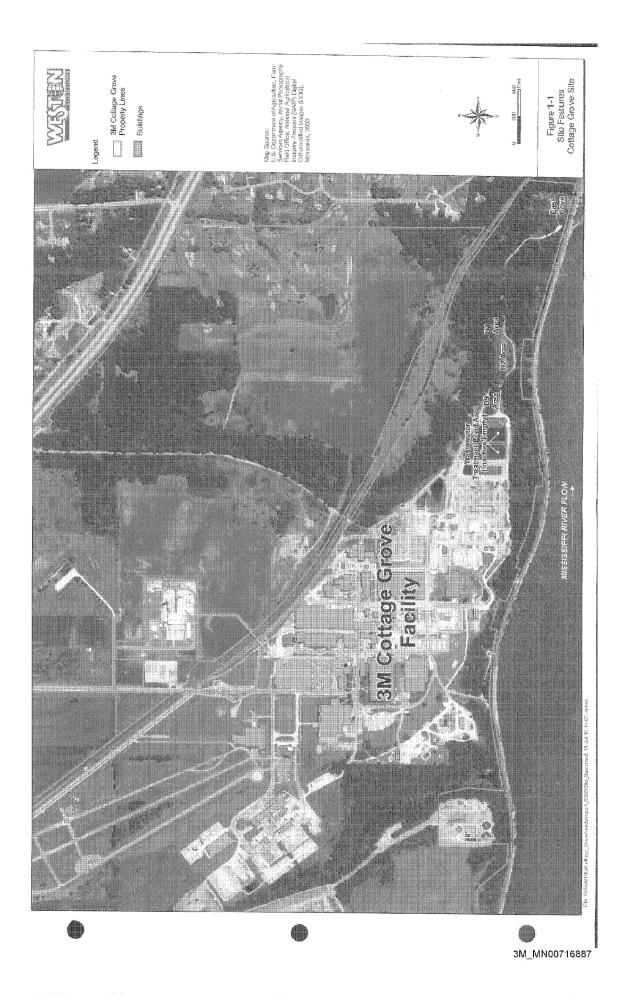
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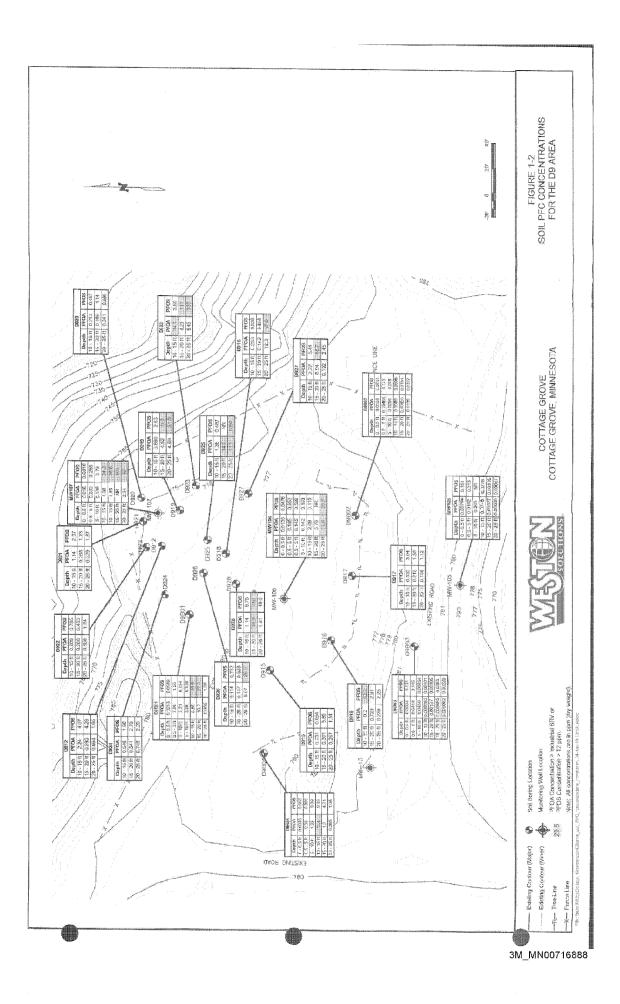


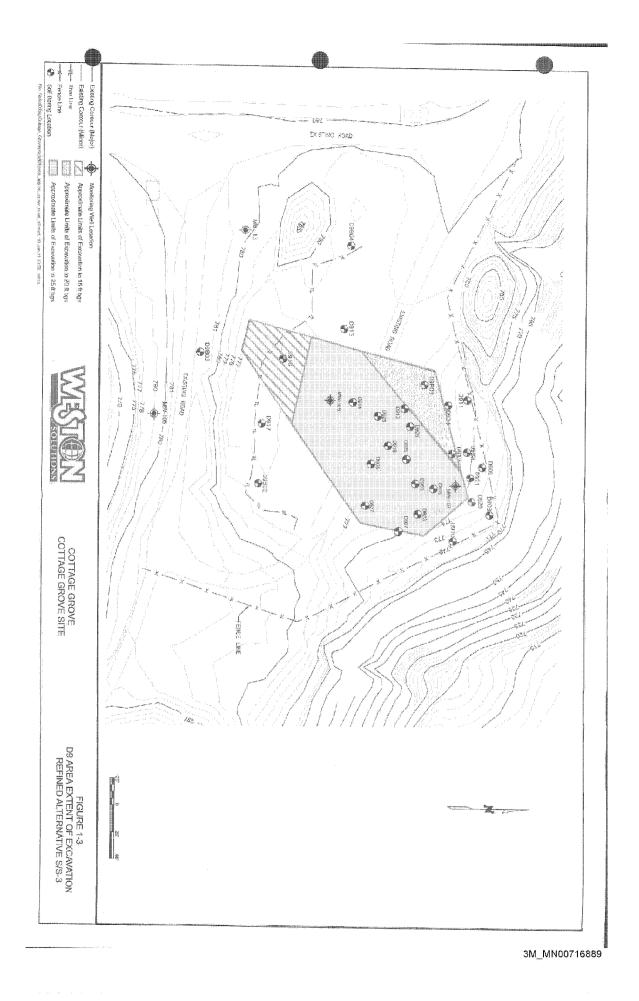
SECTION 1 FIGURES

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2. PRE-CONSTRUCTION

2.1 SOIL DISPOSAL PROFILE SAMPLING

Considering the history of the site and previous soil analyses, it was expected that soils containing VOCs, as well as PFCs, would be encountered during excavation activities. In accordance with Refined Soil and Sediment Alternative S/S-3, the excavated PFC-containing soils would be disposed at the SKB Landfill in Rosemont, Minnesota. However, the presence of VOCs or PCBs in the soils could potentially prevent their acceptance at SKB.

In June 2008, initial profile screening sampling (soil boring locations D905 and D906) was conducted in the D9 Area to gain a general understanding of the non-PFC composition of the D9 Area material. This was followed by another sampling event in March 2009 (soil boring locations D912 through D917). A description of the sampling activities and a summary of the analytical results for the June 2008 and March 2009 sampling events were presented in the MPCA-approved RD/RA Plan (WESTON, 2009c). In February 2010, a final sampling event was conducted in accordance with the Construction Sampling Plan (CSP) (provided as Attachment 1) to the RD/RA Plan, which contains a description of the in situ sampling to be performed prior to excavation. A summary of the February 2010 in situ soil sampling and results is provided below.

February 2010 Profile Sampling - Considering the data already obtained for the D9 Area, a final round of soil samples were collected in February 2010 from nine additional soil boring locations, D929 through D937, to obtain soil disposal profiling data for each soil block within the excavation in accordance with the CSP. The soil boring locations are shown in Figure 2-1. A total of 38 samples (17 grab samples and 21 composite samples) were collected from the borings using the following methodology as presented in the CSP:

• 5-foot sample cores were field screened visually and with a PID, and a grab sample was collected from the location of highest PID reading for blocks that required volatile organic compound (VOC) analysis.

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- Composite soil samples were collected from 5-foot sample intervals for polychlorinated biphenyl (PCB), metals, toxicity characteristic leaching procedure (TCLP) VOC, TCLP semivolatile organic compound (SVOC), TCLP metals, reactivity, flashpoint, and pH analysis (where applicable).
- QA/QC samples were collected and analyzed consistent with the CSP.

The soil boring disposal profiling data are provided in Appendix D.

Disposal Profiling -As part of the file review process that was performed by 3M and WESTON in 2005 to identify possible PFC waste disposal locations, facility personnel interviews also were conducted. It was found that the facility personnel interviews corroborated information from the file reviews and provided additional details. Even though the D9 disposal area was not identified in the 2005 file review, from the more recent personnel interviews and review of historical photos, a disposal area was identified and now is referred to as the D9 Area. The D9 Area has since been assessed for PFCs as documented in the RD/RA Plan and soil disposal parameters (i.e., soil boring sampling results). Based on the 2005 file review and personnel interviews, no known disposal of listed waste occurred at the D9 Area. Thus, the hazardous waste determination for the D9 soils would depend on RCRA characteristic criteria. Additionally, the SKB Landfill would not be permitted to accept material with a PCB concentration greater than 50 ppm.

Based on the soil boring sampling results, soil blocks were classified as solid waste or requiring ex situ sampling after excavation. In each soil block classified as requiring ex situ sampling (shown in purple in Figure 2-2), at least one soil sample collected within the block met one of the RCRA characteristic criteria (i.e., the sample leachate concentration was greater than a TCLP limit) or the sample contained a PCB concentration greater than 50 ppm. If there was no TCLP result for soil samples collected within the soil block, the total metals and total VOC concentrations were compared to 20 times the TCLP limit. If the soil concentrations were greater than 20 times the TCLP limit, the block was designated for ex situ sampling. As discussed in the CSP, these soil blocks were excavated and divided into smaller more representative stockpiles (approximately 50 to 100 cubic yards) and sampled (ex situ) for further disposal profiling.

Except for Soil Block D9-2-1, for each of the D9 soil blocks classified as solid waste (shown in yellow in Figure 2-2), none of the soil samples collected within the blocks contained any of the above parameters in excess of the designated limits. Soil Block D9-2-1 only slightly exceeded

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the "20 times TCLP" concentrations for lead and silver. It was planned to collect an in situ sample from this soil block for TCLP metals analysis to confirm the metals results and excavation of this block would not proceed until soil confirmation results were received. (Note: The ex situ sampling results are provided in Appendix D and indicate that this block did meet non-hazardous criteria).

In a letter dated April 15, 2010, 3M requested from the MPCA a determination as to whether the SKB Landfill would be able to accept such soil classified as solid waste as well as stockpiled soils subjected to ex situ sampling and demonstrated to meet solid waste criteria. MPCA responded to the request in an office memorandum dated May 3, 2010 as follows:

"The Minnesota Pollution Control Agency (Agency) has been asked to make a hazardous waste determination review on VOC, PCB, and RCRA metal contaminated soil to be excavated at the 3M Cottage Grove site, D9 Area. The remediation will be overseen by MPCA Superfund staff. 3M indicated that no known listed hazardous waste was disposed in the D9 area. 3M proposes to dispose of all contaminated soil from the D9 area at the SKB landfill if concentrations are below RCRA characteristic criteria and PCB concentrations are less than 50 ppm. VOC concentrations in soil are below Industrial SRVs except for petroleum related compounds (BTEX)."

"The April 15, 2010 Request for Determination from 3M indicates that based on sampling to date, some soil will be sent directly to SKB upon excavation, and some will be stockpiled on site for further sampling and possible treatment in accordance with the construction sampling plan. This Hazardous Waste Determination is contingent on following both the waste management plan and the following comments:

- 1. The assumption here is that the analytical results presented for each grid are representative of the soil in that grid. If there are indications that it is not, additional samples should be collected.
- 2. Soils identified by the in-situ sampling as being below 50 ppm PCB, and showing no characteristics of a hazardous waste can be managed as a non-hazardous waste if disposed at the SKB landfill as approved by SKB.
- 3. Soil to be stockpiled should be stockpiled in the area of contamination (AOC) prior to ex-situ sampling and managed in a way to prevent further release.

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- 4. For the stockpiled soil, all stockpiles that exceed 50 ppm PCB based on ex-situ sampling should be managed as a hazardous waste.
- 5. Stockpiled soil may be treated in the AOC to remove the hazardous waste characteristic. 3M should inform the MPCA how they intend to treat the soil if necessary prior to treatment. It is likely that excavation and stockpiling of soil will decrease VOC levels in most cases. If ex-situ sampling results indicate the stockpiled soil is no longer characteristic, and contains less than 50 ppm PCB, the soil may be managed as a nonhazardous waste if disposed at the SKB Landfill as approved by SKB."

The performance of construction, excavation, and air sampling activities for the D9 Area, complied with the requirements of the MPCA letter approval, are described in Section 3.

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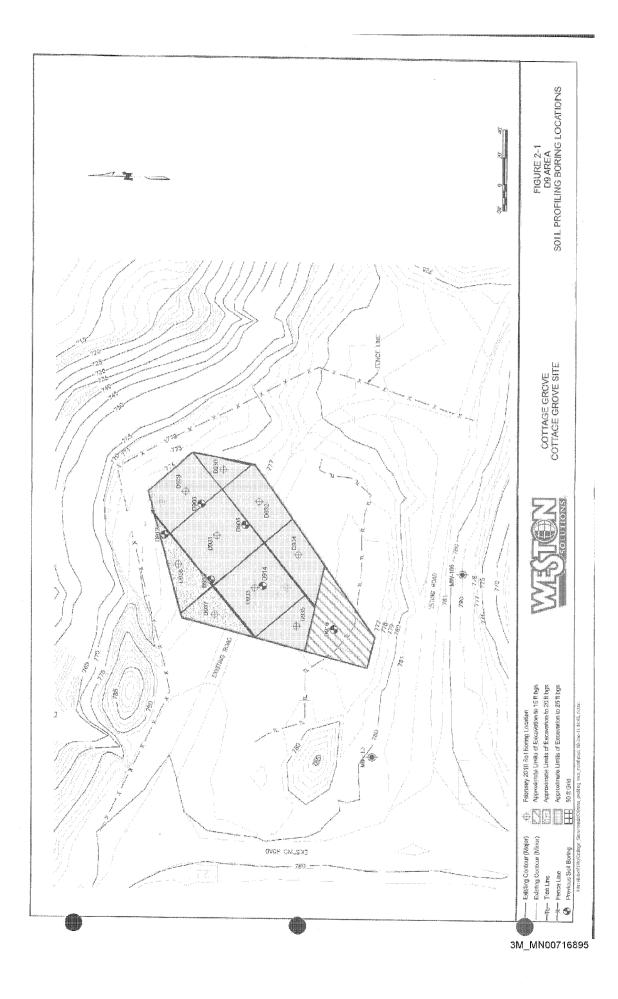
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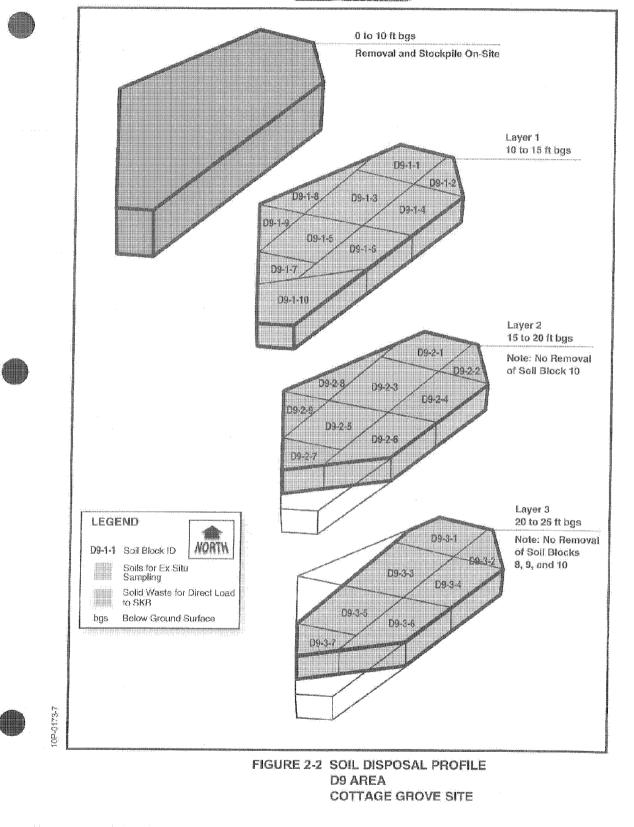
SECTION 2 FIGURES

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3. CONSTRUCTION COMPLETION

The following sections contain a summary of the activities that were conducted to implement the components of Refined Soil Alternative S/S-3 for the Cottage Grove Site D9 Area as presented in the MDD and the MPCA-approved RD/RA Plan. The numbered photographs referenced throughout the text of this CCR can be found in the photograph log provided in Appendix A.

3.1 CONSTRUCTION CHRONOLOGY

Excavation of the D9 Area at the Cottage Grove Site commenced in May 2010. A timeline of preconstruction and construction activities is as follows:

- December 1, 2009 Submission of RD/RA Plan to MPCA.
- February 1, 2010 Approval of the RD/RA Plan by the MPCA.
- May 24, 2010 Mobilization and Site preparation activities begin in the D9 Area.
- June 9, 2010 to August 19, 2010 Excavation of the D9 Area.
- August 25, 2010 Commence backfilling and grading of the D9 Area.
- October 6, 2010 to December 21, 2010 Decommissioning activities (includes equipment demobilization).
 - October 6, 2010 Decommissioning and removal of a portion of the exclusion zone.
 - October 11, 2010 Final removal of the reduced exclusion zone.
 - October 13 to October 20, 2010 Removal and decontamination of sheet piling.
 - November 19, 2010 Formal notification of project completion provided to MPCA.
 - December 21, 2010 Final site survey.

In April 2010, 3M conducted procurement activities and selected a contractor, Carl Bolander and Sons, Inc. (Bolander), to conduct soil excavation and removal followed by backfill and restoration. As indicated in the RD/RA Plan, WESTON performed on-site construction and environmental oversight, sampling, survey control and verification, perimeter monitoring and documentation.

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Site preparation activities were conducted by Bolander beginning on May 24, 2010. These activities consisted of clearing the excavation area, installation of exclusion zone fencing and sediment and erosion controls, installation of stockpile staging and load-out areas, and improvement of the existing access road.

It should be noted that the D9 Area excavation was located immediately west of the D1 and D2 Area excavations, which had just been completed by Bolander in May 2010. Therefore, site mobilization activities were minimized. The construction trailers and sanitary facilities were not moved between the projects. The existing fencing and haul road were adjusted to accommodate the D9 Area excavation. On May 24, 2010, WESTON moved the meteorological monitoring station to a location selected for the D9 Area excavation activities (See Section 3.7.2).

WESTON and their subcontractor, TKDA (a Minnesota licensed surveyor), set up survey control and delineated the excavation area consistent with RD/RA requirements for removal. WESTON and TKDA performed all of the verification and certification surveying for delineation of areas and limits of excavation. Bolander performed operational surveying for their crews and operators.

3.1.1 Summary of D9 Area Construction Activities

It had been decided by 3M that a temporary sheet pile wall would be installed along the northern perimeter of the D9 Area excavation to address potential slope stability issues identified by a geotechnical assessment conducted in December 2008 and summarized in the RD/RA Plan. Specifically, the sheet pile wall would facilitate excavation in the northern portion of the D9 Area into soft soil/waste and immediately adjacent to the steep side slope of a ravine.

On May 21, 2010 the sheet piling was delivered to the site and on May 24, 2010, the installation of the sheet pile wall commenced. Approximately 225 linear feet of sheet pile wall with a wall surface area of approximately 6,700 square feet was installed and consisted of 94 interlocking steel sheets driven approximately 30 feet below ground surface (bgs) or to refusal (due to encountering historic C&D waste material), if less than 30 feet bgs. The sheet pile wall installation was completed on June 2, 2010. Photographs 1 to 5 provided in Appendix A, show the sheet pile wall installation along the north side of the D9 Area.



Bolander constructed stockpile staging areas east of the D9 Area in preparation for the start of excavation activities. This was the location of the former D1 and D2 Area excavations, which had been backfilled and graded in May 2010.

On June 9, 2010, after WESTON surveyed and delineated the limits of excavation, excavation of the D9 Area commenced with the removal and stockpiling of potentially impacted material, i.e., material in the D9 Area, but not containing PFCs at concentrations greater than the Industrial SRVs. The potentially impacted material included the top 10 feet of material from ground surface, which was above and outside the removal limits defined in the RD/RA, as well as the side slope material that was also beyond these removal limits. Previous sampling confirmed that this top 10 feet of material did not contain PFC concentrations greater than the Industrial SRVs. The side slope material is the material on the perimeter of the excavation, outside the limits specified for removal, excavated for slope stability. All potentially impacted material was stockpiled in a designated staging area for the duration of excavation activities and used as backfill material when the D9 Area excavation was complete.

Removal of PFC-containing materials from the D9 Area commenced on July 2, 2010 with the excavation of soil block D9 1-9 and was completed on August 19, 2010 with the excavation of soil block D9 3-4. Hauling of all excavated material was completed on October 5, 2010 with the final stockpiled material from stockpile D9 3-3 005-1 hauled to the EQ Landfill in Belleville, Michigan. Survey verification shots were recorded by WESTON after each individual soil block was excavated and after the completion of excavation activities to ensure the objectives presented in the RD/RA were met or exceeded.

The RD/RA included a "decision tree" procedure to be used in the D9 Area for a conventional "open excavation" into soft or potentially unstable soil conditions. Based on field conditions, the procedure would be followed as a basis for decision making on improving side slope stability and determining the depth of excavation. Admixture material (i.e., lime kiln dust (LKD)) could be used as one option for improving the stability of excavation side slopes if it was determined to be necessary. It could also be used to remove free water, sufficient to allow the material to pass the Paint Filter Test for landfill acceptance and disposal.

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During the D9 Area excavation, it was not necessary to implement the "decision tree" process since side slope stability was not an issue during excavation activities and the sheet piling wall on the north side of the excavation provided stability in that area. Additionally, all material passed the Paint Filter Test indicating that no admixture material was required for disposal. However, LKD was used on site by the contractor to improve soil conditions for the support of heavy equipment and for stockpile conditioning. This is discussed further in Section 3.5.2.1. Photographs 6 to 9, provided in Appendix A, document the LKD usage on-site.

Backfilling of the D9 Area excavation began on August 25, 2010. A detailed description of backfilling activities is presented in Section 3.9. Survey verification shots were recorded by WESTON after backfilling and final grading to ensure the objectives presented in the RD/RA were met. The final survey of the site was conducted on December 21, 2010.

It is noted that in the Fall 2010, backfill, grading, removal of silt fencing, and revegetation/stabilization activities at the D9 Area and the D1/D2 Areas, were coordinated with the East Cove access/haul road improvements (see Section 3.9). The road improvements were conducted in preparation for the upcoming East Cove sediment removal project, i.e., the remaining component of Refined Soil and Sediment Alternative S/S-3 to be implemented. The D9 Area will be utilized during the East Cove sediment excavation for support, staging and stockpile construction. The D9 Area will also be used for setup of the skid-mounted GAC treatment system for the extended pump test of the extraction wells. The final restoration of the surface of the D9 Area (i.e., revegetation) will be performed after the East Cove sediment removal project is completed.

Decommissioning activities were conducted at the D9 Area from October 6, 2010 to December 21, 2010 and included completion of backfilling, removal of the stockpile staging areas, reduction and removal of the exclusion zone, removal of sheet piling, and decontamination and demobilization of equipment.

After backfilling to pre-existing grade was completed, 3M notified MPCA on November 19, 2010 that the required response actions at the D9 Area were completed. Some final grading occurred between November 19 and December 21, 2010 when the final survey was completed.

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This activity was conducted to grade out additional East Cove road material and improve draining of the D9 Area.

3.2 APPROVAL AND PERMITS

The following subsections provide a detailed description of the activities that were completed in the D9 Area for removal and off-site disposal of PFC-containing materials in accordance with the MPCA-approved RD/RA Plan.

The RD/RA Plan was submitted to the MPCA on December 1, 2009 and the MPCA provided approval of the plan with comments in a letter to 3M dated February 1, 2010. MPCA approval of the RD/RA Plan constituted approval to conduct the activities described in the Plan. The following permits also were filed and obtained:

- <u>NPDES Construction Stormwater Permit</u> On December 10, 2009 3M submitted to the MPCA a Permit Modification Form for the existing National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit (ID # C00027036). The purpose of this modification was to add the Site excavation contractor, Bolander, on to the existing 3M NPDES permit. A copy of the completed Permit Modification Form and MPCA approval letter is provided in Appendix B.
- <u>Grading Permit/Conditional Use Permit</u> Bolander, on behalf of 3M, submitted to the City of Cottage Grove, an application for grading and site work at the D9 Excavation Area. The permit (No.: 2010-00595) was issued on May 5, 2010. A copy of the permit is provided in Appendix B.
- <u>Contractor Construction Documents</u> Prior to construction activities, Bolander submitted to 3M a HASP, Decontamination Plan, Excavation Plan, and a Transportation Plan for review and comment. 3M and WESTON reviewed the plans and provided comments which were then addressed by Bolander.

3.3 SITE PREPARATION

Bolander's site preparation consisted of completing additional clearing, establishing the exclusion zone around the D9 excavation area, construction of load-out zones, and construction of the stockpile staging areas. The truck weigh scale was already in place from the D1/D2 Area project. These features, as well as the excavation limits and soil block grids, were surveyed as shown in Figure 3-1.

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The exclusion zone was delineated with black silt fencing and identifying signs. Additionally, orange construction fencing was added on June 9, 2010 around the D9 excavation area as a wildlife deterrent. Photograph 10 and 11, provided in Appendix A, show the established exclusion zone and wildlife deterrent fencing. The exclusion zone encompassed the limits of the excavation and marked the boundary for movement of excavation equipment. Areas enclosed within the exclusion zone included the footprint of the excavation, soil stockpile areas for ex situ disposal profile sampling, stockpile areas for the potentially impacted material, as well as load-out zone locations. This ensured that excavation equipment coming into contact with the PFC-containing soil remained in the exclusion zone at all times unless it was decontaminated. Additionally, the exclusion zone marked the boundary to which non-excavation equipment coming into contact with PFC-containing soil.

Any personnel entering the exclusion zone were required to wear the appropriate personal protective equipment (PPE) in accordance with the site Health and Safety Plan (HASP). The PPE requirements of the HASP for the work site area outside the exclusion zone included Level D PPE consisting of long pants, safety shoes, safety glasses, a hard hat, hand protection (as necessary), hearing protection (as necessary) and a Class 2 safety vest. Level C PPE was required within the exclusion zone and the contaminant reduction zone. The additional PPE requirements for Level C included chemical-resistant coveralls, chemical-resistant outer boots or boot shoe covers, chemical-resistant gloves, and an air purifying respirator. In some instances, during excavation activities, Bolander employees downgraded from Level C to Modified Level D PPE. Modified Level D required all the PPE requirements for Level C without the respirator. Bolander performed their own air monitoring before and during the PPE level downgrades. Weston employees remained in Level C at all times within the exclusion zone during excavation activities.

Upon preparing to exit the exclusion zone, the proper decontamination procedures were required. The Contamination Reduction Zone (CRZ) consisted of the areas surrounding and inside the decontamination trailer (Figure 3-1). Detailed decontamination procedures were outlined in the Decontamination Plan submitted by Bolander to 3M along with their Work Plan. Additional information is included in the WESTON Decontamination Plan, included as an attachment in the RD/RA Plan.



A load-out zone was built along the exclusion zone fencing next to the haul road. The load-out zone consisted of a ramp within the exclusion zone and a tarp curtain at the edge of the exclusion zone. This design allowed trucks, located outside of the exclusion zone, to be loaded using equipment inside the exclusion zone (Photograph 12, provided in Appendix A). The tarp curtain was stretched across the width of the load-out zone ramp to make a barrier approximately the height of a truck bed. The tarp was installed to prevent spillage during haul truck loading activities.

As shown in Figure 3-1, the truck weigh scale was located outside of the exclusion zone and load-out areas. The scale was used by Bolander to determine the net weight of each load to be hauled to the EQ Disposal facility in Michigan and to ensure that the trucks were within their legal limit for hauling. Photograph 13 shows the weigh scale in the background. Toward the conclusion of the project, after the Bolander truck scale had been removed from the site, a second scale owned by 3M and located within the Cottage Grove facility, was utilized.

The stockpile staging areas, used for staging and ex situ sampling of soils for disposal profiling, were constructed by placing 10-mil poly liner on the prepared ground surface and covering the liner with six inches of clean sand. In accordance with project specifications, the liner was placed under the complete footprint of the stockpiled material with liner edges overlapping by at least 12 inches. The purpose of liner was to prevent contact between the excavated PFC-containing soils and the underlying ground surface. Bolander constructed and maintained the staging areas. If a staging area was compromised, showing rips in the 10-mil poly liner or washout of the berm, the staging area was repaired. Photograph 14, provided in Appendix A, shows a newly constructed soil stockpile staging area (identified as PIM-2 on Figure 3-1) for potentially impacted material.

Also as part of site preparation activities, a meteorological station ("met station") was installed by WESTON west of the D9 Area excavation. Photograph 15, provided in Appendix A, shows the meteorological monitoring station. The location of the met station is included in Figures 3-1 through 3-3, and a more detailed discussion of the met station is provided in Section 3.7.2.



3.4 SURVEY CONTROL

TKDA, a registered land surveyor in the State of Minnesota, performed survey verification for the excavation activities. TKDA acted as an independent surveyor contracted to WESTON. Prior to the start of excavation activities, TKDA staked the excavation boundaries as well as boundaries of the sloped excavation sidewalls. Throughout the duration of the project, surveying was performed on an as-needed basis to guide the excavation and to confirm when delineated limits of each soil block were reached. Photographs 16 to 18, provided in Appendix A, show the survey procedure.

Copies of the survey documentation produced by TKDA throughout construction activities are provided Appendix C. Additionally, the site operations map (Figure 3-1) shows the locations of the on-site benchmark and survey control points that were used.

3.5 EXCAVATION ACTIVITIES

As noted in Section 3.1.1, previous sampling of the D9 Area indicated that the top 10 feet of material did not contain PFC concentrations greater than the Industrial SRVs. As such, this potentially impacted material was removed and stockpiled within the exclusion zone to access the limits of removal defined in the MPCA-approved RD/RA Plan. The locations of potentially impacted soil stockpile areas (PIM-1 and PIM-2) are shown in Figure 3-1. Photographs 20 and 21, provided in Appendix A, show the potentially impacted material staging area.

Bolander then continued excavation by removing individual soil blocks one at a time within the delineated excavation area. The corners of each individual soil block were surveyed and identified with a lathe survey stake. Bolander dug out each block relying upon the survey markers and a portable GPS unit.

Soil material was excavated from the side slopes of the D9 excavation at a 1-1/2:1 slope per the project specifications. Lathe survey stakes were used in the field to mark the top of slope, which was beyond the defined removal limits. Photograph 19, provided in Appendix A, shows the staking at the top of slope. This slope material was outside the RD/RA specified limits of removal and did not have to go off-site for disposal. It was placed in the staging areas for

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potentially impacted material (PIM-1 and PIM-2) for use as backfill when excavation activities were complete.

Non-soil debris was encountered during the excavation activities and consisted of concrete footers, drum fragments and a colored powder material. Further detail relating to the non-soil debris is discussed in Section 3.5.4.

The D9 Area soil block figure (Figure 3-2) was referenced to determine the depth for each soil block excavation and whether, based on soil boring sampling results (i.e. in situ) and MPCA's waste determination, the soil block could be direct-loaded for off-site disposal (direct load soils) at the SKB Landfill or was required to be stockpiled for ex situ sampling (stockpile soils) in smaller piles for disposal profiling. This methodology was described in detail in the Construction Sampling Plan (CSP) which was included as an attachment in the approved RD/RA. Excavation depths for the D9 Area and off-site disposal locations were outlined in the RD/RA Plan as well.

3.5.1 Direct Load Soils

"Direct load" refers to those soils that can be excavated and directly loaded out to the SKB Landfill without the need for stockpile and ex situ disposal profile sampling.

On the D9 Area soil block figure (Figure 3-2), yellow colored blocks indicated soil that could be directly loaded onto haul trucks for disposal at the SKB nonhazardous industrial waste landfill in Rosemount, Minnesota. The in situ disposal profile sample results for soils represented by a yellow colored block indicated that none of the soil boring samples within the block met the RCRA hazardous characteristic criteria, soil leachate concentrations were less than the VOC Toxicity Characteristic Leaching Procedure (TCLP) limits, soil leachate concentrations less were than the metals TCLP limits, and soil PCB concentrations less than 50 mg/kg [ppm]).

To reduce the movement of equipment into and out of the excavation limits, Bolander placed each direct load soil block into a single stockpile for loadout. This temporary staging stockpile was constructed within approved stockpile staging areas. From this staging stockpile, the soil was loaded out into haul trucks. Photograph 22, provided in Appendix A, depicts a large staging

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stockpile of direct load material placed in close proximity to a load out zone. A description of the soil loading/unloading activities is provided in Section 3.5.3.

The direct load soil blocks from the D9 area included: D9 1-1, D9 1-2, D9 1-4, D9 1-5, D9 1-6, D9 1-7, D9 1-10, D9 2-1, D9 2-3, D9 2-5, D9 2-6, D9 2-8 and D9 3-2. These soil blocks were approved by MPCA for disposal at SKB based on the in situ sampling results. As noted on Figure 3-2, an in situ soil sample was collected from soil block D9 2-1 and analyzed for TCLP metals to confirm that this block met non-hazardous criteria, which it did. Accordingly, the soil block was designated for disposal as direct load. A tabular summary of the in situ disposal profile results for the direct load soil blocks is provided in Appendix D.

Documentation was maintained for each truckload of soil leaving the site to track it to its final disposal location. A manifest and a haul truck inspection sheet were prepared by WESTON for every truck prior to the departure of the truck from the Site. For direct load soils, an SKB shipping manifest and a SKB haul truck inspection sheet were used. All shipping manifests were developed and printed by the landfill (assisted by WESTON), filled out on-site by WESTON personnel, signed by a 3M representative (as the waste generator), and signed by the transporter. Each manifest consisted of 4 carbon copies, each to be maintained in the respective files of the waste generator (2 copies), transporter and landfill, creating a documentation trail for all excavated wastes from the point of generation through disposal at the landfill. The haul truck inspection sheet was a pre- and post-loading checklist that documented the adherence to hauling procedures as presented in the Soil Transportation Plan, included in the project specifications.

A typical SKB shipping manifest (generator copy) and a typical truck inspection sheet for direct load soils are provided in Figures 3-3 and 3-4, respectively. A complete set of all SKB shipping manifests (generators copy) are provided in Appendix E (on CD). The haul truck inspection sheets are maintained by 3M and WESTON in the project files.

Each SKB shipping manifest has a unique ID number and the shipping manifest is the primary document used for tracking each truck load of soil. Recorded on the manifest is the soil block from which the material originated. For example, as shown in Figure 3-3, "D9 2-1" was

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recorded on SKB shipping manifest #739859 to indicate that the manifest represented the direct load material from excavated Soil Block D9 2-1.

Additionally, a unique "container ID", soil block source, and load number were recorded on the truck inspection sheet for each load. The unique container ID is a combination of the trailer number and the manifest number. For example, as shown in Figure 3-4, the unique container ID was recorded as "106-739859" to indicate that trailer #106 contained the load associated with SKB shipping manifest #739859. Soils that were shipped to the SKB Landfill, such as the direct load soils, were not weighed on-site, but were weighed at the SKB facility. When the weigh ticket for each load was received by Bolander from SKB, a copy of the landfill-provided load ticket was obtained by WESTON for the project files, and the weights for each load were recorded on the respective haul truck inspection sheets.

The SKB-accepted load summary list provided in Appendix E-1 contains the manifest number for each load accepted at the landfill, as well as the net weight in tons. This list was provided by the SKB Landfill at the conclusion of all trucking activities.

3.5.2 Stockpiled Soils

On the D9 Area soil block figure (Figure 3-2), purple colored blocks indicated that certain soil blocks, based on sampling results from soil borings and MPCA's waste determination, were required to be stockpiled for ex situ sampling for disposal profiling. These soils were excavated in accordance with the CSP and placed in approximately 100 cubic yard stockpiles in the lined stockpile staging areas. Each approximately 100 cubic yard stockpile was split into two subpiles, approximately 50 cubic yards each.

Stockpiles were named by the soil block from which the material originated and then each 100 cubic yard stockpile was numbered in ascending numerical order. Each half of the 100 cubic yard stockpile was denoted with either a "-1" or a "-2". For example stockpile "D9 1-3 001-2" refers to material that originated in soil block D9 1-3 and is the second half of the first 100 cubic yard stockpile removed from that soil block. Photographs 23 - 26, provided in Appendix A, depict the placement of the stockpiles and the nomenclature for the stockpiled material.

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The stockpiles were sampled in accordance with the CSP to determine the disposal destination for the particular stockpile or sub-pile. The analyses selected for the ex situ sampling of the stockpile were dependent upon the parameters that exceeded the non-hazardous criteria during the soil boring sampling. For example, since all of the samples from soil borings tested for ignitability and reactivity were found to be negative for these RCRA characteristics, none of the ex situ samples required ignitability or reactivity analyses.

Sampling procedures were conducted in accordance with the CSP and Quality Assurance Project Plan (QAPP). Copies of the field sampling sheets for all soil stockpiles are provided in Appendix F. Laboratory data packages are quite voluminous and are maintained in WESTON project files. To be consistent with the other completed perfluorochemical (PFC) projects, i.e., the Cottage Grove D1 and D2 Areas and the Woodbury Main Disposal Area, the data packages are not provided in this the CCR.

Stockpiles or sub-piles with ex situ analyses that met the nonhazardous solid waste criteria (soil leachate concentrations less than the VOC TCLP limits, soil leachate concentrations less than the metals TCLP limits, and/or soil PCB concentrations less than 50 ppm) were managed as solid waste (nonhazardous) and sent to the SKB Landfill.

Stockpiles or sub-piles with ex situ analyses that did not meet the nonhazardous solid waste criteria (i.e., soil concentrations greater than the VOC TCLP limits and/or soil PCB concentrations greater than 50 ppm) were managed as potentially hazardous and sent to the Environmental Quality Company (EQ) waste landfill, also known as the Wayne Disposal, Inc. Landfill, in Belleville, Michigan. It is important to note that none of the ex situ samples analyzed for TCLP metals exceeded the metals TCLP limits.

As shown in Figure 3-2, the following soil blocks were excavated from the D9 Area and stockpiled for ex situ sampling: D9 1-3, D9 1-9, D9 2-2, D9 2-4, D9 2-7, D9 2-9, D9 3-1, D9 3-3, D9 3-4, D9 3-5, D9 3-6 and D9 3-7.

Sampling parameters for stockpiles from each D9 Area soil block are indicated in Figure 3-2 and were based on the sampling results for soil borings from the soil block as discussed above. A tabular summary of the ex situ sampling results for each stockpile and sub-pile is provided in

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Appendix D. The analytical results for each stockpile and sub-pile were forwarded to the disposal facilities for review and approval prior to shipment

Soil stockpiles with sample results that exceeded VOC TCLP limits were conditioned to reduce VOCs by addition of LKD and/or by further reshaping of the stockpiles. The conditioned stockpiles were then resampled for the VOC parameter that was exceeded and the disposal location was determined based on final sampling results for that stockpile. It is important to note that if a stockpile's initial sampling results indicated a PCB concentration greater than 50 ppm, it was designated for disposal at EQ and no further sampling for PCBs was conducted.

One bag (1 ton) of LKD was added for conditioning to the following stockpiles: D9 2-7 001-1 and 001-2, D9 3-3 001-1 through 002-2, D9 3-3 004-1 through 005-2, and D9 3-6 001-1 through 003-2. Two bags (2 tons) of LKD were added for conditioning to the following stockpiles: D9 1-9 001-2 and 002-1 and D9 2-7 003. Stockpiles D9 1-9 001-1, D9 1-9 002-2, D9 3-1 003-1, and D9 3-1 003-2 were conditioned by reshaping and no LKD was added.

3.5.2.1 Stockpile Management

Stockpiles were identified and managed in the exclusion zone using wooden survey stakes and a colored flagging system. A lathe survey stake with the soil block and stockpile number written on it was placed into the west side of the stockpile for identification. After the stockpile was sampled, a red flag was tied to the stake. The red flag signified that the pile was sampled and analytical results were pending. Additionally, the red flagging served as a visual sign that the stockpile was not approved for hauling.

After the analytical results were obtained for each stockpile, the flag was changed. If, based on the stockpile sampling results, the stockpile was approved for disposal at the SKB Landfill, the red flag was removed and replaced with a green flag. A blue flag was also tied to the stake. The green flag was a visual sign that the pile was approved for hauling. The blue flag indicated that the disposal destination for the stockpile was the SKB Landfill.

If, based on the stockpile sampling results, the stockpile was approved for disposal at the EQ facility, the red flag was removed and replaced with a green flag. A yellow flag was also tied to

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the stake. The green flag was a visual sign that the pile was approved for hauling. The yellow flag indicated that the disposal destination for the stockpile was the EQ Landfill. Photograph 27, provided in Appendix A, demonstrate the stockpile flagging system.

As the stockpiles were marked for load out, WESTON personal monitored the operation to assure that the stockpiles were being manifested and handled according to the flagging system.

3.5.2.2 Disposal at SKB Nonhazardous Landfill

After receiving SKB approval for disposal acceptance, stockpiles or sub-piles with ex situ analyses meeting the nonhazardous criteria were shipped to the SKB Landfill via the highway route described in the RD/RA Plan. Between July 19, 2010 and August 20, 2010 an approved alternate trucking route was implemented as necessary due to road construction on Highway 61 and the closure of the north bound access ramp at Innovation Drive. The alternate trucking route diverted haul trucks southbound on Highway 61 through the town of Hastings to Highway 55 west.

As with the direct load soils, an SKB shipping manifest and a haul truck inspection sheet were completed by WESTON for each load before leaving the site. On both documents, the load's source soil block and stockpile number were indicated. For example, "D9 1-5 001-2" indicates that the load was from Soil Block D9 1-5, Stockpile 001-2. A typical SKB shipping manifest and a typical SKB haul truck inspection sheet for direct load soils are provided in Figures 3-3 and 3-4, respectively. A complete set of SKB shipping manifests (generators copy) are provided in Appendix E (on CD). Manifests and haul truck inspection sheets are also maintained in the WESTON and 3M project files.

3.5.2.3 Disposal at EQ Hazardous Landfill

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After receiving EQ approval for acceptance and disposal, stockpiles or sub-piles with ex situ analyses that did not meet the nonhazardous solid waste criteria were managed as hazardous and sent to the EQ Landfill in Belleville, Michigan via the route described in the RD/RA Plan. An EQ manifest and a haul truck inspection sheet were completed for each truckload before leaving the site. The EQ manifest used was generated from a standard Uniform Hazardous Waste Manifest. A typical EQ manifest and a typical truck inspection sheet for stockpiled soils that were shipped to EQ are provided in Figures 3-5 and 3-6, respectively. Copies of all the EQ

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manifests are provided in Appendix E (on CD). Additionally, a complete set of EQ manifests and EQ haul truck inspection sheets are maintained in both 3M and WESTON project files.

It is important to note that, like the SKB shipping manifests, each EQ manifest has a unique ID number. Recorded on the manifest is the soil block and stockpile from which the load was derived. For example, as shown in Figure 3-5, "D9 3-3 –1-2" and "D9 3-3 005-1" was recorded on EQ manifest #007796728 to indicate that the manifest represented a soil from D9 3-3 Stockpiles 001-2 and 005-1. WESTON personnel monitored load-out activities and stockpile management, and denoted the source material on each manifest. The EQ shipping manifests were produced by the landfill (assisted by WESTON), completed by WESTON personnel, signed by a 3M representative, and signed by the transporter.

Loads that were shipped to the EQ Landfill were weighed on-site before leaving the site. As shown in Figure 3-6, the weight information (i.e., tare, gross, and net weights) was recorded on the truck inspection sheet as well as the soil block and stockpile from which the load was composed.

The EQ accepted load summary list provided in Appendix E-1 contains the manifest number for each load accepted at the landfill, as well as the net weight in tons. This list was provided by the EQ facility at the conclusion of all trucking activities. It should be noted that the weights reported by the landfill and those recorded on the manifest are slightly different. The weights reported by the EQ Landfill are considered accurate as the scale used at that facility is certified.

The EQ load summary lists also contain information indicating when the loads were received at the landfill. From review of these acceptance dates, it became evident that the contractor (Bolander) and their hauling subcontractor (Metro Gravel) had temporarily staged some loaded trailers without 3M's authorization. Accordingly, 3M requested detailed supporting documentation to account for the location of such trailers between loading at the D9 Area and final receipt at the landfill. Tracking documentation was provided to 3M by Bolander and their subcontractor Metro Gravel for all requested loads.



3.5.3 Truck Loading/Unloading Operations

The haul trucks consisted of an 18-wheel truck tractor and an aluminum dump trailer, with the occasional usage of a straight truck and a steel trailer. All haul trucks were inspected by WESTON upon arrival and departure from the Site to ensure that trucks were properly prepared to haul soils and that excavated materials were loaded properly and secured. The inspections were documented on the Haul Truck Inspection Forms (Figures 3-4 and 3-6).

Upon arrival at the Site, trucks would proceed to the lining station. At the lining station the trucks pulled up to a scaffold and were visibly inspected by WESTON to ensure that there was no waste material in the truck bed. The truck bed was then lined with disposable, 6-mil poly sheeting to prevent the truck bed from coming into contact with the excavated soil and to ensure that free liquids (if present) could not leak out of the tailgate. The poly sheeting was tied to the rails of the truck bed to keep it in place during loading and shipment. On several occasions WESTON followed trucks hauling soils to the SKB Landfill to ensure liner integrity throughout the hauling process. Even though trucks hauling soils to the EQ Landfill never carried clean soils back to the Site, a bed liner was still installed prior to being loaded with hazardous material. Based on WESTON's observations during the loading and hauling operation, there was no evidence of ripping or tearing problems with the bed liner and the 6-mil thick poly sheeting was satisfactory.

A truck preparing to be loaded with materials to be hauled to the EQ Landfill would proceed from the lining station to the weigh scale for a tare weight, and then to the load-out zone. After loading, the truck returned to the weigh scale for a gross weight and then returned to the lining station. The trucks were inspected by WESTON to ensure the bed liner was in good condition, the liner remained in place in the bed of the truck and that the height of the soil was lower than the sides of the truck. After inspection a tarp was secured over the top of the trailer, required placarding was posted on the truck and the driver signed the associated manifest before the truck departed from the Site. The trucks loaded with material for the SKB Landfill followed the same general procedure with the exception of the weigh scale. Trucks transporting material to SKB were not weighed until they arrived at the SKB Landfill. All trucks were weighed at the respective landfills using a certified weigh scale.

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3.5.4 Non-Soil Debris

During the D9 Area excavation, non-soil debris was encountered. This debris consisted of drum fragments, tree stumps and concrete remnants. The drum carcasses contained no visible tar residue and were only encountered in the potentially impacted material. These were temporarily staged on a stockpile staging area and hauled to SKB. The concrete remnants and tree roots were excavated and disposed with the surrounding soils. However one large tree stump and several large pieces of concrete were segregated during excavation activities and remained in the excavation. Red, blue and white colored residuals were encountered in the potentially impacted material. 3M personnel thought that the residuals were probably glass bead remnants as noted in the Daily Report dated 6/14/10. The colored residuals remained with the potentially impacted material. Photographs 30 to 33, provided in Appendix A, show the non-soil debris.

3.5.5 Water Management

During the D9 Area excavation, construction water that collected in the excavation was managed on-site to minimize the accumulation of this water in the active portion of the excavation. Trenches and sumps were dug on the western edge of the excavation and in the northeast corner of the D9 excavation area. Water that collected in the trenches and sumps was allowed to percolate into the ground. No construction or excavation water was handled in the D9 Area. Photographs 34 and 35, provided in Appendix A, show the trench and sump management systems used in the D9 Area excavation.

Near the conclusion of the project, after the potentially impacted material was backfilled into the bottom of the excavation and prior to the backfilling with clean soil from the East Cove haul road improvement, the excavation equipment (that was operated within the exclusion zone) was decontaminated using a 300 psi heated pressure washer. Three passes were done with the pressure washer after visible debris was removed. The procedure was performed within the boundaries of the D9 excavation and decontamination water was allowed to percolate into the ground.

Additionally, a small section in the northeast corner of the D9 excavation area, approximately 20 feet wide by 50 feet long by 16 feet deep, was left open during backfilling and was utilized for decontamination of the sheet piling. After all the sheet piling was decontaminated, backfilling

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was completed. Photographs 36 to 39, provided in Appendix A, demonstrate the sheet piling decontamination procedure.

3.6 SURVEY VERIFICATION OF EXCAVATION LIMITS

Verification surveying was performed by TKDA, a Minnesota-licensed surveyor, as a contractor to WESTON. This arrangement provided the "third party" verification that the removal requirements specified in the RD/RA Plan were being met. Surveying was conducted regularly during the excavation activities to confirm that the required horizontal and vertical excavation limits had been reached for each soil block. After the final excavation limits were verified to the lateral and vertical limits specified in the approved RD/RA Plan, backfilling was allowed.

It should be noted that soil block quantities for direct load and stockpiled soil blocks were surveyed differently in accordance with project specifications. The direct load soil block quantities were in-place volumes calculated from as-built survey shots of the excavation. In order to better quantify the volumes of these soil blocks, four corner survey shots were collected along with multiple interior ground check shots per soil block.

To quantify the amount of soil excavated from the ex situ sampling soil blocks the soil quantities were surveyed in the stockpiles. Stockpile quantities were surveyed by collecting several survey shots around the base of the stockpile, as well as one or two shots at the top of the stockpile. Asbuilt survey shots were taken at the four corners of each of the ex situ sampling soil blocks, but the corner shots were only used to confirmed the excavation met the required limits.

3.6.1 D9 Area

Figures 3-7 through 3-10 provide the plan view and cross section results of final verification surveys for the base of each layer in the D9 Area (i.e., base of Potentially Impacted Material -0 to 10 ft bgs, base of Layer 1 - 10 to 15 ft bgs, base of Layer 2 - 15 to 20 ft bgs, and base of Layer 3 - 20 to 25 ft bgs, respectively), which includes the corners of each soil block. The cross sections of the D9 Area indicate the RD/RA specified excavation limits as well as the actual final excavation limits for Layer 1, Layer 2 and Layer 3 respectively. Figures 3-7 through 3-10 demonstrate that the RD/RA specified excavation limits for the D9 Area were achieved and that



the actual excavation limits met or extended slightly beyond the RD/RA Plan design limits. The complete D9 excavation limits can be seen in Photographs 40 and 41, provided in Appendix A.

Table 3-1 provides a tabular summary of the D9 Area soil excavation volumes and final disposal location. The total volume of soil removed from the D9 Area was approximately 8,443 cubic yards (12,381 tons). Of that, approximately 961 cubic yards (1,307 tons) were transported to the EQ Landfill and approximately 7,482 cubic yards (11,074 tons) were transported to the SKB Landfill.

3.7 OPERATIONAL RECORDS

In addition to haul truck inspection sheets (Figures 3-4 and 3-6), additional operational records are maintained by WESTON documenting the excavation activities and ambient conditions during site activities. Such records include daily reports, meteorological station data, and perimeter monitoring as discussed in the following sections.

3.7.1 Daily Reports

The Daily Site Operations Log Form was completed for each day of site activity. The log form contains a summary of key site daily information such as activities performed, personnel on-site, soil blocks that were excavated, stockpiles that were generated, hauling information, monitoring information, and communications. All of the daily reports are maintained in WESTON's project files as part of the construction record.

Additionally, weekly construction meetings were held by 3M, typically on Mondays throughout the duration of Site Activities to review construction progress, plans for upcoming construction, and resolve construction questions or issues. These meetings were lead by the 3M project representative and were attended by 3M, Bolander, WESTON, and other parties such as AECOM (MPCA's contractor) and MPCA. Meeting minutes were e-mailed out weekly and copies are maintained in 3M and WESTON project files, as part of the construction record. Lastly, AECOM representatives periodically visited the site to observe and document excavation activities, on behalf of MPCA.



3.7.2 Meteorological Station Data

Daily weather conditions were recorded on the Daily Site Operations Log Form; however, continuous monitoring and documentation of on-site meteorological conditions were recorded by WESTON is an on-site meteorological monitoring station ("met station"). The met station was installed the week of May 24, 2010, prior to excavation activities, and was mounted outside of the exclusion zone on an approximate 18-foot tripod. Data logging for the D9 Excavation started on May 26, 2010. The met station was located southwest of the exclusion zone and west of the construction trailer (Figure 3-1). The meteorological data were recorded by a data logger and downloaded daily. The meteorological variables monitored included:

- Wind speed.
- Wind direction.
- Standard deviation of horizontal wind direction (sigma theta).
- Ambient air temperature.
- Precipitation.

The meteorological data were also used during construction activities to help foresee construction water issues. Of the fifty-eight recorded precipitation events, thirty-four were less than a quarter of an inch, six were between a quarter and a half an inch, twelve were between a half of an inch and an inch, five were greater than one inch and one event exceeded two inches. All water was managed on-site through a sump system in the excavation and no water removal was necessary throughout construction activities. The sump accumulated water after precipitation events as well as from the release of perched water. This accumulated water was allowed to percolate into the ground in the excavation.

Three inches of rain fell between June 25 and June 27, 2010 during a heavy rain event. For the SWPP inspections conducted on June 26 and 27, Bolander noted some silt build-up next to the silt fence on the north side of the potentially impacted soil staging area. It was decided to install a second row of silt fence as a precautionary measure. A row of hay bales was also installed along the interior silt fence. Photographs 42 to 44, provided in Appendix A, demonstrate the enhancement of silt fencing at the potentially impacted material staging area.

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Throughout the excavation activities the average daily directional wind originated from the south, including the southwest, south and southeast, 71% of the time. The average wind speed was 3.3 miles per hour.

The wind speed was monitored with a three-cup anemometer assembly mounted on a cross arm. Horizontal wind direction was monitored by a wind vane coupled to a precision low torque potentiometer. Precipitation was measured with a tipping bucket rain gauge. A table that provides a summary of the daily meteorological data is provided in Appendix G.

3.7.3 Perimeter Monitoring

Throughout the duration of the excavation activities, perimeter monitoring for VOCs and particulates was performed approximately once a week and measurements recorded on a Perimeter Monitoring Form, as outlined in the RD/RA Plan. A copy of the Perimeter Monitoring Forms is provided in Appendix H.

The following instruments were used for monitoring:

- MultiRAE photoionization detector (PID) for VOC ambient air monitoring.
- Thermo Electron Corporation personal DataRam (pDR) for PM_{10} particulate ambient air monitoring.

As shown in Figure 3-11, there were four monitoring locations surrounding the excavation area in all directions. The monitoring locations were relocated slightly from those proposed in the RD/RA Plan due to access issues. The air monitoring locations were as follows:

- Station 1 East of the D9 excavation area (and former D1/D2 excavation areas), near the truck turnaround point.
- Station 2 South of the EW-4 staging area excavation area (former D2 excavation area).
- Station 3 South of the D9 excavation, across from the office trailer.
- Station 4 West of the D9 excavation near the sheet piling equipment staging area.

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A total of fourteen monitoring events were performed throughout excavation activities. The frequency of monitoring events was considered sufficient, and did not need to be increased, due to the very low readings being recorded and the isolation of the excavation activities from surrounding properties.

Cumulatively, the readings obtained for all the monitored parameters, i.e., VOCs and PM_{10} , across all perimeter monitoring locations, were well below the associated HASP action levels. The VOC concentrations were consistently 0.0 ppm on many occasions and never exceeded 1.6 ppm, with a project average of 0.1 ppm. The Action Level set in the HASP was a reading of 2.5 ppm above background as a 15 minute time weighted average. The PM_{10} concentrations recorded across all stations ranged from 0.000 mg/m³ to 0.073 mg/m³ with a project average of 0.014 mg/m³. These recorded concentrations were well below the Action Level defined in the HASP of 0.1 mg/m³ above background levels.

3.8 DECOMMISSIONING ACTIVITIES

At the conclusion of the construction activities, all stockpile staging areas were removed and hauled to the SKB Landfill, including the poly liner. Approximately 1,450 tons of this material was hauled to SKB between September 24, 2010 and December 5, 2010.

Spillage of excavated material in traffic areas inside of the exclusion zone was not an issue on this project due to several factors (1) the increased size of the stockpile staging areas, (2) minimization of traffic lanes and (3) a change in the equipment usage on site. As a result the contractor was not required to scrape and remove the traffic lane soils at the conclusion of the project.

During D9 stockpiling activities, Bolander dedicated an excavator and skid steer in the stockpile staging area. These machines were used for forming stockpiles, stockpiles conditioning, and load out. Prior to load out, Bolander moved stockpiles with the excavator and an off-road haul truck to the staging areas directly next to the load out. Stockpiles on the staging areas next to the load out could be accessed and loaded using the designated excavator. This method eliminated need for material to travel between staging areas in the bucket of a front-end loader and thus prevented the spillage issues that could have occurred.

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Following excavation activities, Bolander decontaminated all equipment used in the exclusion zone. Decontamination activities were performed under the guidance of the decontamination plan submitted by Bolander to 3M prior to excavation activities at the Site.

3.9 BACKFILLING, FINAL GRADING, AND REVEGETATION

Backfill documentation, including the date of backfilling activities and source of backfill material, was recorded in the daily reports. Backfill material was placed in 12-inch lifts and compacted.

In the D9 Area, the source of backfill material was the potentially impacted material that was removed from the first 10 feet of the excavation, excavation side slopes, and the material excavated during the East Cove Road improvement. The potentially impacted material that had been staged in the PIM-1 and PIM-2 areas was the first material backfilled into the excavation and compacted, per the project specifications to a minimum depth of 4 ft. below final grade elevation. This was followed by the soil material that was excavated for the East Cove Road improvement. Photographs 45 to 47, provided in Appendix A, show the backfilling procedures.

Existing and final grading surface contours are provided in Figure 3-12. Overall, the final grading contours are slightly higher than the initial grade. Bolander used the extra East Cove road material they excavated during the East Cove road project to improve the drainage and topography of the D1, D2, and D9 Area.

With the completion of backfill to pre-existing grade, MPCA was notified on November 19, 2010 that the D9 removal project had been completed. Final inspection of the site occurred on November 23, 2010. The final inspection consisted of a representative from Bolander, TKDA and 3M. The final site survey of the completed construction was conducted on December 21, 2010.

Since the D9 Areas are to be utilized for staging and set-up areas during the East Cove remediation project and extended pump test, the silt fencing was not removed and a Notice of Termination for the Stormwater General Permit was not filed at that time. The permit will remain open and will be transferred to the respective contractor for the PFC remedial construction and sediment removal project occurring at the East Cove in 2011.

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In preparation for upcoming East Cove remediation activities in 2011 and extended pump test for the Cottage Grove extraction wells, the D9 Area was covered with stone so it can serve as a construction laydown area for East Cove equipment and setup for skid-mounted water treatment equipment for the extended pump test. Final restoration (i.e., seeding) of the D1 and D2 Areas was performed in December 2010 and consisted of application of a native seed mix and covering with straw. The effectiveness of the seeding will be evaluated in spring 2011 and can be readdressed if required at the completion of the East Cove remediation project.

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SECTION 3 TABLE



Table 3-1 Summary of D9 Area Excavation Cottage Grove, MN

		Desti	nation	
Soil Block	Direct Load/Stockpile No. ¹	EQ (cy)	SKB (cy)	
D9 1-1	Direct Load	-	347.92	
D9 1-2	Direct Load	-	161.67	
	001	-	149.20	
D9 1-3	002	-	110.89	
DA 1-2	003	-	106.08	
	004	-	50.23	
D9 1-4	Direct Load	-	323.76	
D9 1-5	Direct Load	-	459.59	
D9 1-6	Direct Load	-	287.42	
D9 1-7	Direct Load	-	228.88	
D9 1-8	Direct Load	_	231.13	
D0 1 0	001	-	110.08	
D9 1-9	002	-	91.55	
D9 1-10	Direct Load	_	441.02	
D9 2-1	Direct Load	-	338.74	
2 2 2 2	001	-	111.95	
D9 2-2	002	-	39.96	
D9 2-3	Direct Load	-	455.95	
	001	-	109.87	
D9 2-4	002	-	160.00	
	003	-	155.83	
D9 2-5	Direct Load	-	460.98	
D9 2-6	Direct Load	-	284.69	
	001	-	102.51	
D9 2-7	002	-	113.93	
	003	-	35.94	
D9 2-8	Direct Load	-	229.88	
	001	-	112.15	
D9 2-9	002	-	70.68	
	001	-	131.50	
D9 3-1	002	-	151.22	
	003	-	127.11	
D9 3-2	Direct Load	-	162.98	
	001	101.69	-	
	002	-	93.86	
D9 3-3	003		103.90	
	004	118.07	-	
	005	77.32	-	
· · · · · · ·	001	-	95.01	
	002	109.17		
D9 3-4	003	108.57	_	
	004	-	78.61	

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Table 3-1 Summary of D9 Area Excavation Cottage Grove, MN

		Destination	
Soil Block	Direct Load/Stockpile No. 1	EQ (cy)	SKB (cy)
	001	-	144.73
D9 3-5	002	_	158.06
	003		140.18
	004	-	72.44
	001	111.68	-
D9 3-6	002	104.27	~
	003	95.35	-
D9 3-7	001	-	140.23
	002	134.44	_
	D9 Total Volume	960.56	7,482.31

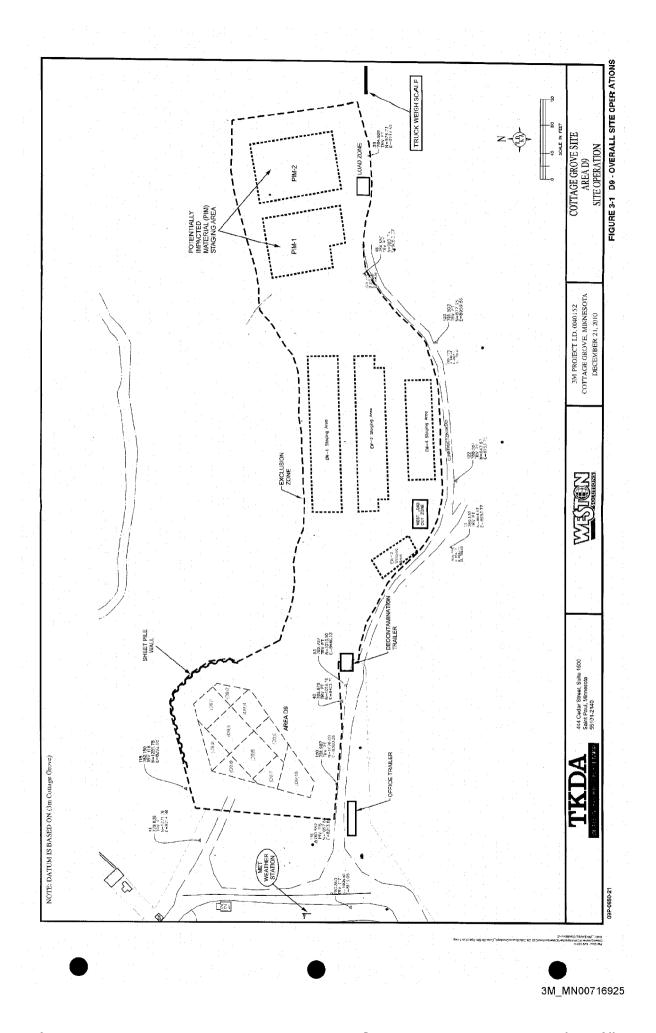
¹ Each ~100 cy stockpile was staged in two separate sub-piles; i.e., 001-1 and 001-2 represent the two halves of stockpile 001. If no halves are listed, either the stockpile was less than ~50 cubic yards or both halves went to the same destination.

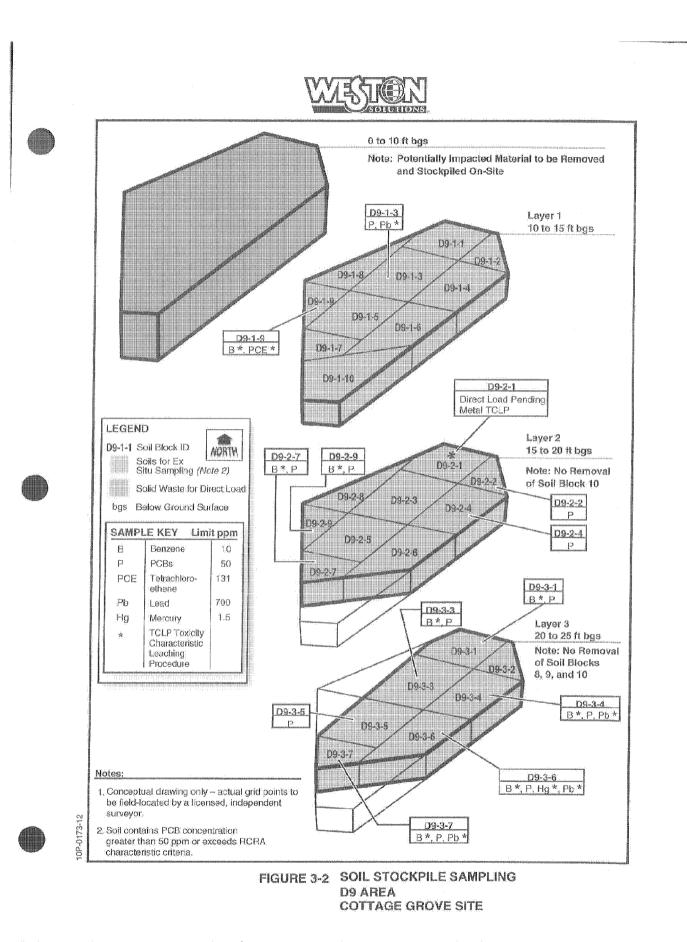
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SECTION 3 FIGURES

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SKB Rosemou	nt Industri					Manifest #
Shipping Manifest	merator's US EPA ID N		1969 - 18		age 1 of	page(s)
3. Generator's Name and Facility Address 3M Company Innovation Rd & Rt. 61; Sec. 35; T27N; R21W Coftage Grove, MN 55016 4. Generator's Phone : (651) 737-3477	<u>N R 0 0 (</u>	3 1	Mailing A 3M Co Cottag Cottag			
5. Transporter 1 Company Name <u>B15COL</u> /H15RO 6. Transporter 2 Company Name		an di Jinn Alfri Di Alfridia n	Phone:			
			Phone		1999 - 1999 1999 - 1999	
A. 39 A. 4 A. 4 A. 134	B Rosemount In 25 Courthouse I semount, MN 55	3lvd. 1068	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Facility 651-438-15	00	
a. O.C. DOT Description (including Proper Shipping Name)		9, Co No.	ntainers Type	1 0. Total Quantity	11, Unit Wt/Vol	12. Waste Profile Sheet #
Non-Hazardous Industrial Waste (Cottage Grove Soi	I -D9 Area) 2-12	041	D T			
		111				
	arten en baran en di Baran de la composition Status de la composition de la composit			百角		
13. Additional Descriptions for Materials Listed Above unsisterwaste Mi 10-0093 Cottage Grove Soil - D9 area Mi Mi Mi	stream Appford # below)	14. Sp	ecial Handi	ing Procedures for We	istes Listed	Abové
5. Special Handling Instructions and Additional Information Emergency Contact:				Lo	(B Use Or ad # ale Wt	
6. GENERATOR'S CERTIFICATION: I hereby declare that proper shipping name and are classified, packed, market according to applicable international and national governments.	, and labeled and are	onsigome in all re	int are full spects in j		ns/Yds.	bove by by highway
Printed/Typed Name	Signature				Mon	
N1ACL CALT 2 . Transporter 1 Acknowledged of Receipt of Materials	A. C. A. A.	A	K-a Z		101-	12716
Printed/Typed Name	Signature	La star		F. C.	Mont	사람이 가지 않는 것이 있는 것이 많이 많이 많이 많이 많이 했다.
t. Transported 2 Acknowledgement of Receipt of Materials					<u></u>	112171110
Printed/Typed Name	Signature			States and	Mont	h Day Year
• Discrepancy Indication Space						<u></u>
Facility Owner or Operator: Certification of receipt of non-	hazardous materials c	overed b	ry this Ma	niest except as not	ted in Item	19.



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WISSMEN

1. DATE 27						
	TAINER ID (Trailer # -		<u>3985 9 26. TRI</u>	JCK ID: 62.8		
3. DRIVER ID:	BISCOE / METRO	GRAVEL				
Arrival Inspection				• <u> </u>		
4. Time of Arriva		and and a special sector of the sector of th			Yes N	
	ig soil to the Site? If no,	proceed to No. 6.				X
	a. If yes, cite source of a					
	b. Is the truck covered?					
5.0	. Is soil free from debri	s, roots, large rocks, or	free water?			
8. Are truck tires	, undercarriage, and bo	dy clean?	· · · ·		X	
7. issues and/or	items of discussion:					
·						
GROSS (LBS)	TARE (LBS)	NET WEIGHT (LBS)	NET WEIGHT (TONS)	SOIL BLOCK S	-	ECT LOA
82500	30800	51700	25.85	DG	2-1	
	······		I			
Denarture Inene	etion			•		
Departure Inspe				•	Yes	Nó
3. Time of depart	ure: 0920				Yes X	No
3. Time of depart 9. Is truck haulin	ure: 0920 g soil from the site?	If no, proceed to No.	10. SKB			Nó
3. Time of depart 9. Is truck haulin 9.a	ure: 092.0 g soil from the site? . If yes, cite destination		10. SKB	· 		No
3. Time of depart 9. Is truck haulin 9.a 9.b	ure: 092.0 g soil from the site? . If yes, cite destination . Is the container liner in	n place and secure?	10. SKB		X	No
B. Time of depart 9. Is truck haulin 9.a 9.b 9.c	ure: 092.0 g soil from the site? . If yes, cite destination . Is the container liner in . Is soil lower than the s	n place and secure? sides of the truck?		truck bed?	×	No
B. Time of depart B. Is truck haulin B.a B.a B.a B.a B.a B.a B.a B.a	ure: 092.0 g soil from the site? . If yes, cite destination . Is the container liner in . Is soil lower than the s	n place and secure? sides of the truck? ndition and properly sec	10. SKB sured over the soils in the	truck bed?	× × ×	No
B. Time of depart 9. Is truck haulin 9.a 9.b 9.c 9.d 9.d 9.d 9.d 9.d	ure: 092.0 g soil from the site? . If yes, cite destination . Is the container liner in . Is soil lower than the s . Is the tarp in good cor	n place and secure? sides of the truck? ndition and properly sec uck secure?	ured over the soils in the	iruck bed?	× × × ×	No
B. Time of depart B. Is truck haulin 9.a 9.b 9.c 9.c 9.c 9.c 9.c 9.c 9.c 9.c	ure: 092.0 g soil from the site? . If yes, cite destination . Is the container liner in . Is soil lower than the s . Is the tarp in good cor ls the tailgate of the tru	n place and secure? sides of the truck? ndition and properly sec uck secure? lifest been signed and r	eceived by the driver?	ruck bed?	× × × ×	No
B. Time of depart 9. Is truck haulin 9.a 9.b 9.c 9.d 9.d 9.c 9.d 9.c 9.d 9.c 9.d 9.d 9.d 9.d 9.d 9.d 9.d 9.d	ure: 092.0 g soil from the site? . If yes, cite destination . Is the container liner in . Is soil lower than the s . Is the tarp in good cor Is the tailgate of the tru Has a copy of the man . Has the "Generators I	n place and secure? sides of the truck? ndition and properly sec uck secure? lifest been signed and r nitial Copy" been retain	eceived by the driver?		× × × × × ×	<u>No</u>
B. Time of depart B. Is truck haulin 9.a 9.b 9.c 9.c 9.c 9.c 9.c 9.c 9.c 9.c	ure: 092.0 g soil from the site? . If yes, cite destination . Is the container liner in . Is soil lower than the s . Is the tarp in good cor Is the tailgate of the tru Has a copy of the man . Has the "Generators I	n place and secure? sides of the truck? ndition and properly sec uck secure? lifest been signed and r nitial Copy" been retain loaded in the Mainfest	ured over the soils in the aceived by the driver? ed by Weston?		× × × × × ×	

FIGURE 3-4 D9 - SKB HAUL TRUCK INSPECTION COTTAGE GROVE, MN



t I	ABLAUD STATUTAD	I, Generator ID Number		1	3. Emergency Respon		4. Manifest	Tracking N	672	0	1
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	10746 INNOVATI		ROVE		Analysis Points In Build & Standard	a fu an an air an an ai					
	COTTAGE GROV										
	Generator's Phone: 6. Transporter 1 Company Name	(AC4) 700 444A]	·		U.S. EPAID	Shamhor.	3-0t		-
					•		LANS.		5 16 2 4	2 ⁷⁴⁰ . 3	() () ()
١٢	7. Fransporter 2 Corepany Name					*****	U.S. EPA ID		-		
	8. Designated Pacifity Name and S	WAYNE LUS	Posal, Ini	c are 2	LANDFILL		U.S. EPAID I		nen anen-in		
	AR350 N 1-RA SER BELLEVILLE, M						(981)	048 01	ee 033		
		592,5480					L				
	94. Sb. U.S. DOT Description Het and Packing Group (If any	(including Proper Shipping Name, Hazan +1)	d Class, ID Number.	È.	10. Contr No.	inans Type	11. Total Quantity	12. Unit Wit. Wat.	1	l. Wasto Cr	
٣		ein Polychlarinated Eschenyle.	sold minute.	9, POH, P	annon an	iype X	MODIFIELD	K K	PCEI	- Mixios	
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100 AN 100	5. GENERATOR'S/OFFEROR'S	KOE GROVE POB CONTAIN DB-3-5, DB-3-7 GB2, DB-3-4 S CERTIFICATION: 1 hareby declare that	NATED SCALS TEL CR 1.4 0	t (16 AREA Ro sconsgiment i	ne july and accurately d	scribed above	by the proper sh	ipping nam	a, and are c	assified pa	
at: 22.22	F 104077ND17 COTTA Y047A142R 10 10 9 LOCKS: 09.32 09.34 CENERATOR SIOFFEROR! marked and labeled/placende Expanse, 1 settly that the con	INT Additional Information NEE GROVE PCB CONTAINING DB 3.5, DB 3.7 (NI)2, DB 3.4 S CERTIFICATION: I hereby declare inal 4, and are in all respects in proper condi- tions of this consignment information to the zation statement identified in 40 CFR 282	NATED SCH 5 1922, 09 1-4 0 1 the contents of this ion for transport acc lorms of the attachs	t (110 AREA 160 sconsignment a parting to applic ed EPA Actoromi ga quantity gene	tre boly and accurately d able international and na edgment of Consent, nator) or (b) (ff are a sm nature	ecribed sbove lenel governm	by the proper sh ental regulations	ipping nam	e, and ere c Ipment and	assified, pa I am the P	
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FIGURE 3-5 D9 - EQ MANIFEST COTTAGE GROVE, MN

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WISTON

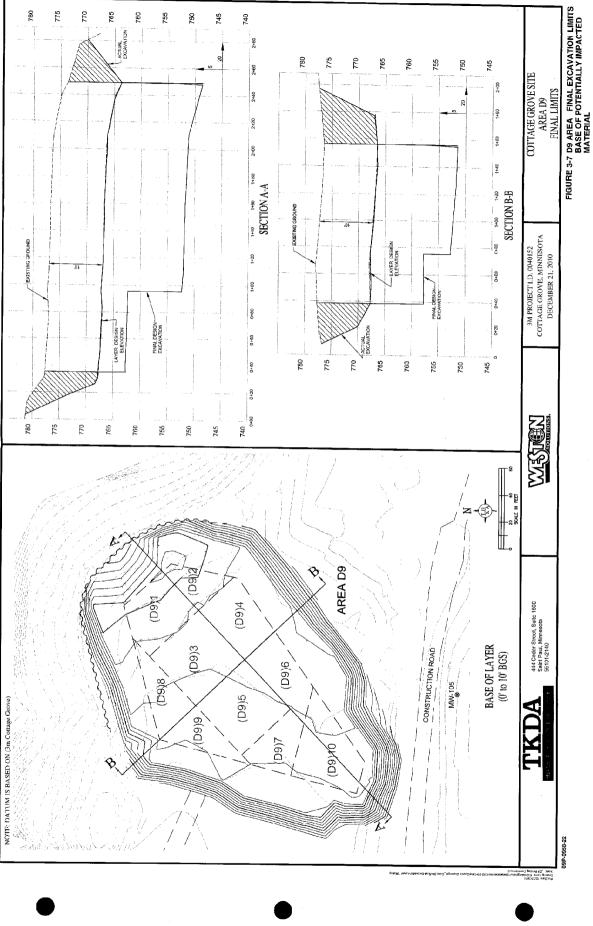
DAILY TRUCK NUMBER:

ł

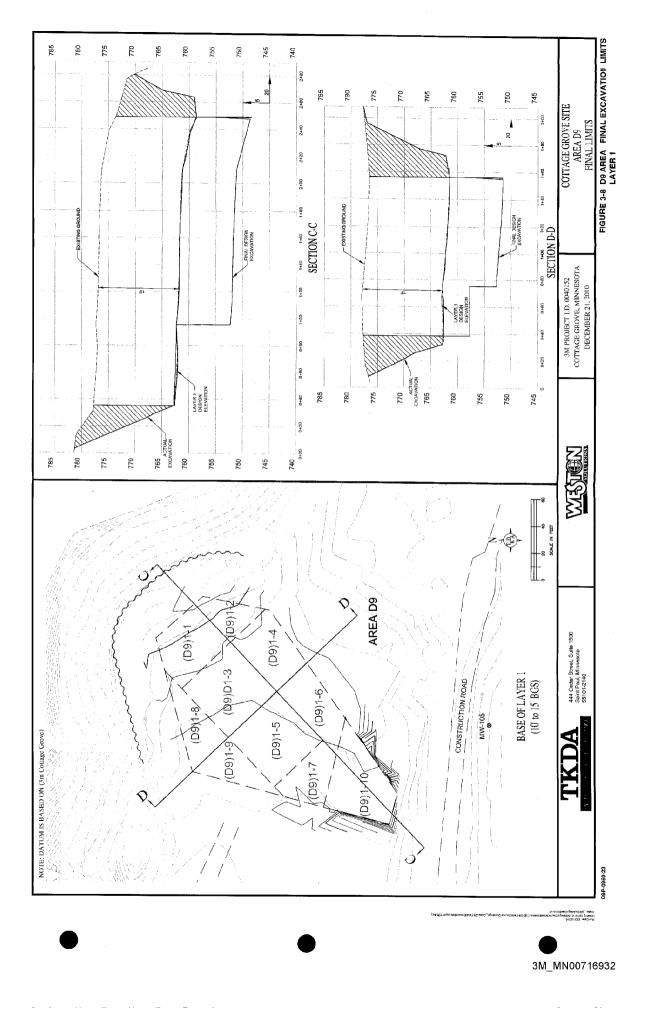
	EQ Hazardou	is Material Ha	ul Truck Inspe	ction (CC	GD9)	
1. DATE: 10/04	1/2010					
2. UNIQUE CONT	NNER ID (Trailer # -	Manifest #): 109 - 7	796728 2b. TR	UCKID: 70	6	
3. DRIVER ID: B	ISCOF				•.	·····
	·····	· · · · · · · · · · · · · · · · · · ·				
Arrival Inspection						·
4. Time of Arrival:						
5. Is truck hauling	soil to the Site? If no,	proceed to No. 6.	·			×
5.a.	If yes, cite source of s	soil.			·	
5.b.	5.b. Is the truck covered?					
	5.c. Is soil free from debris, roots, large rocks, or free water?					
	indercarriage, and bo	dy clean?			X	
7. Issues and/or ite	ems of discussion:					
GROSS (LBS)	TARE (LBS)	NET (LBS / TONS)	NET WEIGHT (K)	SOUR	CE STOCK	DN E #
	34,100		1	D9 3-3 0		
77,860	43,760 19,849.5 D9 3-3 005-1 (8/26/2011)					
Departure inspecti	on					
8. Time of departure	8:15				Yes	No
9. Is truck hauling s	oil from the site?				X	
9.a. li	f yes, cite destination.	If no, proceed to No. 1	o. EQ			
9.b. l	s the container liner in	place and secure?	·····		X	
9.c. ls	9.c. is soil lower than the sides of the truck?					
9.d. lı	9.d. Is the tarp in good condition and properly secured over the soils in the truck bed?					
9.e is	9.e is the tailgate of the truck secure?					
9.f. H	9.f. Has a copy of the manifest been signed and received by the driver?					
	9.g. Has the "Generators Initial Copy" been retained by Weston?					
		g visible on truck as rec			X	
			Container? If yes, explain	lin.		X
	indercarriage, and bo	dy clean?			X	·····
11. Issues and/or ite	ems of discussion.					

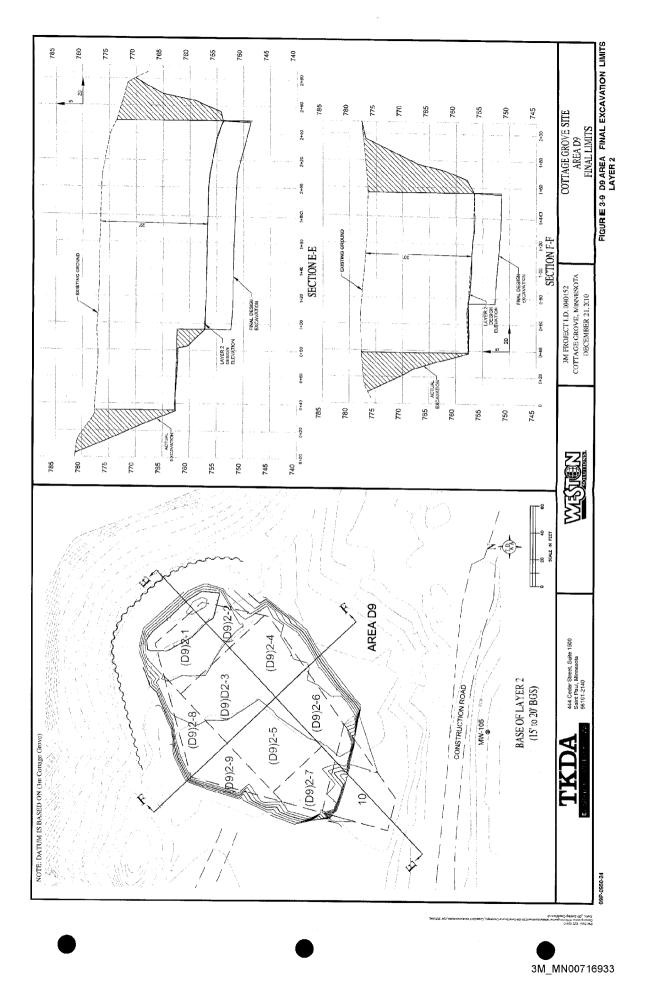
FIGURE 3-6 D9 - EQ HAUL TRUCK INSPECTION COTTAGE GROVE, MN

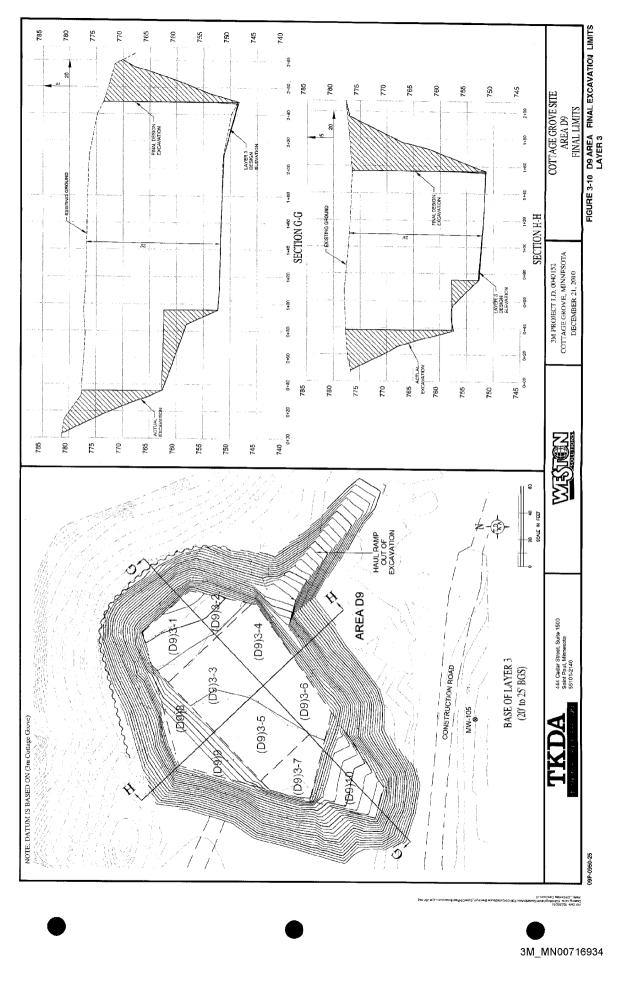
10P-1340-4

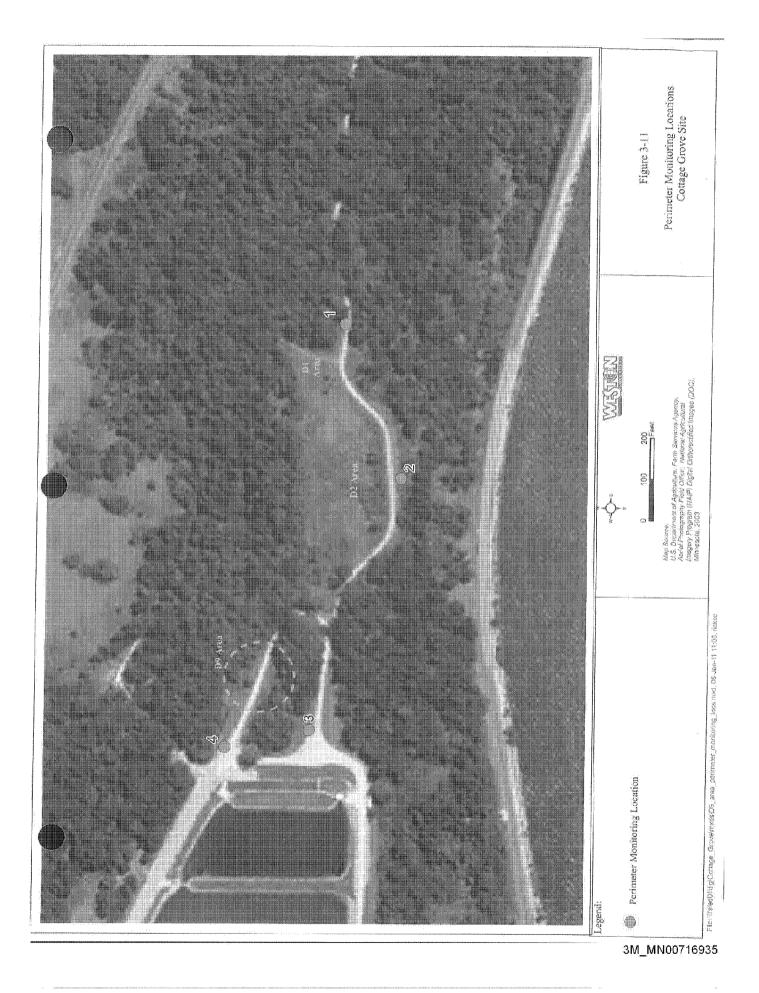


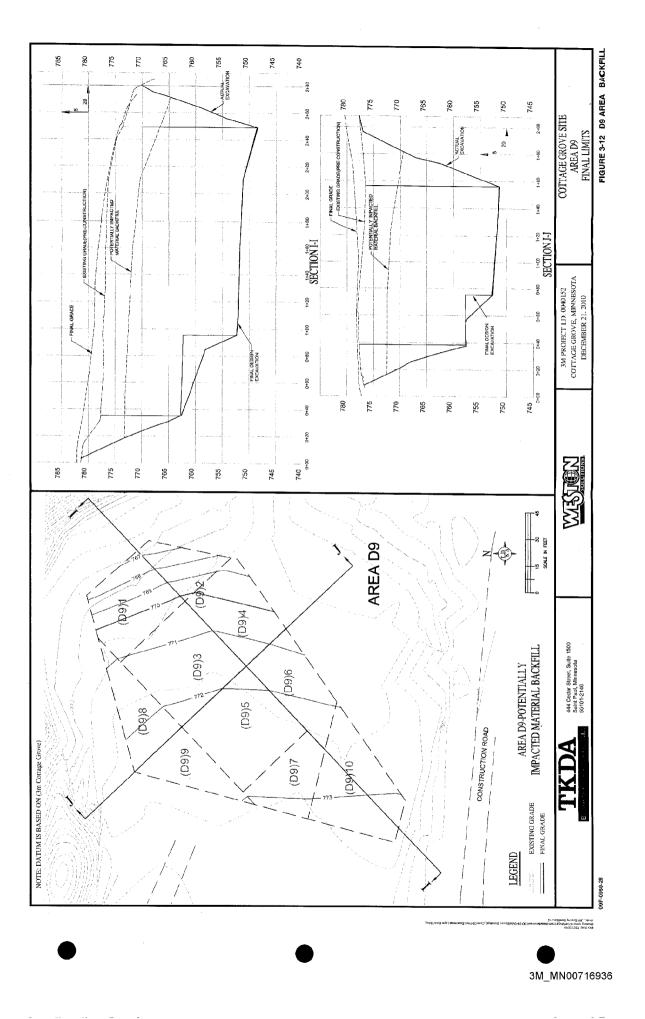
3M_MN00716931













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WESTON (Weston Solutions, Inc). 2009a. *Feasibility Study Report Addendum No. 2* (*Pre-Design Data Report and Alternative Refinement*). Prepared by Weston Solutions, Inc. for the 3M Company. January 2009.

WESTON (Weston Solutions, Inc). 2009b. Interim Response Action Plan for the D1 and D2 Areas. Prepared by Weston Solutions, Inc. for the 3M Company. August 2009.

WESTON (Weston Solutions, Inc). 2009c. Remedial Design/Response Action Plan for the Cottage Grove Site. Prepared by Weston Solutions, Inc. for the 3M Company. November 2009.

WESTON (Weston Solutions, Inc). 2010. Construction Completion Report - D1 and D2 Areas. Prepared by Weston Solutions, Inc. for the 3M Company. July 2010.

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Appendix A

3M_MN00716938

APPENDIX A PHOTOGRAPH LOG

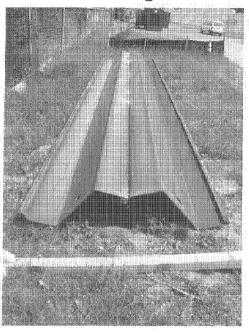
3M_MN00716939

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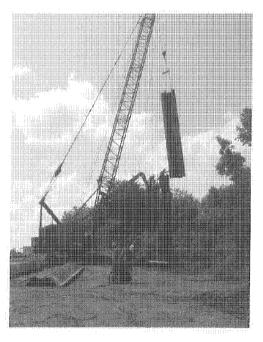
Sheet Piling A-1
Lime Kiln Dust
Exclusion Zone Fencing
Load Out Zones & Loading Procedure A-6
Haul Truck Weigh Scale A-7
Stockpile Staging Areas
Meteorological Monitoring Station A-8
Surveying A-8
Surveying Stakes / Top of Slope A-10
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~100 yd ³ Stockpile Split into Two ~50 yd ³ Stockpiles A-13
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D9 Non-Soil Debris
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* The photographs provided in this appendix were selected to demonstrate important site activities and/or procedures discussed in the Construction Completion Report for the excavation activities at the Cottage Grove Site (D9Area). A more detailed project photograph log is maintained in 3M and WESTON Project Files. Additionally, the detailed project photograph log was shared with the MPCA and AECOM representatives throughout the site activities.

Sheet Piling



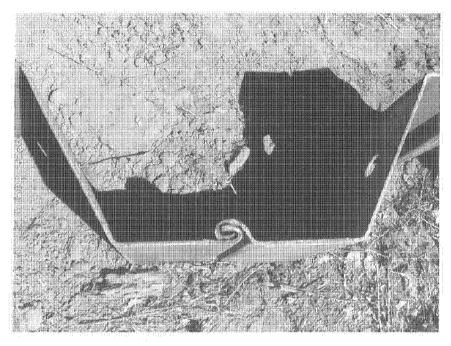
Photograph 1: D9 Area – SKZ22 (30' – 0") Sheet Piling Staged for Installation (5/24/2010).



 Photograph 2: D9 Area – Bolander Personnel, Crane and Lift Installing Sheet Piling along North Side of D9 Area (5/24/2010).

A - 1

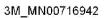
3M_MN00716941



Photograph 3: D9 Area – Sheet Piling Interlocking System (5/25/2010).



 Photograph 4: D9 Area – Sheet Piling Early Refusal along East End of Wall Due to C&D Waste along Slope (6/2/2010).





 Photograph 5: D9 Area – Completed Sheet Piling Installation along North Side of D9 Area (Raised Sheets Refused Early) (6/2/2010).



Lime Kiln Dust

 Photograph 6: Cottage Grove Site – Bolander Documents LKD Delivery Weights at 3M's Onsite Scale (7/9/2010).

3M_MN00716943



• Photograph 7: D9 Area – Staged 1-Ton Super Sacks of LKD West of the Office Trailer (7/9/2010).

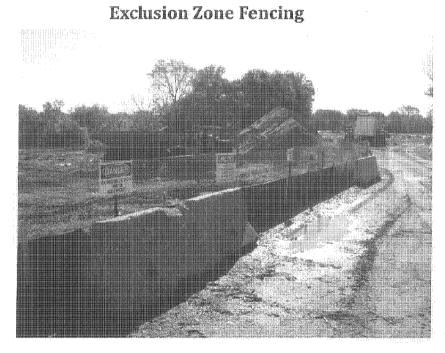


 Photograph 8: D9 Staging Area - Bolander Mixing LKD into the D9 1-9 Stockpiles for Onsite Conditioning (7/20/2010).



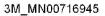


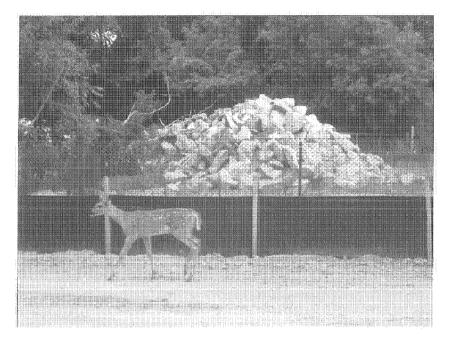
 Photograph 9: D9 Area – Bolander Mixes 10 Bags of LKD Into Soil Block D9 2-7 to Stabilize Soils and Support Heavy Equipment (7/26/2010).



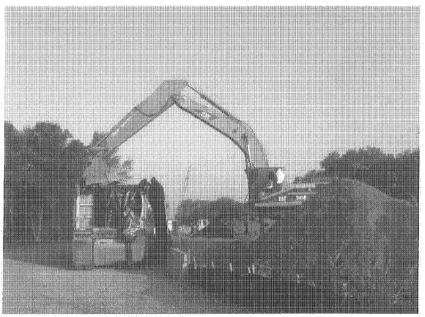
 Photograph 10: D9 Area – Safety Signage Along South Side of D9 Exclusion Zone / Haul Road (6/9/2010).

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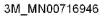


 Photograph 11: D9 Area – Wildlife Deterrent Fence and Redirection of Deer Around the D9 Excavation (7/13/2010).

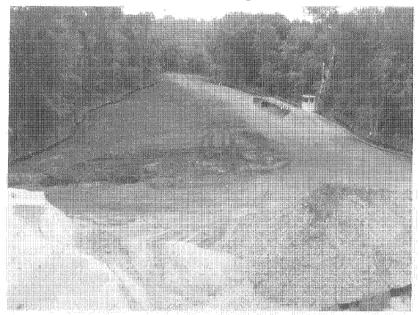


Load Out Zones & Loading Procedure

Photograph 12: Load-out From D9 Staging Area.



Haul Truck Weigh Scale



 Photograph 13: D9 Staging Area – Overview of Onsite Bolander Truck Scale and Haul Road to the East Cove (7/30/2010).



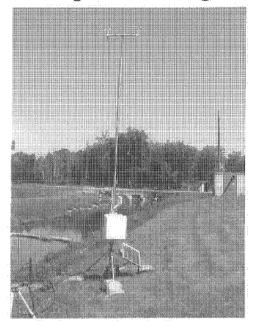
Stockpile Staging Areas

 Photograph 14: D9 Staging Area – Construction of PIM-2 Staging Area for Additional Potentially Impacted Material (6/22/10). PIM-1 Stockpile is in Background.

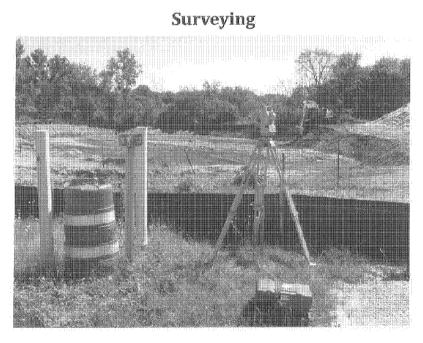
A - 7

3M_MN00716947

Meteorological Monitoring Station



Photograph 15: D9 Area – Met Weather Station (5/25/2010).

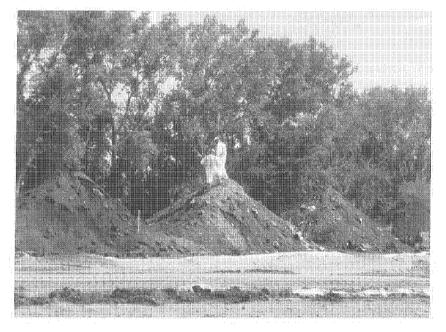


 Photograph 16: D9 Area – TKDA Survey Equipment Area – TKDA, Bolander & Weston Personnel Survey Layer 2 (5'-10' BGS) (2/26/2010).





 Photograph 17: D9 Area – Weston & Bolander Surveying the North Side of the D9 Excavation for Verification (7/1/2010).



• Picture 18: D9 Staging Area – Weston & Bolander Personnel Surveying Stockpiles from Soil Block D9 1-3 on the EW-1 Staging Area for Quantity (7/20/2010).

Surveying Stakes / Top of Slope



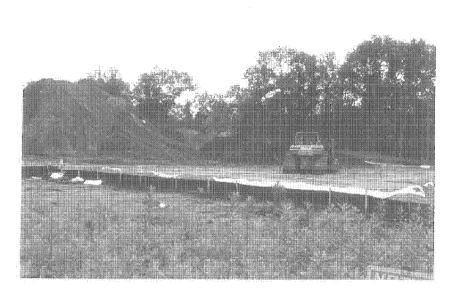
 Photograph 19: D9 Area – Installed Silt Fence along South Side of D9 with Top-of-Slope Staking on Interior (6/3/2010).



 Photograph 20: D9 Staging Area – Potentially Impacted Material Staged on PIM-1 maintained with Dedicated Dozer (6/22/2010).

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 Photograph 21: D9 Staging Area – Potentially Impacted Material Staged on the PIM-2 Staging Area (6/23/2010).

Temporary Staging of Direct Load Material

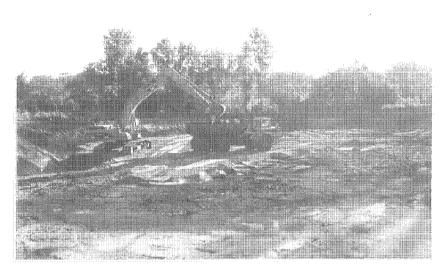


 Photograph 22: D9 Staging Area – Bolander Stages Material from the Direct Load Soil Block D9 1-8 on the EW-3 Staging Area for Hauling Activities (7/7/2010).

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Creating Stockpiles



 Photograph 23: D9 Area – Bolander Excavates and Loads Soil Block D9 1-9 for Stockpiling (7/2/2010).



 Photograph 24: D9 Staging Area – Bolander Generates Stockpiles on the EW-1 Stockpile Staging Area from the Excavated D9 1-9 Soil Block (7/2/2010).

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 Photograph 25: D9 Staging Area – Bolander Generates Stockpiles on the EW-1 Stockpile Staging Area from the Excavated D9 1-9 Soil Block (7/2/2010).

~100 yd³ Stockpile Split into Two ~50 yd³ Stockpiles

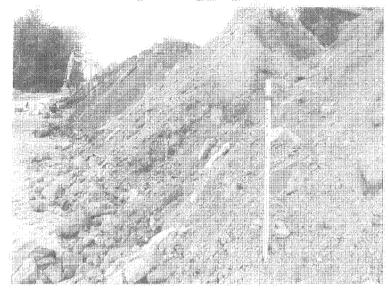


 Photograph 26: D9 Staging Area – Material Generated and Placed from Soil Block. D9 1-3 into Stockpiles (7/15/2010). The stockpile identification stake is visible (D9 1-3 003-2), indicating the material staged in this pile was pulled from the D9 excavation, Soil Block 1-3 and it is the second half of the third 100 yd³ stockpile.

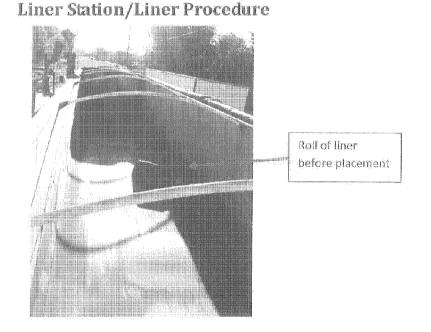
A-13

3M_MN00716953

Stockpile Flagging System



 Photograph 27: D9 Staging Area – Soil Block D9 1-3 Stockpiles Staged on the EW-1 Staging Area for Sampling and Surveying (7/16/2010). The red flagging signifies the stockpile has been sampled and it is not yet approved for hauling.



 Photograph 28: Empty Truck Bed Prior to being Lined. A roll of black liner is visible in the bed of the truck.

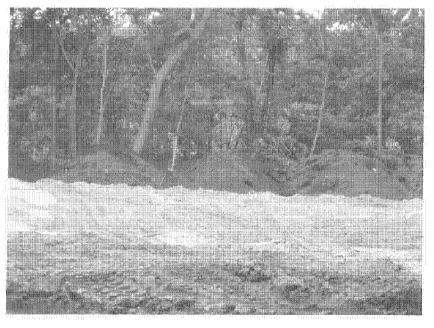
A - 14



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• Photograph 29: D9 Area – Haul Truck with Direct Load Soil Block D9 1-5 Material Inspected at Haul Truck Inspection Station (7/12/2010).

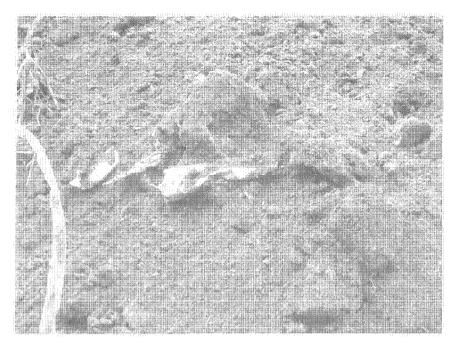


D9 Non-Soil Debris

 Photograph 30: D9 Staging Area – Colored Powder Material Removed with the Potentially Impacted Material (6/9/2010).

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3M_MN00716955



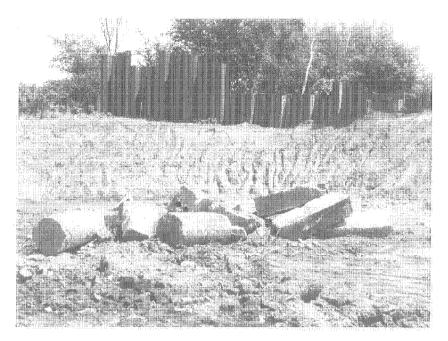
 Photograph 31: D9 Staging Area – Encountered Colored Material from Potentially Impacted Layer (6/10/2010).



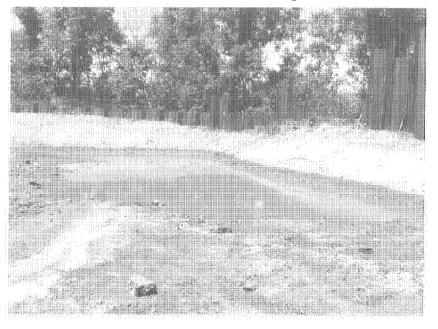
 Photograph 32: D9 Staging Area – Encountered Empty Crushed Drum Fragments from Potentially Impacted Material (6/10/2010).

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Photograph 33: D9 Area – Concrete Debris Excavated from Layer #2 (15' – 20' BGS) in the D9 Excavation (7/16/2010).

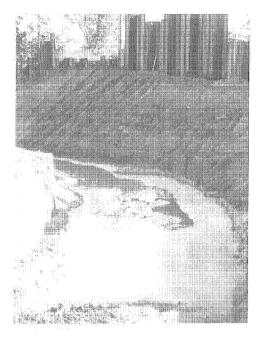


Construction Water Sumps

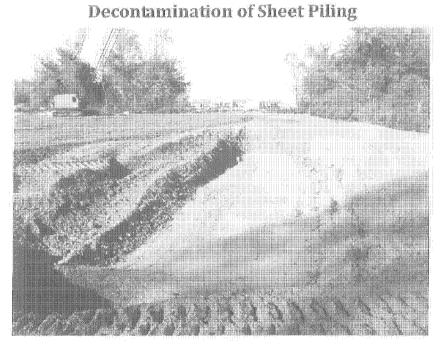
 Photograph 34: D9 Area – Collected Construction Water above Soil Block D9 1-1 & D9 1-2 (6/29/2010).

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 Photograph 35: D9 Area – Bolander Constructs a Collected Construction Water Sump along the North Side of the D9 1-2 Soil Block (2/13/2010).



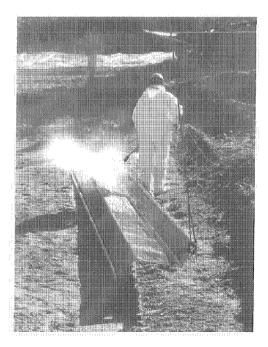
Photograph 36: Sump Left Open to Collect Decon Water.



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Photograph 37: Minimized Exclusion Zone with Crane to Pull Sheet Piling.

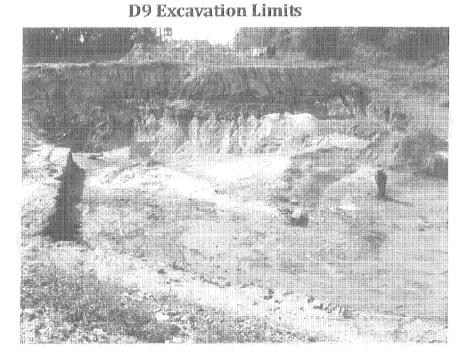


Photograph 38: Decontamination of Sheet Piling.

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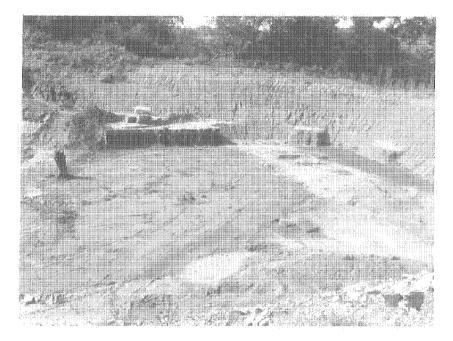


Photograph 39: Removal of Sheet Piling from Site.



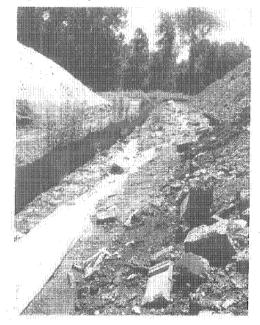
 Photograph 40: Complete D9 Area (West) – Completed D9 Excavation. Note PIM slope material from 20' – 25' BG5 layer staged in the excavation as backfill (8/20/2010).

A - 20



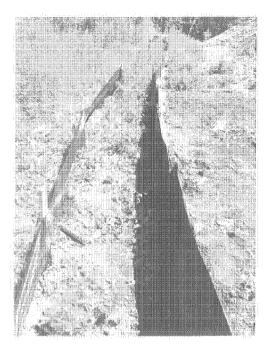
 Photograph 41: Complete D9 Area (Northwest) – Completed D9 Excavation. Note PIM slope material from 20⁷ – 25' BGS layer staged in the excavation as backfill (8/20/2010).

Heavy Rains/Additional Silt Fencing

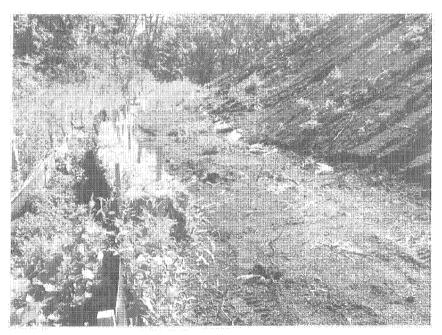


 Photograph 42: D9 Staging Area – East Site Exclusion Zone for the Potentially Impacted Material Stockpiles (PIM-1 and PIM-2).

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 Photograph 43: D9 Staging Area – North Side of the Potentially Impacted Material Stockpiles Exclusion Zone Silt Fence w/Secondary Containment (7/6/2010).



 Photograph 44: D9 Staging Area – North Side of the Potentially Impacted Material Stockpiles Exclusion Zone Silt Fence with Secondary Containment (7/28/2010).

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Backfilling



• Photograph 45: Backfilling.

ł



• Photograph 46: Backfill and Compaction.

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3M_MN00716963



• Photograph 47: Final grade (Additional). Final Grade and Stone Laydown Pads.

Appendix B

Appendix B

APPENDIX B CONSTRUCTION PERMITS



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, MN 55155-4194 | 651-296-6300 | 800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us

January 21, 2009

Ms. Vickie J Batroot, Site Director 10746 Innovation Rd Cottage Grove, MN 55016

RE: Coverage Under NPDES/SDS General Stormwater Permit for Construction Activity (MNR100001) for: Clearing and Grubbing - Cottage Grove - CSW (ID# C00027036)

Dear Ms. Vickie J Batroot:

Thank you for submitting your completed construction stormwater permit application for the abovereferenced project. The Minnesota Pollution Control Agency (MPCA) is pleased to inform you that you have been granted coverage under the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Stormwater Permit ("Permit") for Construction Activity. Permit coverage for this project started on January 27, 2009, seven (7) days after the postmarked date of your completed permit application form.

You are required to comply with the terms of the Permit to prevent erosion and control sediment from your site with the procedures established in your Stormwater Pollution Prevention Plan (SWPPP). You are also required to upgrade your SWPPP and erosion prevention and sediment control Best Management Practices (BMPs) as site and weather conditions dictate throughout the entire term of the project.

Enclosed, with the **contractor's copy** of this letter only, you will find a "Notice of Stormwater Permit Coverage" certificate for this construction project. Once all construction activity has been completed at this project, you must submit a "Notice of Termination" (NOT) form to the MPCA within 30 days of meeting the conditions outlined in Part II (C) of the permit. Please check the MPCA website (<u>www.pca.state.mn.us/water/stormwater/stormwater-c.html</u>) or call to request an NOT form and fact sheet.

Please save this letter for your records. If you have any questions about permit coverage for this project, please contact the Construction Stormwater Program at 651-757-2119 or toll free at 800-657-3804.

Sincerely,

Rin Rock

Brian Livingston Supervisor, Stormwater Policy & Technical Assistance Unit St. Paul Office Municipal Division

cc: Ms. Vickie J Batroot.



St. Paul | Brainerd | Detroit Lakes | Duluth | Mankato | Marshall | Rochester | Willmar

3M_MN00716967

Minnesota Pollution
 Control Agency
 SZO Lafayette Road North
 SL Paul, MN 55155-4194

Notice of Termination/ Permit Modification Form

Transfer or terminate your National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit. Allowable changes are permit termination and permit transfer for all or a portion of the site. This form replaces the Notice of Termination (NOT). Permit Transfer, Permit Modification, and Subdivision Registration forms used under the former permit.

Instructions for this form are located on the Internet at http://www.pca.state.mn.us/publications/wq-strm2-60i.pdf.

Form will be invalid and returned to sender unless the checkbox associated with the applicable actions is checked and the corresponding signature is provided in section A-1, A-2, A-3, and or A-4.

Piease submit to: Construction Stormwater Permit Program Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, Minnesota 55155-4194

Existing Permit Identification

- a. Current permit ID: C000 27036 or SUB00 _____
- b. Project name: <u>D1 & D2 Soil Removal Project (formerly Clearing & Grubbing)</u>
 Project location: <u>10746 Innovation Road, Cottage Grove, MN 55016</u>
 South and cest comer of the property near the ravine to the Mississippi River
 Briefly describe where the construction activity occurs (for example: Intersection of 45th SL and Irving Are.). Include extress if available.

Select Option 1, 2, or 3

wg-strm2-60 + 7/20/09

I.	Notice of Termination (NOT) for entire site by existing owner
	Select this option when a project has achieved final stabilization with existing owner / contractor and no part of the site is being transferred to a new owner and all construction activity is complete,
	Notice of Termination for entite existing permitted site or a subdivided site. (Current owner and contractor must sign under the "Current" Owner and "Current" Contractor sections respectively).
	Check above box and sign section A-1 and A-2 on page 2.
2	Transfer of entire site to new owner or contractor (Transfer/Modification)
	Select this option if the <i>entire</i> site (represented by the ID above) has either a new owner and/or new general contractor. Check all the boxes below that apply.
	New Owner for entire existing permitted site. f. 🔲 Current Owner for entire existing permitted site.
. 5	New Contractor for online existing permitted site. g. 🔯 Current Contractor for antire existing permitted site.
	Check above box(es) and sign section A-3 and A-4 page 3 and or check above box(es) and sign section A-1 and A-2 page 2 Both "Current" and "New" Parties must sign this form (preferred), however, separate forms are acceptable.
L	Transfer of a portion of a site to a new owner or contractor (Bubdivision)
	Select this option if a <i>portion</i> of a site (permitted under the ID above) has either a new owner and/or new general contractor. Check the boxes below that apply.
z	Describe the portion of the site being transferred: Lot Block Block
	City, State, and Zip:
	Example: SW quedrant of 45th Street and Irving Avenue or Lots 1-17 of block 20. Include list of addresses if available or include a mep
	New Owner for portion of existing site, k, 📋 Current Owner of the portion to be transferred.
	New Contractor for portion of existing site, I. 🔲 Current Contractor of the portion to be transferred,
	Check above box(es) and sign section A-3 and A-4 page 3 and or check above box(es) and sign section A-1 and A-2 page 2 Both "Current" and "New" Parties must sign (his form (craferred), however, separate forms are acceptable.
	Both "Current" and "New" Parties must sign this form (praterred), however, separate forms are acceptable.

Page 1 of 3

Current Owner Authorized Signature (A-1)

Business/Film name:		••••• • • • • • • • • • • • • • • • •	
Last name:	First name:	Title:	
E-mail address:		Telephone: ()	Ext.
Malling address:	a a contra managana ma	a fa an an an an ann ann ann an an an an an	
City:	State:	Zip code;	
Alternate comact:			
Last name:	First name:	Title:	
E-mail address:	والعبيب الاوريكاني الحارار ال	Telephone: ()	Ext.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the cerson or persons who manage this system, or the persons directly responsible for gathering the information, the Information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

i also certify under penality of law that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Ganeral Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

Authorized signature: 1 *1 · 4 · 4

Date:

This Application must be signed by; Corporation: a principal executive officer of at least the level of vice-president or the duly authorized representative or egent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application, Partnership or Sole Proprietorship: a general partner or the proprietor, Municipality, State, Federal or Other Public Agency: principal executive officer or ranking elected official.

Current Contractor Authorized Signature (A-2)

E-mail address: liflicker1@mmm.com

Business/Firm name: 3M Company	an mangan managan sa	. w waar waaraa aa aha gaar gaalaa aa aha gaar gaalaa aa aha gaar gaalaa aa	
Last name: Batroot	First name: Vickie	Title: Site Director	s filosofie caracterization of a company set
E-mail address: vjbatroe:1@mmm.com		Telephone: (651) 458-2001	Ext.
Mailing address: 10746 Innovation Road	1	a a succession of the	
City: Cottage Grove	State: MN	Zip code: 55016	
Altemate contact:			
Last name: Flicker	Pirst name: Thomas	Title: Site Resident Engineer	P

I cartify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and baller, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify under penalty of law that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Gaveral Stornwater Permit Construction Activity (MN R100001) that authorizes stormwater decharges associated with the construction site identified on this form.

Authorized algaature: Ulder Batroot

12-10-09 Date:

Telephone; (651) 458-2111

This Application must be signed by: Corporation: a principal executive officer of at least the level of vice-president or the duly authorized representative or egent of the executive officer If the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application. Partnership or Sole Proprietorship: a general partner or the proprietor. Municipality, State, Federal or Other Public Agency: principal executive officer or ranking elected official.

WWW.OCA.ILALG.CTT.US wa-strm2-60 + 7120109 651-296-6300 .

800-657-3864 + TTY 551-282-5332 or 800-657-3864 + Available in alternative formats

Page 2 of 3

£xt.

"New" Owner Authorized Signature (A-3)

Business/Firm na	mə:	المحمد الم	
Last name:	First name:	Title:	· ,
E-mail address:	ан мала 		
Mailing address.		an anna ar ann an ann an an an an an an an an an a	
	Stato:	Zip code:	
Attemate contact:	:		
Last came:	First name:	Tille:	
E-mail address:		Telephone: ()	Exi,

I cartify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Laiso cartify under penalty of law that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES)/State Disposel System (SDS) General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

Authorized signature:

Date:

This Application must be signed by: Corporation: a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or egent is responsible for the overall operation of the facility that is the subject of the permit application. Partnership or Sole Proprietorship: a general partner or the proprietor. Municipality, State, Federal or Other Public Agency: principal executive officer or ranking elected official.

"New" Contractor Authorized Signature (A-4)

a

K

.

Business/Firm name: <u>Carl Bolandar</u>	& Sons Company	<u>.</u>	an an angan sa angan		
Last name: Everson	First name: Norm	Title: Proja	ot Manager		
E-mail address: norm@bolander.co	<u>)</u>	Telephone: (651)	290-3740	Ext.	
Mailing address: 251 Starkey Street					
City: St. Paul	State: MN	Zip code	<u> 55107 </u>		
Alternate contact:					
Last name: Stanton	First name: Roger	Title: Site S	Superintendent	المحمد الم	
E-mail address:		Telephone: (651)	224-8299	Ext.	

I carify under penalty of law that this documant and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge.

I also certify under penalty of faw that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

Authorized signature:

12-10-09 Date:

This Application must be signed by: Corporation: a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application. **Partnership or Sole Proprietorship**: a general partner or the proprietor. **Municipality, State, Federal or Other Public Agency:** principal executive officer or ranking elected official.

If you have quasitions about the administrative details of the permit processing to: http://www.pca.state.mn.us/publications/wqstmt2-60 pdf or call the Minnesota Pollution Control Agency at 651-286-6300 or 800-657-3864 and ask for *"Construction Stormwater*," If you have technical questions, ask for the "Stormwater Policy and Technical Assistance Unit."

www.pca.ttate.mn.us + 651-296-6300 + 800-657-3864 + TTY 651-282-5332 or 800-657-3864 + Available in alternative formats wq-strm2-60 + 7/20/09 Page 3 of 3



Community Development Department 7516 – 80th Street South Cottage Grove, MN 55016 www.cottage-grove.org Planning Division Telephone: 651-458-2827 Fax: 651-458-2881 E-Mail: planning@cottage-grove.org

PLANNING APPLICATION

Applicant				-		
		Contact Name (if different)				
3M Company	······	Patrick J McGrann				
Mailing Address 3M Center, Bidg. 275-6W-22		E-Mail Address				
St. Paul, MN 55144		pjmcgrann2@mmm.com				
Telephone Numbers:						
Daytime: 651-737-2984	Oth	er	Fax: 651-737-3471			
Property Owner		Contact Name (if different)				
3M Company						
Mailing Address		E-Mail Address	rante for an anna anna anna anna anna anna anna			
3M Center, Bldg. 275-6W-22 St. Paul, MN 55144						
Telephone Numbers:	и у на сполити на полити на полити на по бласти на селото на селото се сполити се сполити се селото се селото с Сполити на сполити на сполити на селото се					
Daytime:	Other:	Fax:	and the second			
Property Address/Location		Property Identification Number		T		
10746 Innovation Road, Cottage Grove, MN						
Legal Description						
Type of Application: (check all that apply to your proposal)						
Minor Subdivision	\$300 + \$2000 escrow	Conditional Use Permit	\$400 + \$4000 escrow	x		
Preliminary Plat	\$400 + \$15000 escrow	Interim Conditional Use Permit	\$300 (annually)			
Final Plat	\$200	Site Plan Review	\$300 + \$5000 escrew			
Comprehensive Plan Amendment	\$600	Variance	\$200			
Zoning Amendment	\$600	Right-of-Way/Easement Vacation	\$300			
Description of Proposal (If more space is needed, please attach a letter describing your request): Requesting Conditional Use Permit for the Excavation and removal of soil material from area D-9 located at 3M Cottage Grove Center Plant Site. Excavation area is 100% within the boundary of the 3M Plant Site. Grading to include moving approximately 10,000 cu of material and excavating and removal of an additional 10,000 cu of material from the 3M Site.						
necessary information including plan applicant and property owner also ag	IS, surveys, drawings, and oth ree to pay all fees and escrows o agree to allow City staff, City aing requested.	on, the applicant and property owner agr er materials necessary to process and at the time of application and again when Council, and Planning Commission men Signature of Property Owner: 4 Vickie Batroot Date: Wickle Batboo	examine this request. The never accounts are deficient, nbers access to the property	•		
Date Application Received:	Date Applicat	ton Accepted:	By:			
Case Number(s):	· · · · · · · · · · · · · · · · · · ·	Received	By:			



.



7516 80TH STREET S **COTTAGE GROVE, MN 55016** (651) 458-2804

	51) 455-2004	
ADDRESS : 10746 INNOVATION RD S		
PIN : 35-027-21-22-0002		
LEGAL DESC : METES AND BOUNDS		
LOT 035 BLOCK 027		
PERMIT TYPE : BUILDING		
		· ·
PROPERTY TYPE : COMMERCIAL		
CONSTRUCTION TYPE : GRADING/SITEWORK		
NOTE: CELL D9 - SOIL REMEDIATION CITY COUNCIL APPROVAL OF CONDITIONAL USE PERMIT G	RANTED ON APRIL 21, 2010.	
APPLICANT	GRADING/EXCAVATION	391.00
CARL BOLANDER & SONS CO.	GRADING ASBUILT REVIEW	30.00
251 STARKEY STREET	GRADING/EXCAVATION PLAN REVIEW	73.75
ST. PAUL, MN 55107-	TOTAL	494.75
	PAID WITH CHECK # 8190	
OWNER		
3M COMPANY		
3M COMPANY 3M COMPANY TAX-BLDG220-6E-02		
PO BOX 33441		
TAX DIVISION		
ST: PAUL, MN 55133-3441		- BC
AGREEMENT AND SWORN STATEMENT		
The work for which this permit is issued shall be performed		
according to: 1) the conditions of this permit; 2) the approved		
plans and specifications; 3) the applicable City approvals,		-
Ordinances, and Codes; and, 4) the State Building Code. This		
permit is for only the work described, and does not grant		
permission for additional or related work that requires		
separate permits. This permit will expire and become null		
and void if work is not started within 180 days, or work is		
suspended or abandoned for a period of 180 days any time after work has commenced. Applicant is responsible for		
assuring all required inspections are requested in conformance		i
with the State Building Code.		

SEPARATE PERMITS REQUIRED FOR WORK OTHER THAN DESCRIBED ABOVE.

3M_MN00716972

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CITY OF COTTAGE GROVE 7516 80TH STREET S COTTAGE GROVE, MN 55016 (651) 458-2804

PERMIT NO.: 2010-00595

DATE ISSUED: 05/05/2010

ADDRESS	: 10746 INNOVATION RD S	PERMIT APPLICANT:
PIN	: 35-027-21-22-0002	CARL BOLANDER & SONS CO.
LEGAL DESC	: METES AND BOUNDS	251 STARKEY STREET
	; LOT 035 BLOCK 027	ST. PAUL, MN 55107-
PERMIT TYPE	: BUILDING	
PROPERTY TYPE	: COMMERCIAL	
CONSTRUCTION TYPE	: GRADING/SITEWORK	

CELL D9

CITY COUNCIL APPROVAL OF CONDITIONAL USE PERMIT GRANTED ON APRIL 21, 2010.

BUILDING INSPECTION RECORD 24 HOUR NOTICE REQUIRED FOR ALL INSPECTIONS, CALL FOR INSPECTIONS WEEKDAYS; 458-2804 7:30 AM - 4:30 PM

INSPECTION TYPE	DATE	INSPECTOR	INSPECTION TYPE	DATE	INSPECTOR
GRADING/SITE PREP					
				n 'n	
				8	

INSPECTION COMMENTS:

IN ACCORDANCE WITH CITY ORDINANCE, NEW OR SUBSTANTIALLY REMODELED BUILDINGS SHALL NOT BE OCCUPIED UNTIL ALL WORK HAS BEEN APPROVED, AND A CERTIFICATE OF OCCUPANCY HAS BEEN ISSUED BY THE BUILDING DEPARTMENT.

THIS CARD MUST BE POSTED AND VISIBLE AT ALL TIMES UNTIL WORK IS COMPLETE,

Appendix C

Appendix C

APPENDIX C SURVEY DOCUMENTATION

Total Excavation Stock Pile Direct Load PIM Stock Pile	ation Ne		1							
6/29/2010 Index	0 Base Surface 1 E6-ceN AS Builts-14-2010 E6-5-21-2010 2 E9-GRN AS Builts-14-2010 E6-5-21-2010	Comparison Surface D9-10FT BGS NO Stopes D9-10FT BGS With Stopes	Cut 6253.62 Cu. Yd. 11975.04 Cu. Yd	Cut Gut Fill G255.62 Cu. Yd. 0.00 Cu. Yd 11975.04 Cu. Yd. 1.52 Cu. Yd.	Net 6255.62 Cu. Yd. «Cut> 11973.53 Cu. Yd. «Cut>	Cut Factor FIII Factor 1 1	Cut (adjusted) 1 6255.62 Cu, Yd. 1 11975.04 Cu, Yd.	Fill (adjusted) 0.00 Cu. Yd. 1.52 Cu. Yd.	Net (adjusted) 6255.62 Cu. Yd. «Cut> 11973.53 Cu. Yd. «Cut>	Description Inplace Pol.imp. Mail. Volume 0.10 BGS Inplace Pol.imp. Mail. Volume 0.10 BGS
7/15/2010 Index 1 2 3 3	010 Base Surface 1 Base of 1-9 001.1 to 1-9 002.2 2 Base of 1-9 001.1 to 1-9 002.2 3 Base of 1-9 001.1 to 1-9 002.2 4 Base of 1-9 001.1 to 1-9 002.2	Comparison Surface Comparison Surface GeN 03 1-9001.2 GeN 03 1-9002.2 GeN 03 1-9002.2	Curt 0.00 Cur, Yd. 0.00 Cur, Yd. 0.00 Cur, Yd. 0.00 Cur, Yd.	Fill 60.83 Cu. Yd. 49.25 Cu. Yd. 44.64 Cu. Yd. 46.91 Cu. Yd.	Net 60.83 Cu. Yd. <fil> 49.25 Cu. Yd.<fil> 44.64 Cu. Yd.<fil> 46.91 Cu. Yd.<fil></fil></fil></fil></fil>	Cut factor Fill Factor	Cut (adjusted) 1 0.00 Cu. Yd. 1 0.00 Cu. Yd. 1 0.00 Cu. Yd.	Fàl (adjusted) 60.83 Cu. Yd. 49.25 Cu. Yd. 44.64 Cu. Yd. 46.91 Cu. Yd.	Net [adjusted] 0.83 Cu., Nd.47IIb 49.25 Cu. Yd.47IIb 44.64 Cu.Yd.47IIb 46.91 Cu.Yd.47IIb	Dascription Dascription Stock File Stock File Stock File
7/20/2010 Index 1 2 3 3 5 5 5 7 7 7 7/21/2010	100 Base Surface 1 Base of 1-3 Piles 2 Base of 1-3 Piles 3 Base of 1-3 Piles 6 Base of 1-3 Piles 6 Base of 1-3 Piles 7 Base of 1-3 Piles 7 Base of 1-3 Piles	Comparion Surface 6NN 09 1-3002-1 6NN 09 1-3002-1 6NN 09 1-3002-2 6NN 09 1-3002-2 6NN 09 1-3003-2 6NN 09 1-3003 6NN 09 1-3003	Cut 0.000 Cut 14 0.000 Cut 14 0.000 Cut 14 0.000 Cut 14 0.000 Cut 14 0.000 Cut 14 0.000 Cut 14	Fill 71.64 Cu. Yd. 77.56 Cu. Yd. 23.44 Cu. Yd. 51.46 Cu. Yd. 53.46 Cu. Yd. 53.45 Cu. Yd. 50.23 Cu. Yd.	Net 77,56 02, 74 cells 77,56 02, 74 cells 53 44 02, 14 cells 53 44 02, 14 cells 59 67 02, 14 cells 66 41 02, 14 cells 50,21 02, 14 cells	Cut factor fill factor	Cart (adjusted) 1 0.00 Gu. Yd. 1 0.00 Gu. Yd. 1 0.00 Gu. Yd 1 0.00 Gu. Yd 1 0.00 Gu. Yd 1 0.00 Gu. Yd.	Fill (adjusted) 71.54 Cu Yu 77.56 Cu Yu 77.56 Cu Yu 51.48 Cu Yu 66.31 Cu Yu 66.31 Cu Yu 50.23 Cu Yu	. Net [adjusted] 77.56 to. Yd.46Hb 77.56 to. Yd.46Hb 59.41 to. Yd.47Hb 59.42 to. Yd.47Hb 59.67 tu. Yd.47Hb 59.67 tu. Yd.47Hb 59.23 tu. Yd.47Hb	Daaacription Stock False Stock False Stock False Stock False Stock False Stock False
Index	Baxe Surface 1.0 % 10 F 865 2.0 % 10 F 865 2.0 % 10 F 865 4.0 % 10 F 865 5.0 % 10 F 865 8.0 % 10 F 865 8.0 % 10 F 865 8.0 % 10 F 865	Comparison Surface Gamparison Surface GMM 09:1-21:577 865 664 09:1-41:577 865 664 09:1-41:577 865 664 09:1-01:577 865 664 09:1-01:577 865 664 09:1-01:577 865 664 09:1-01:577 865	Curt 347.92 Cu. Yd. 165.157 Cu. Yd. 323.87 Cu. Yd. 459.59 Cu. Yd. 228.88 Cu. Yd. 228.88 Cu. Yd. 228.13 Cu. Yd. 231.13 Cu. Yd. 387.05 Cu. Yd.	Fill 0.00 Cu. Yd 0.00 Cu. Yd 0.00 Cu. Yd 0.00 Cu. Yd 0.00 Cu. Yd 0.00 Cu. Yd 0.00 Cu. Yd	Net 347.92 Cu Yd Curb 347.92 Cu Yd Curb 323.75 Cu Yd Curb 323.75 Cu Yd Curb 459.59 Cu Yd Curb 238.88 Cu Yd Curb 238.88 Cu Yd Curb 231.13 Cu Yd Curb 337.135 Cu Yd Curb 337.135 Cu Yd Curb	Cut Factor All Factor 1 1 1 1 1 1 1 1 1 1	Cut (adjusted) 1 347,92 Cu, Yd. 1 161,67 Cu, Yd. 1 161,67 Cu, Yd. 1 223,75 Cu, Yd. 1 287,42 Cu, Yd. 1 281,13 Cu, Yd. 1 221,13 Cu, Yd. 1 231,13 Cu, Yd.	Fill (adjusted) 0.00 Cu. Yd. 0.00 Cu. Yd. 0.00 Cu. Yd. 0.00 Cu. Yd. 0.00 Cu. Yd. 0.00 Cu. Yd. 0.00 Cu. Yd.	Net [adjusted] 347.92 Cu Yi -Curr- 347.92 Cu Yi -Curr- 323.76 Cu Yi -Curr- 323.76 Cu Yi -Curr- 459.39 Cu Yi -Curr- 459.35 Cu Yi -Curr- 228.88 Cu Yi -Curr- 231.13 Cu Yi -Curr- 231.13 Cu Yi -Curr- 231.13 Cu Yi -Curr- 231.05 Cu Yi -Curr-	Description Direct Load Direct Load Direct Load Direct Load Direct Load Direct Load Direct Load Direct Load Direct Load
Index	Base Surface 1 D9-10FT BGS With Slopes 2 D9-10FT BGS With Slopes	Compariton Surface 15' BGS MD Stopes 15' BGS MD Stopes	Cut 46.11.73 Cu. Yd. 31.10.11 Cu. Yd.	Fill D.18 Cu. Yd. D.000 Cu. Yd.	Net 461155 Cu ?d. <cut> 3110.11 Cu ?d.<cut></cut></cut>	Cut Factor Fill Factor 1 1	Cut (adjusted) 1 4611.73 Cu. Yd. 1 3110.11 Cu. Yd.	Fill (adjusted) 0.18 Cu. Yd. 0.00 Cu. Yd.	Net (adjusted) 4611.55 Cu: Yd <cnt⊳ 3110.11 Cu: Yd <cu⊳ 1501.44 Cu: Yd.</cu⊳ </cnt⊳ 	Net Graph Layer 1 Volume With Sicpe Layer 2 Volume NO Siope Poul Imp.Matri, (Informational Only)
7/21/2010REVISED Index Base S 1/1/1900 D9-10F	/2010 — AEVISED X Base Surface 1/1/1900 D9-10FT 0dS With Stopes	Comparison Surface GRN D9 1-10 15FTB65	Cut 441.02 cu. rd.	Filt 0.00 Cu. Yd.	Net 441.02 Cu. YdCuth	Cut Factor Fill Factor	Cut (adjusted) 1 441.02 Cu. Yd.	Fill (adjusted) 0.00 Cu. Yd.	Net (adjusted) 441.02 Cu, Yd. <cut></cut>	Net Gaph Direct Load
7/30/2010 7/30/2010 2 3 3 4 5 5 5 5 5	000 Base Surface 1 Base C / 7-30-2010 Piles 2 Base C / 7-30-2010 Piles 3 Base C / 7-300 Piles 4 Base C / 7-30-2010 Piles 6 Base C / 7-30-2010 Piles 7 Base C / 7-30-2010 Piles	Comparison Surface Comparison Surface GRN 05 2.2 001-1 GRN 05 2.2001-2 GRN 05 2-2001-1 GRN 05 2-9 001-2 GRN 05 2-9 001-2 GRN 15 2-9 002-2 GRN 15 2-9 002-2	Сц Сц 3000 Сц. Yd. 3000 Сц. Yd. 3000 Сц. Yd. 3000 Сц. Yd. 3000 Сц. Yd. 3000 Сц. Yd. 3000 Сц. Yd.	Fill 58.54 Cu, Yd. 53.31 Cu, Yd. 33.97 Cu, Yd. 33.97 Cu, Yd. 57.10 Cu, Yd. 77.56 Cu, Yd. 17.21 Cu, Yd.	Net 58.64 CL Yd cFIb 53.31 CL Yd cFIb 53.31 CL Yd cFIb 53.05 CL Yd cFIIb 55.05 CL Yd cFIIb 57.12 CL Yd cFIIb 17.21 CL Yd cFIIb	Cut Factor 1 1 1 1 1 1 1 1 1 1 1 1	Cut (adjusted) Cut (adjusted) 1 0.00 Cu: Yd. 1 0.00 Cu: Yd.	Fill(adjusted) 58.64 Cu: Yd. 53.31 Cu: Yd. 55.05 Cu: Yd. 57.10 Cu: Yd. 47.56 Cu: Yd.	Net (adjusted) 58.54 Gu. Yd.4Flb 53.34 Gu. Yd.4Flb 53.34 Gu. Yd.4Flb 53.05 Gu. Yd.4Flb 53.05 Gu. Yd.4Flb 47.52 Cu Yd.4Flb 17.21 Gu. Yd.4Flb	Description Description Stock File Stock File Stock File Stock File Stock File Stock File Stock File

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	Net [adjusted] 53.58 Cu Yd.4Filb 58.10 Cu Yd.4Filb 28.10 Cu Yd.4Filb 21.52 Cu Yd.4Filb 48.20 Cu Yd.4Filb 47.15 Cu, Yd.4Filb	Net (adjusted) 55.68 Cu, Yd.411 46.00 Cu, Yd.4111 46.00 Cu, Yd.4111 43.16 Cu, Yd.4111 49.48 Cu, Yd.4111 54.42 Cu, Yd.4111	Net (adjusted) 162.36 Cu. Yd. «Cut> 1010.45 Cu. Yd. «Cut>	Met [adjusted] 59.5 Gu Nd Affl 55.5 Gu Nd Affl 66.00 Gu Nd Affl 66.00 Gu Nd Affl 67.5 Gu Nd Affl 68.5 Gu Nd Affl 68.5 Gu Nd Affl 98.9 Gu Nd Affl 59.2 Gu Nd Affl 59.2 Gu Nd Affl 59.2 Gu Nd Affl	Net (adjusted) 23.16 Cu. Yd.cfilb 61.85 Cu. Yd.cfilb
	FHI (adjustred) 55.3.58 Cu. Yd. 58.20 Cu. Yd. 52.75 Cu. Yd. 41.22 Cu. Yd. 47.15 Cu. Yd. 47.15 Cu. Yd.	Fill (actiusted) 55.68 Cu. Yd. 55.68 Cu. Yd. 44.70 Cu. Yd. 44.70 Cu. Yd. 54.42 Cu. Yd. 54.42 Cu. Yd.	Fill (adjusted) 0.00 Cu. Yd. 0.01 Cu. Yd.	Fill (Adjusted) 55.55 Cu. 14 65.05 Cu. 14 31.23 Cu. 14 31.23 Cu. 14 45.15 Cu. 14 45.15 Cu. 14 45.15 Cu. 14 54.25 Cu. 14 54.25 Cu. 14 54.25 Cu. 14 55.25 Cu. 14 55	Fill (adjusted) 23.16 Cu: Yd. 61.86 Cu: Yd.
	Cut (audjussed) 1 0.00 Cut Yd. 1 0.00 Cut Yd. 1 0.00 Cut Yd. 1 0.00 Cut Yd. 1 0.02 Cut Yd. 1 0.00 Cut Yd.	Cut (adjusted) Cut (adjusted) 1 0.00 Cu Yd. 1 0.04 Cu Yd. 1 0.00 Cu Yd. 1 0.00 Cu Yd. 1 0.00 Cu Yd.	Cut (adjusted) 1 162.98 Cu. Yd. 1 101046 Cu. Yd.	Cut fadiusted Cut fadiusted 1 0000 cu Yd 1 0000 cu Yd	Cut (adjusted) 1 0.00 Cu. Yd. 1 0.00 Cu. Yd.
	Cut Factor Fill Factor 1 1 1 1 1 1 1	Cut Factor	Cut Factor Fill Factor 1 1	Out Factor fill Factor	Cut Factor Fill Factor 1
	Net 33.58 Cu Yd sfilb 38.10 Cu Yd sfilb 52.75 Cu Yd sfilb 82.25 Cu Yd sfilb 81.25 Cu Yd sfilb 47.15 Cu Yd sfilb	Mer 55 86 GL YGL FEIID 55 86 GL YGL FEIID 46 JJ GL YGL FEIID 49 JG GL YGL FEIID 49 42 GL YGL FEIID 54 42 GL YGL FEIID	Net 152.98 Cu, Yd, <cut> 1010.45 Cu, Yd, <cut></cut></cut>	Net 53.22 Cu Yd effilb 53.53 Cu Yd effilb 45.80 Cu Yd effilb 53.53 Cu Yd effilb 43.53 Cu Yd effilb 43.15 Cu Yd effilb 43.15 Cu Yd effilb 54.27 Cu Yd effilb 73.61 Cu Yd effilb 73.61 Cu Yd effilb	Net 23.16 Cu, Yd, cFill> 61.86 Cu, Yd, cFill>
	Fill SS.16 Cu. Yd. SS.16 Cu. Yd. 52.75 Cu. Yd. 51.52 Cu. Yd. 48.22 Cu. Yd. 47.15 Cu. Yd.	Fill 55.68 Cu. Yd. 46.06 Cu. Yd. 49.16 Cu. Yd. 49.48 Cu. Yd. 54.42 Cu. Yd. 54.42 Cu. Yd.	FIII 0.00 Cu Yd. 0.01 Cu Yd.	Fill 59.52 Ch Yd 58.55 Ch Yd 58.55 Ch Yd 31.32 Ch Yd 46.85 Ch Yd 46.85 Ch Yd 46.85 Ch Yd 54.92 Ch Yd 54.92 Ch Yd 54.92 Ch Yd 59.18 Ch Yd 78.61 Ch Yd	FN 23.16 Cu. Yd. 61.86 Cu. Yd.
2	Cu 0.00 Cu, Yd 0.00 Cu, Yd 0.00 Cu, Yd 0.00 Cu, Yd 0.00 Cu, Yd 0.00 Cu, Yd	Cut Cut 0.00 Cut Yd 0.000 Cut Yd 0.000 Cut Yd 0.000 Cut Yd 0.000 Cut Yd	Cut Cut 153.98 Cu, Yd. 1030.46 Cu, Yd.	0.1 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Cut 0.00 Cu, Yd. 0.00 Cu, Yd.
	Camparisan Surface GRN 093-6 001-1 GRN 093-6 001-2 GRN 093-6 002-1 GRN 093-6 002-1 GRN 093-6 003-1 GRN 093-6 003-2 GRN 093-6 003-2	Comparison Surface GRN D9 3-3 001.1 GRN D9 3-3 001.2 GRN D9 3-3 002.1 GRN D9 3-3 002.1 GRN D9 3-3 003.1 GRN D9 3-3 003.2 GRN D9 3-3 003.2	Compatison Surface GRN 09 3-2 25FT BGS RampBottom	Comparison Surface GRN D93-3004.1 GRN D93-3004.2 GRN D93-3005.2 GRN D33-3005.2 GRN D33-4001.2 GRN D33-4001.2 GRN D33-4002.1 GRN D33-4005.1 GRN D33-4005.1 GRN D33-4005.1 GRN D33-4005.1	Comparison Surface GRN DD 2-5 002-2 GRN DD 3-1 D01-2
10	Base Surface Base of 8.18.2010 Pite: 1 Base of 8.18.2010 Pites 2 Base of 8.18.2010 Pites 4 Base of 8.18.2010 Pites 5 Base of 8.18.2010 Pites 6 Base of 8.18.2010 Pites	00 Base Surface 1 Base of 8.19.2010 2 Base of 8.19.2010 2 Base of 8.19.2010 6 Base of 8.19.2010 6 Base of 8.19.2010	110 Base Surfleee 1 20 BG: PT 2 BG-GNN AS-Built-5-14-7010-EG 5-21-2010	010 Base Surface Base Surface Deare of 8.26-2010-Priez-3 Deare of 8.26-2010-Priez-3 Base of 8.26-2010-Priez-4 Base of 8.26-2010-Priez-4 Ease of 8.26-2010-Priez-4 Base of 8.26-2010-Priez-4 Base of 8.26-2010-Priez-4 11 Base of 8.26-2010-Priez-4 11 Base of 8.26-2010-Priez-4	RNSED Base Surface. 1 Base of GRN D3 2:9 003-2 Minus Center Shots 2 Base of GRN D3 3-1 003-2 Minus Center Shots
8/18/2010	Index	8/15/2010 Index 1 2 2 3 3 6 6 6	8/23/2010 1 1 2	a/20/2010 1 1 3 2 5 5 5 5 5 1 1 1 1 1 1 1 1 1	8/11/2010 REVISED Index Base 1 Base 2 Base

Appendix D

Appendix D

APPENDIX D SAMPLING RESULTS

3M_MN00716980

SOIL BORING SAMPLE RESULTS

フロシスクシン	09 Area - Soll Boring Profiling
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	· .			- 60	8	
		E	6	D9-3-3	E190	
		8	6	20-3-1 D0-1-2 D0-1-2 D0-2-2 D0-2-2 D0-3-2 D0-1-3 D0-1-3 D0-2-3 D0-2-3 D0-3-3 D0-3-3 D0-3-3 D0-3-3 D0-3-3 D0-3-2 D0-	D805	or her de
		E		09-3-3	D905	A 1
		8	-	D9-3-3	0631	01110
		62	2	09-2-3	0913	10 Mar 20
			7	D9-2-3	D931	
		8	-	D9-1-3	5160	
Results		67	-	09-1-3	9060	
ng Analytical Site		ş		D9-3-2	0690	
I- Soll Boring Profiling A Cottage Grove, MN Site		2	5	D9-3-2	0630	
Area - Soil B Cottage		2	~	D9-2-2	0860	
Table 1: 09 Area - Soll Boring Profiling Analytical Results Cottage Grove, MN Site		~	7	D9-2-2	0690	
	:	7	-	DG 1 - 2	0690	
		2	-	D9-1-2	0830	
		-	•	D9-2-1	9060	
		F		09-3-1	6260	

1.1.4	D932	11 feet		< 0.907	< 0.997	166.0 2	<0.097	< 0.997	< 0.997	< 0.997	< 0.997	2496 C >	286°C ~	799.C >	1 007	1 007	1001 2	10000	1001	1001	200.02	< 0.997	< 0.997	< 0.097	< 0.897	< 2.49	< 2.49	< 0.887	< 2.49	4.14	188.0 >	RV7 V	E0.0	100-	1002	< 0.249	< 0.987	< 0.997	< 0.967	<1.99	< 2.49	< 0.997	< 0.997	< 0.007	< 0.997 2 0.007	< 0.997	100'0 4	< 0.097	< (997	< 0.997	< 0.997	< C.997	< 2.49	< 0.997	< C.249	< 0.997	× 2.49	1000 0	10407	1007	19.9	< 0.997	< 0.997	< 0.249	< 0.997	< 0.997	< 0.997	< 0.997	< 0.997	< 3.97	< D249	> U.C.90
11		02-Feb-10 10 - 15 feet (DB)		1	-	**	h	1	1	!	1		1	1							T				T		-	1.		t	!	:	!		╞	F	i		1	1	i	1	ł	Т	$\left \right $	1			,	1	1	1		-	1	1	-			h	┢	1	1	1	T	ľ	1	I	1		-	1
1.1.4	D952	02-Feb-10 10 - 15 feet 10		T	1			1	T	1	1	1	!	1						T			1	T	-	1	***	1	1	T	1	E	1			I	1	1	-	1	1	ł	ł	1	ī	I			1	1	+	1		1	1	-	1	-				!	!	ĩ	ī	ľ	1	ĩ	1	1		F
		22 faet 1		< 0.234	< 0.234	× 0.2%	1020	× 0.234	- 0234	< 0.234	< 0.234	0.00	< 0.2%	0.2%	10.04	1000	5 U.234	× 0.004	- 100	1023	c 0.234	< 0.234	< 0,234	< 0204	< 0.234	< 0.686	T	c 0.234	1	7	< U.234	0000 V	09000		105C V -	0.170	< U.234	< 0.204	< 0.234	< 0.469	< 0.586	;	< 0.234	< 0.234	< 0.234	40.834	A U.C.94	< 0.234	1	< 0.234	< 0.234	×0.234	0.586	!	0.263	< 0.234		*CZ:0 >	P2607	1020	10.204	< 0.234	< 0.234	ľ	< 0.234	4 0.234	< 0.234	< 0.234	< 0.234	< 2.34	< 0.059.B	00000 S
++	+	19-War-09 20 - 25 feet	11	-	1	!		1	1	1	1	1	1						h			ſ	1	1				1	1	F	1		ł	!		7	1	1		7	ī	ŧ	1		1	1	1		1	1	1			1	1	!	1	•				;	1	1	1	I	1	1	T	ľ		Г
5	D805	22 - 23 feet (RE)		Ŧ		!		1	1	1	!	1	1				h					T	;	1		1	:	1	1	ľ	1		7			1	.1	1	1	т	I	1	1	. 1	1	(1		1	.1	T	5		;	1	-	1					, 	!	!	1	1	1	1	T	1		F
, , ,	D905	25-Jun-08 22 - 22 feet 22 -		< 3.7	<1.9	41.4 4	211	01.	< 1.9	e15	< 87	197		5	- 27	1.5	< 3./		81.0			1	× 1.3	ţ	6.1.5	< 3.7		e 1.9	< 3.7	-	2:0	s	C'1 2			24	<3.1	< 3.7	< 3.7	< 3.7	< 3.7	< 3.7	\$1.9	× 1.9	< 3.7	41.9	141	< 1.9 I	T	< 3.7	< 37	5 87	1	< 3.7	80	7		040	237	287	3	< 19.		480	5.8	2.8	< 1.9	< 1.9	< 1.9		2000	-
	1.1	20 - 25 feet 22	-	ŧ	£	!		5	ļ	,			1	1								1	ī	1	-	i	1	1	1	-	1	-	r			ſ	Ĩ	1	1	1	1	1	1	1	Ŧ	1		ſ	T	1	1		1	1	ł	ī			L			•	i	ī	1	5	1	1	-	1	l	
╈	╋╋	19-Mar-09 0. 17 feet 20	┢┥	< 0.24	< 0.24	42.02	10.94	× 0.24	- 0.24	< 0.24	¢0.24	10.94	0.94	10.04	40.0	100	4 U.24	/nem	17.0 2	1007	20.94	<0.24	<0.24	×0.24	< 0.24	< 0.6	Ť	< 0.24			40.24		000		VO V	0.287	< 0.24	< 0.24	<0.24	< 0.48	< 0.5	;	<0.24	< 0.24	10.24	10.02	10.24	<0.24	1	< 0.24	< 0.24	40.24	< 0.8	1	3.8	< 0.24	- 100-	100	10.0	10.04	<0.24	< 0.24	< 0.24	1	< 0.24	+ 0.24	< 0.24	< 0.24	+2°C>	< 2.4	0.160	1100
┿╋	11	03-Feb-10 1 15 - 20 feet	H	***	ì	1		1	ŀ	-	!			1			r	n		1	1	1	1			1	:	1	ſ	-	3	•	1	!		1	1	ī		1	1	T	:	1	ł	1	: :	1	1	1	1	1	1		:	1	!	1				7		;	1	1	1	1	1	1	!	
		19-15 feet 1:			1	1		1	ľ	;				1			5	η		5		T	1	l		;	1	ł		1	1	;	£			:	1			1	;	1	-	1	1	1		T	1	1	1	£ 1	1			t	1			;	1	;	1	1	1	1	;	T	1	:	1	
		25-Jun-08 1 14-15 feet 1		< 0.0351	< 0.0051	Locolo -	10000	< 0.00m	< 0.0051	< 0.0051	< 0.0051	-0.0051		< 0.0084	0.0061	-0.0054	Linnon v	11 (0)(0)	100010 2	- 0.0MB1	< 0.0051	1	< 0.0051	1	< 0.0051	< 0.0061	;	< 0.0001	< 0.0051		< 0.001	100010	2000	!		< 0.0051	< 0.0051	< 0.0051	< 0.0061	< 0.0051	< 0.0051	0.0064	< 0.0051	< 0.0051	< 0.0051	< 0.0051	14000	< 0.0051	-	< 0.0051	< 0.0051	< 0.0001		< 0.0051	< 0.0051	-	- 0 0004	10.00	< 0.0074	< 0.0015		< 0.0051	< 0.0051	< 0.0051	< 0.0061	< 0.0061	< 0.0061	< 0.0065	< 0.0061	1	< 0.0051	- month -
	++	22 feet 1		< 0.003B	< 0.0039	0.0009	< 0.0000	P200.0 -	< 0.0039	< 0.0099	< 0.0099	0.0040	< 0.00%	- 0.0030	< 0.000a	10000	REININ S	S ULINOS	10000	0.0000	0.0030	< 0.0039	< 0.0035	< 0.0039	< 0.0098	< 0.0193	< 0.0241	< 0.0039	< 0.0193	< 0.0195	< 0.0058	2000 VIIN	10 004	10000	0 on the	< 0.0038	< 0.0039	< 0.0039	< 0.0039	< 0.0193	< 0.0193	< 0.0039	< 0.0039	× 0.0038	 0.0066 0.0066 	< 0.0000 A	< 0.0000	< 0.003P	< 0.5096	< 0.0039	< 0.039	< 0.000 ×	< 0.0096	< 0.0039	< 0.0038	< 0.0096	- 0 0000	C200 0 2	< 0.019.9	< 0.0039	× 0.0096	< 0.0039	< 0.0039	< 0.0030	< 0.0039	< 0.036	< 0.039	< 0.0039	< 0.039	< 0.0386	< 0.0039	Antonia S
	1 1	03-Feb-10 20 - 25 loot	1 1	1	1	1			1	1	1	,	1	,			ή	h			1	1	1	1:		1	1	1	1	1	,					1	ī		1	1	1	1	T			1			-						1	1	1	- 1	:	1	1	1	ľ	1		1	-	T	1	!	!	5
-+		03.Feb-10 17 feet 2	11	< 0.489t	< 0.489	< 0.489 A02.0	001-0 V	× 0.489	< 0.489	< 0.489	< 0.480	067.0	e 0 499	0.4991	0490	1010	60101	< U.409	10,000	0.000	0.460	<0.489	< 0,489	< 0.489	< 0.489	< 1.22	< 1.22	< 0.489	< 1.22	< 0.488	1.00	221 2	100 1	9	- 0.480	<0.122	< 0.469	≺ 0,489	< 0.489	< 0.978	< 1.22	< 0.489	< 0.489	< 0.48B	< 0.489	< 0.480 ×	0.469	< 0.489	< 0.489	< 0.489	< 0.489	< 0.480	<122	< 0.489	0.679	< 0.469	007.1 2	1 79	< 0.489	< 0.469	< 0,469	< 0.469	< 0.489	0.683	< 0.469	< 0.458	< 0.468	< 0.489	< 0.489	< 4.89	0.368	
+++	+ +	03-Feb-10 15 - 20 feet		Ŧ	T	+			ľ	1	1		ŀ							Ì	1	-	T	1		1	1	'	;	1	5	ľ				1		:	ŧ	:	T	1	!	1				1	:	1	;		1	1	1	I	r		1	:		1	1	1		1	1	1	!	1	ſ	
++	+-+	03-Feb-10 14 teet	H	< 0.013	< 0.013	× (1013	0018	< 0.013	< 0.013	< 0.013	< 0.013	10043	< 0.013	< 0.013	3000	0 DAG	20012	< 0.018	1000	10042	< 0.013	< 0.013	< 0.013	< 0.013	< 0.0325	< 0.0649	< 0,0812	< 0.013	< 0.0649	< 0.0649	2002	2 0.018	1000	1 206	ACC/028	< 0.013	< 0.013	< 0.013	< 0.013	< 0.0649	< 0.0649	< 0.013	< 0.013	< 0.013	< 0.040	< 0.015	< 0.013	< 0.013	< 0.0325	< 0.013	c 0.013	< 0.0120	< 0.0325	< 0.013	< 0.013	< 0.0625	1 0.045	0.028	< 0.0649	< 0.013	< 0.0325	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	< 0.13	< 0.013	Tax and a
- 92	D930	03-Feb-10 10 - 15 feet		:	1			ľ	ŀ	1		,	1		h			h			1	ł	1	1	1	1	1	r	1	-	;					1	T	T	1	1	1	'	1			: :		:	'	1	!	, ,	T	I	T	-			1	:	!	1	1	Т	t	1	1	7	1			
5 g	9060	0 26-Jun-08 et 23 - 24 feet		\$' 5 *	< 2.2	225	g ::	24	< 22	< 22		144		ę	2.4 8	2.1	0	1 00 1	2	00.7	8.5	1	< 22		< 22	< 4.5	•••	<22	< 4.5		2	8	b - 1			8	< 4.5	< 4.5	< 4.5	c 4.5	< 4.5	< 4.5	< <u>2</u> 2	< 22	000	282	< 2.2	4 2 2	1	< 4.5	4 9 P		ľ	< 4.5	8	1		2600	<45	540	1	< 2.2	c 4.5	610	< 4.5	<2.2	< 2.2	< 2.2	<22	1	2600	
6 4 1	6260	02-Feb-10 20 - 25 feet			1	ή		1	;		1						h				1	1	1	-	-	1	1	1	1	1	5	ľ			h	f	1	1	1	7	1	:	;	!	1			1	1		ī		1		1				ľ	I	T	E	1	1	Т	1	1	1	:	1	1	
++	0908	25-Jun-08 17 - 18 feet		< 0.18	< 0.068	2 0.088	0000	+ 0.08A	× 0.068	< 0.088	< 0.18	<018		-018	1018	010	0.07	< 0.088	00000	0.080	< 0.18	1	< 0.086	-	< 0,088	< 0.18	:	< 0.086	< C.18		2010	2010	10010 2			0.35	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.089 ×	< 0.088	0.030	0.18	< 0.038	- 0.088	1	< 0.18	0.18		,	< 0.18	0.080	1.	-018	0.24	< 0.18	0.0	Т	< 0.088	< 0.18	0.054	< 0,13	< 0.038	< 0.038	< 0.088	< 0.038	-	2.0	
	D929	2-Feb-t0		< 0.239	< 0.239	< 0.235	0.020	0.239	< 0.239	< 0.239	A 1,259	0990	0.239	0.030	0360	0.000	A U.K05	20202	10.477	1000	1020	< 0.239	< 0.238	< 0.239	< 0.239	< 0.506	< 0,598	< 0.239	< 0.508	×0.200	A 9.600	1000 V	00.67	8.01	0000	< 0.0596	< 0.239	< 0.238	< 0.238	< 0.477	< 0.596	< 0.239	< 0.239	< 0.239	66202	662.0 2	< 0.233	- 0.233	< 0.233	< 0.233	< 0.239	< 0.239	< 0.598	< 0.238	0.387	40204	0800 1	258	< 0.239	< 0.238	< 0.239	< 0.239	< 0.239	0.671	< 0.239	< 0.239	< 0.239	< 0.239	< 0.239	× 2.33	0.783	
	D929	2-Feb-10 0		:		1			!	1				-							1	1		1		1	-	1	1	1	1	ľ				;	;	1	1	:	;	!	1	!					1	┯	T	Π	1	i	T	1			1	L	1					1	Г		-		T	Î
Layer Number	Joring ID:	oth (boah: 0	-				-													-																					-					╞						-						ł									_					
Laver	9																																																																							
			ide (mg/kg, ppm)				put.								ens.	A MA															VIL	N																									1															
			Volatife Organic Compounds (mg/kg, ppm)	Tetrachiorosthens	richloroethane	-Terrachioroethan	Inthontal functions	1 cecelbace	"licroethene	licroprocese	chicrobanzana	ichloronomene	ichlorobenzama	imativihanzana	amo S.chierann	Province of the second second	fornioemaria (cuo	Norvalina na	International Teta	Increased and	1.8.5.7 dmathvibenzana	Vicrobenzene	anapropana h	1.4-Dichlorobenzene	1000000000	one (MER)	pethytylnyl ether	otoluene	000	-unapriculation		A restreme		title	hife	Benzene	Arcone	thloromethane	licitionomethane	uu.	retrane	disuitide	tetrachloride	euszue	0000	othana	Nchicroathane	cls-1,3-Dichicropropono	eusz	ochloromethane	omemone	functionethene	ther (Ediyl ether)	Dilsopropyl ather	BUBZ	000-1.3-00(actions	Therana (Certain	American review of the	he Chtoride	art-butvl ather	lane	entene	benzette		pyficiuone	dbenzana		(benzene	orcethene	trofuran		
			Volstife C	1,1,1,2		2211	1.1.2.1	11-Dish	1.1-Didh	1.1-D/oh	1.2.3.7.	123.74	1.2.4-7	124.70	1 2.0 ho	20 C C	1 0.Dich	1 2.040	10.014	1 2.044	1.3.5.74	1005	1,5-Dich	1.4-Dich	2.2-Dich	2-Butanu	2-Chlory	2-CHOC	2 Heldhono	Allow 2	Collecter 1	Automatic Automatic	Annual Annual	Acretont	AllMohilo	Benzene	Bronnuls	Bromoet.	Bromod).	Bremolo	Brcmom	Carbon	Carbor	Chloroby	Chloride	Chloron	cia-1.2-0	cls-1,3-D	Cyclohen	Dibrorro	amound Annual	Dichland	Diethyle	Dilsopm	Funvioen	Performant	februrul.	mac.	Methylan	Methyla	Nephthal	n-Butylbe	n-Propyli	O-Xylgne	p-laoprop	SAC-BUN.	Shrene	lert-Buty	i etrachik	Tetrahyd	Toluene	

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1 of 12

MILLIN MILLING	Table 1: D9 Area - Soil Boring Profiling Analytical Results Cottage Grove, MN Site
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2 di 12

Table 1: D9 Area - Soli Boring Profiling Analytical Contage Grove, AN Site

Results

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 3 D9-2-1 D9-3-1 D906 D929	3 3 -3-1 09-3-1 929 D908	D8-1-2 D930	D9-1-2 D9-2-2 D930 D930	D9-2-2	D9-3-2 D9-3-2 D830 D930	D9-1-3 D905	09-1-3 D9 10913 11	D9-2-3 D9-2-3 D931 D913	D931	D9-3-3 D905	0905 25. h 0.08	D913 D9-3-3 D913 D913	-3-3 D9-1-4 913 D932 Mar.09 09.5ab-10	D9-1-4 D9-1-4 D932 D932 D832
		-eb-10 25-Jun-08 25 feet 23 - 24 feet	03-Feb-10	++	17 feet	++	20-00-08	_		++	22 - 23 feet	2 - 23 feet (RE)	24 - 25 feet	++	10 - 15 feet (DE
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< 0.0.00	C (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	202				< C1000	200	0.0	< UUT15	-			< 0.052	2000	- 0.00tg
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- 0.056	10.000		5	10.017		- 0.035		0.0	1000 C				× 0 302	- C 0344	
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•	!	< 0.35	1	-	T	1		1	1	-	-	ĩ	1	1	

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WEAT N

Table 1: D9 Area - Soil Boring Profiling Analytical Results Cottage Grove, MN Site

	Block Number:	-	-	+-	-	-	2	2	2	2	2	2		8		3			3	3	8	4	4
	Layer Number:	-	-	2			-	-	2	2			-	-	2	2						L	1
	Soil Block ID:	29-1-1	D8-1-1	D8-2-1	D0-3-1	D9-3-1	D0-1-2	D9-1-2	D0-2-2	D9-2-2	D9-3-2 C	09-3-2 5 0	D0-1-3	D9-1-3 D5	09-2-3	09-2-3 D9	60 - E- E- 60	0-0-0-00	08-3-3	D9-3-3	D0-3-3 [D8-1-4 D	D9-1-4 D9-1-
	Boring ID:	D829	0329	906C	6260	9060	0830	┝		0830	0660	0830	D905	0913	184	0213	0631 D	DS05	D805	D313	D913	-	
	-		02-Feb-10	25-Jun-08	2	25-Jun-08		03-Feb-10 0	•		9		8		ē	9-Mar-09 03-F	H	H	Ĥ	Н		Η	02-Feb-10 02-Feb-10
S94	H	10 - 15 leet	11 feet		20 · 25 feet	H	10 - 'S feet	14 feet 1	15 - 20 feet 1	17 feat 26	20 - 25 feet	22 (eet 14	14 - 15 feat 10	10-151001 15	15 - 20 feet 1	17 feet 20 -	20-25 feet 22-	22 23 feet 22	22 - 23 Inet (RE) 2	20 - 25 feet	22 teet 10	10-15 feet 10-1	10 - 15 feet (3B)
etals, TCLP (mg/L, ppm)									ŀ	-						L	;			-			-
Arsento, TOLP		1	1	1	< 0.050	1	1	1	;	ī	;	,	ł	•	1	7	< 0.050	;	1	1	1	1	i
Barium, TCLP		1	1	2	0.390	1	1	1		1	1	1	:	1	;	T	0.630	1	1	1	T	î	1
Cednium, TOLP		1	1	1	< 0.0050	1	1	. !		;	1	1	j	ł	ſ	1	< 0.060	1	1	:	-	1	1
Ctromburn, TCLP		ł	F	ł	< 0.050	1	ſ	1	:	;	1	1	T	1	1	7	< 0.050	1	1	1	-	ī	!
Lead, TCLP		!	1	1	< 0.015	ſ	1	1	1	;	ſ	:	ī	1	1	1	< 0.015	1	1	1	1	1	-
Selenium, TCLP		1	1	1	< 0'020°	Т	1		:	i	r		i	:	1	-	\$2010 >	-	1			1	
Silver, TCLP		1	1	;	< 0.050 h	in a	ŀ	1	Т	1	÷	1	1	1			C90'0 ×	T	1	1	1	1ș	1
Mercury, TCLP		1	1	1	< 0.00081	1	•	:	1	1	1	1	1	1	1	!	E000/0 >	ī	ſ	1	1	1	
ctivity (make, ppm)										-	-	-								-		-	
Cythrice, Reactive		1	1	1	< 0.025		T	1	:	1	1	-	1	1	T	1	< 0.025	;	ī	1	1	Т	T
Sufide, Resource		T	1	T	< 100	1	1	-	1	I	I	1	1	1	ī	-	< 100	1	-	ī	!	T	-
Rashpoint ("F)		-	-																		-		
Flashpoint		ī	-	T	>210		1	ĩ		1	1		-	1	ī	1	>210	1	ŧ	1	1	1	
(Standard Units)			-																				
pH at 25 Degrees C		1	2	1	6.4		1	i	***		!	1	1	!	1				:	1	1	1	I
ercent Moleture (%)																				_	_		
Percent Molature		4.6	52	40	E47	*	0.00		1.00		~						~ ~ ~						



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Bit Dist Dist <thdist< th=""> <thdist< th=""> <thdist< th=""> Dis</thdist<></thdist<></thdist<>				1600.02	20.0037	< 0.0097	<0.008/1	0.000		- < 0.0243	<0.0097	<0.0007 11.	100100		1200070	<0.0097	20002	< 0.0097	- <0.0243	c0.0807	1			31	~ 0.0007	!	V 26.0	1	< 0.0097 < 2.35	~ 0.0097	//0.009/	- 1.0480	< 0.0097	~ 0.0097	 0.0097 0.0040 	T 1	< 0.0243	~ 0.0097	202	< 0.0097			1	01053	< 0.0240 39.	< 0.0243	- < 0.0097		< 0.0037	c 0.0243	< 0.0097		- < 0.0007	< 0.0097 <2.65		< 0.0097 < 2.65	ZR00/0 >	1990
3 1 1 1 -5 09-3-6 09-1-9 09-16 09-1-9 -6 09-3-6 09-1-9 03-6-6 09-6-6 -63 19-Man-01 02-5-6-6-10 02-7-6-0-10 02-7-6-0-10 feet 22-feet 10-15-feet 11-16-feet 11-16-feet	< 0.417 < 0.208		0.442	1	1	1	1.	-		1		T	10710 S	< 0.417	1	1	1		- < 0.417 - < 0.208		- < 0.417	c0.519		10	s 1.04		-0.208	8.64 V	× 0.417 × 0.200	< 0.417	< 0.417	101	Т	;	1				2020 × · · · · · · · · · · · · · · · · · ·		T		<1.04 <0.518			+	4.36 <0.208		0.417	0781		217 1	0.783	< 0.417	< 60.417 < 0.203	< 0.417	41.41.7	
1 2 2 2 3 3 1 0 2 0 2 1 1 3 1 0 2 0 2 0 3 1 1 3 1 0 2 0 2 0 3 0 1 3 1 3				1987) 1987) 1987)		<1.95				- <1.66	<0.974*	18.1				2.66	- <1.85	2.64	1.135					1	<4.07		2 1 2 1 2 1	- 431	× 1.66				1	< 0.974 ^a						<1.96		1					-			<1.95	<				- <1.95		<1.95	~ 19.6
3 3 3 1 1 0 3 3 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 0 1 3 4 10 1 1 0 1 3 4 10 1	< 10.5 × 25.7 × 0.0064		< 25.7	< 25.7	+ 25.7	0.61 < 25.7	122	107 2	- 26.7	< 25.7	292 > 291	< 25.7	1919	1	0.5 < 25.7	< 26.7	< 25.7	5 <25.7		< 643	< 25.7	< 64.3		l	26.1 < 64.3	5 • 257		17.8	< 10.6 < 26.7 < 0.0064		< 10.01 < 20.01 < 20.01 < 0.00041	3.1 < 64.3	5 × 25.7		0.5 <25.7	-	0.5 < 20.7		26.2	c 10.6 < 25.7	< 16.3 < 23.7 < 0.0084 . 10.61 . 10.9 < 0.0084		< 26.1 < 54.3 < 0.0159		c 10.5 < 26.7	<64.3		300	< 10.5 < 25.7 < 0.0064	5 <25.7	16 < 25.7	256 217 < 0.004	10.5 < 25.7		<10.5 < 25.7 < 0.0064			
2 3 3 3 3 0 2 2 4 09 3 4 09 3 4 0 0 2 2 4 09 2 4 0 0 2 2 0 0 2 2 0 2 2 4 0 10 0 2 4 0 0 0 2 4 2 0 0 2 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 0 0	< 0.578	< 0.579	< 0.579}	< 0.679 < 0.679	< 0.579	< 0,579	 			< 0.579f	1	-				ſ	T	1	- 0.579		1	1	1			1	1 1	9 1		1	f :				+	- 1223			6 T			- 02/0 ×	<1.45	T	0.579	1.45	0.828		~ C.579	< 0.579	0.728	11		1	< 0.679	1	1	
Leyer Number: 1 2 Soli Block D: 01-1.4 09-2-4 Soli Block D: 02-1.4 Sample Dave: 02-64-11 02-24 Sample Dave: 02-640-10 02-660-10 Sample Dave: 02-640-10 02-60 660					-0.989	< 0.389	~ 0.998	 C.EBS a. cont 	0.000			- 0,989		1 0.389		0.389	- 0.369	6860	× 0.389	< 247	- 6363	< 2.47	4.73	< 2.47	~ 542			< 0.247			O.808 O.808		< 0.569 ····							< 0.989		1-1 6880 v	< 247	C 0.869	- 0.880	< 247	× 0.889	111 DEV/D 2	< 0.989	24.0		42830 × 0.2471		60500 >	0.889	~ 0.999		

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NT IN MARK Table 1: D9 Area - Soil Boring Profiling A Cottage Grove, MN Site

Table 1: D9 Area - Soil Boring Profiling Analytical Results

2 2 09-2-7 0935 0 04-Feb-10 rt 17 feet			11,1	- < 2.76		1		1	1	1			1	1	1	1				1	1		-	-	!	:	-					1	1	-	f	1	I			1	ł	1	-		-	1	1	-					ľ			1	-	-	-	1	1	1	1	!	1	7
7 2 09.2-7 09.35 03.Feb-10 15-20 feet	50	38.	73	09		1		-	1	1	1 1		Ţ.	1	1	1					T	7	1	1	-		1						1			1	1	1						-	-	1	-									-	÷	-	1			t				
7 109-1-7 0835 03-Feb-10 12 feet	< 0.0109		- < 0.02	- 0.01					5	r					1																																																			
7 1 1935 03-Feb-10 10 - 15 feet	000			0																	ĺ													,				1								'	•	£				1			3				1	1			!	•		
8 3 D9.3 8 D934 02/Feb-10 23 feet	< 2.65	4 6.6 4 2.6	< 2.6 < 2.6	< 0.6B				1		I	:			;	•		: :						•	\$	1	•	•	1					1	1		:	-	ł			1					1	:					-	1	Ŧ	1		***	-	1	-	1	1		Ï	-	
e 3 D9 - 3 - 6 D934 02-Feb-10 20 - 25 feet										•	ā	1	1	i	1	1							-			1										I	!	1		1	1	!		1	1	1	1				1	1	:	1	ľ			1	1	1	1		1	1	1	ī
e 2 D9-2-8 D994 02:Feb-10 17 Met	< 0.0087	< 0.121	< 0.0243	<0.0087		1	1	1	1	1	I				1								1	1	ī	-	ł	1	•		1	1	ł	1		I	1	:			1	1	1	1	Π	1							1	1	i	1	1	1	1	3	ł	1	1	ł	1	i
6 2 D9-2-6 D934 02-Feb-10 15-20 feet			1	! ;		1	Г. ;	1		I	1		7	T	1	1					1	***	1	1	-	1	I	1	ī			1	1	T	1	1	1	T	h	ľ	1	1		1		1		!			1	1	1	T	T	1	1	1	1	1	1		1	1	1	1
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6 1 0934 02Feb-10 02Feb-10		TT					ĩ	1	1	1	1		•	1	1		•		i T		1	***	1	1		1	1	1	"	9		F	ł	1		T	ī	1		Ī	T	T		!	:	1	!	!	ľ		ľ		1	1	1	1		T	T	1	1	1	1	1	1	J
5 3 D9:4 19-Mar-09 22 feet	< 0.417	0.613	< 0.417	< 0.104	3	1	1	1	T	1	1	ľ	T	7	Ť						1		1	1	1		1	1	1			T	1	T	1	1	ł	1		1		ľ	1	1	1	T	ľ	1		h		1	1	!	1	1	T	T	ł	1	1	1		1	;	1
5 3 09-3-5 0914 19-Mar-09 20-25 feet	11	1 1	1			1	!	1		1	T		1	1	1	!		ľ	h	1			1	ł		-	÷	T	f			f	1	T	1	1	T	1	h	1	:	;		-	1		T	ľ		h	ľ	T	!	1	:	-	1	!	1	T	,	1	1	1	1	-
5 3 09-3-5 0233 02-Feb-10 02-Feb-10 20-25 freet		11				1	1	h	T	1	ī		ſ	1	Ť					1			1			1	1	1	•		ŋ	:	1	I	-	1	1	1			ſ	1	1	1	1	!		1	ſ	h	,	,	1	1	-	1		1		;	ī	-	T	1		í
5 2 0814 19-Mar-09 18 freet	< 1.05	: 8 : 8	5 5 1	< 0.487	2		1		;	1	1		-		!	-				1			ł	1		1	-	1	h		1	1	1	1	1	ĩ	1			1	1	1	1	1	1	ł	1	1		1	i	;	;	1	;	i	1	;	1	1		1	1		r	í
5 2 09-2-5 0933 02/Feb-10 15-20 feet	: :	1 1	1	1			1	1	1	1	1	h	1	1	1		1	1	h	1	1	:	1	1	1	F	1	1			1	1	'	1		1	1		1	I	1	1	1	1	ł	;	,	ľ	1		1	1	1	T	1	1	7	1	1	•	;	;	1			ſ
6 1 19-11-5 19-Mar-09 10-15 feet		TI	T	11		ł	1	I	-	1	1		ī		Ť		h				fr	;	1	1	'	!	:	1		h		T	ī	-	1	1	1	1	1	!	1		1	ſ	1		ľ		h		1	T	1	1	1	1	1	i	T	1	:		:			
5 1 19-1-5 D9-1-5 02-Feb-10 11 foet	< 0.0084 < 0.0084	< 0.0794	< 0.0159 < 0.0159	< 0.0064	10.00	1440	1		1	1	1	ſ	1	1	1	1	1			h	ī	1	1	1	'	1	1	1		h		f	1	1	:	1	T	1	h	!	1	1	1	1	1	1	'		1 8		ī		1	1	1	7	1	1	1	!	ľ	1	I		ł	
4 3 D9-3-4 2332 D2-Feb-10 22-Feb-10 22-Feb-10	< 26.7 < 26.7	< 64.3	1997	< 6.48 1470		1	T		1	1	1		T	1	╉					:	1	:	1	1		ſ	5	T		h		1	,	1		1	7			1	1	1	1	ł	1	ī					1	1	1	1	1	1	-	1	1	T	r			T	+	
4 3 09-3-4 0932 02-Feb-10 22 feet	< 10.5	< 26.1	< 10.5 < 10.5	< 2.61		1	1			ŀ			1	1				h	h	1:	,	1	**	1	T	1	1	1		h	1	ľ	1	1	1	1	7	ih	T	1	1	1	1	1	1		'			t	T	T	Ŧ	i				1	T	1	•		:		1	1
a 4 3 3 3 9-3-4 D9-3-4 D922 0332 D332 D332 02-Fab-10 02-Fab-10 20-25 feet (DB) 20-25 feet (20-55 feet (DB) 20-55 feet (DB)		11	11	11		1	1			i	1		1	-	1					:	ľ	:	1	T	T	'	1	ı				;	!	1	1	:	1		1	T	1		ł	t	i	1	ſ				1	1	1	1	-		1	!	1	1	r			h		(
a 3 09-3-4 0932 02-Feb-10 20-25 feet 20		1 1	TT	11		1	3		:	1	1		1	1	1	1		h	h		1	I.	**	1		T	1	1				ľ	1	1	ŧ	1	!	1	1	ſ	Т	-	T	ł	1	1	!				1	1	1	T	1	1	+			i	Ì				1	
4 2 09-2-4 0932 02-Feb-10 18 feet	< 0.579 < 0.579	< 0.579	e73.0 >	< 0.145	5		1		-	-	1		1		T	1				:	,	1	!	1	1	1	;	T	h	h		T	1	1	1	7	T	╽	ľ	1	1	1	Ţ	1	1	1	'				ľ	1	-	r	1	1	1	1		1			1		-	ſ
4 4 4 2 2 2 D9-2-4 09-2-4 0822 0832 02Feb-10 02Feb-10 15-20 feet 18 feet		TI	11		!	1	1	1	-	-	1			-	1	1				1			-	1		ī	7	1	h		!	i	I		1	1	;			1	:	-	:	1	1	!	!				1	ī	1	1	-	ĩ	T	1	1	i	1	1	;	╉	-	
4 1 1-4 0932 20:Feb-13 1 feet (DB) 1	< 0.968	< 2.47	< 0.989 886.0 ×	< 0.247	74.70	1	7	ī		1	1		!	1	1	1	ή	ľ			!	***	1	1	1	Ŧ	Π	1	ϯ		-		1	1	1	1	1	1	1	1	1	:	1	1	1		ſ				1	1	1	1		1	1	Ŷ	1	ſ		T	1	h		
Block Number: 4 Uver Namber: 1 Alter Namber: 0 Solitigation: 00-1-4 Sample Dreph (bab): 111 (sec (03) 1) Sample Dreph (bab): 111 (sec (03) 1)			+		$\left \right $			╞			+	•	$\left \right $							ł								╎	$\left \right $	╎			$\left \right $		H			$\frac{1}{1}$	┞	-							╞														+			╞	+	-
	Volatile Organic Compounds (regific, ppm) (cont.) Vans-1,2:00/miceatiens (cars-1,3:00/miceatiens	rans-1.4-Dichloro-2-butene Dichloroedhene	richiorotiuoiomathane Inyi acetete	nyi chlotide Aana (7014)	i Volselle Organic Compounds (mg/Kg)	2.4-Trichlosobschzene, SVDC	-Dichlorobenzene, SV.OC	-Dichlorohamane, SVDC	.5.Trichtonophenol	6. Trichlorophenel	Okchiptophenol	Diritrotranci	-Dinitrotoluene	Dipitrolotuena	Chiloronaphrmanene	chiorophenol	Astronic Marchine Astronomic	vier giptierus	Vibratianoi	P-Dichlanzidine	titraanline	-Methylpheno(2)	D nitro-2-methylohenot	ru rupheryl-phenyletter	Chloro-3-mothylphonol	Norganisme	Interpretation of the states o	Introduction	re uprimite, SYON	nanhthviana	TRACED A	získanthracene	e/j/ee	o(a)pyrana	olbilucianthena	o(0,hJ)peryiene	o(k)fluoranthene	000 acid	-Chloroethocylmatikana	e-Dhoroethylether	-Chloroisopropy()ether	 Ethylthercylliphthalaxie 	1 benzyl phthalalo	3220(6	Clrysene	angleun technecene	encourters httd://www.accourters	angeleration and the second	V. Buthi nhthatete	V-Octal officiales	stanthene	euau	achiorobenzene	achiorobutadene, SVOC	Miniargoyolopentadiene	schlorgethave	001.2.3-cd)pyrene	CIOLE	thatene, SVOC	euezueo	rozo-gen-propydmine	trostodiofient/sumine	GATILOICOPTIBION, SAVCK		Light	

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MATANA Anoldical Results Table 1: D9 Area - Soil Boing Profiling Anolytical Results Cattage Grow, MN Sile

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Layer Number: 1 2 2 call block in no.4.4 no.6.4	1.1.00	2	2	10-2-V	3	3 1		+			- T	3		1 - 1 - 8	-		+		1 1 2	+	2.0.0.7
Boring ID:	D932	0982	D932	D932	0332	D972		+				D914			-		-		DB35	H	
Sample Date:	02-Feb-10	02-Feb-1	1 02-Feb-1	02-Feb-10 28 - 25 free	02-Feb-10 02-Feb-10 20 - 25 free 20 - 25 feet (DB)	02-Feb-10	D2-Feb-10 02	02-Feb-10 19-M	19-Mar-09 02-Fe	02-Feb-10 18-Man-08 18. 20 feet 18 feet	08 02/Feb-10	19-Mar-08	19-Mar-09 0	02-Feb-10 02-Feb-10 10.15 feet 11 feet	th-10 02-Feb-10	5-10 02-Feb-10	0 02-Feb-10 20 - 25 freet	02-Feb-10 23 Invet	03-Feb-10 10 - 15 free	03-Feb-10 12 fint	03-Feb-10 (3-Feb-16 - 20 /set 17 /set
dicides (multic)			1	1351 674 - 874		1		⊢		+	-			+	+-	-	+			+	+
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Silvex (2,4,5 TP)			T	1	1	1		!		1				;	1	:	. 1	1	ī	1	ľ
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BCE.1004 Member 4004		Ì	111	aco u				0	5 6	10001		5 6 C		- 0.000		0.0000	10.4.2		0.000		2000
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24 (Articulus 12:02)			< '.12		11.7	!	-	1	1	< 0.86/				< 0.202	v I	0.0623	- 45		< 0.0546	1	4 3 32
42 (Arocio: 1242)			21.	~~~ × 0.63			;	-		< 0.887	-	- × 9.13		< 0.202		0.0623	4.4	:	< 0.0548	T	< 3.92 <
B (Arcolor 1248)	-		<7.12			1	:	÷		< 0.887		~ < 9.13	1	6.05	÷	0.0623	-4.2	:	< 0.0546	ł	< 3,92
4 (Arwiw 1234)	1			21.0		1		4	-1	2.5	:	- 177	1	< 0.202	0.751		9.40	1	4.1%		59.1
0 (Aroclar 1260)	1	ē		× 0.80		1	-	1		5	-	+ 9.13		0.381		0.0623	- 8.30	7	< 0.0546		7.02
2 (Aroclor 1262)	1	< 7.12	12	< 0.395	5 < 7.11	:		1	< 3.01	< 0.887		× 9.13	1	< 0.202	Ŷ	< 0.0628	- <4.26	1	9H30'C >		4.3.82
8 (Arocibr 1268)	1		12	~ 0.89		1	;	1		< 0.887	1	× 9.131	1	< 0.000	1	0.082.3	- 4.28	1	# 2.0548	:	-3.90
Trial PCBs		Ē							L	06.1		1		0.40	0.151		50				g
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	i		1	-	-	!		1	1	т	1	T		1	1	**		-		•	-
Mercury				2:00	2.10	!	-	-	:	-	0.380	1			1		18.7		1	1	1
Volatila Organio Compounds, "Ci P (mg/l., ppm)							_			-		-									-
iocosthane. TCLP	1		1			1	1	!	1	1	- < 0.05		:	1	i	< 0.05		1	< 0.05	1	1
loroathane, TCLP	;		ī		1	T	T	1	1	;	102			:	1	< 0.05	1	1	< 0.05	ž	;
loroberzene. TCLP	1		ī		1	1	1	1	1		0.0517		1	!	1	0.05			10.04	1	•
one (MEK). TCLP			1			1	•	1	1		-			1		CU-			0.0		1
A 101 P												1				- 1 /16			and A.		ľ
otherhodids TM P												5 7	i	1		2010			10.00		1
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(ii), I.O.F.									1			1		5	1	< 0.05	-	-	9010 ×	1	1
Contration I OC.									!	1	×0×		;			< 0.05	1	1	× 0.05	:	1
othane, TCL.P				-				i	-	1		2		1	-	< 0.06			< 0.05	1	1
vice, ICLP	1		1			1	1	1	!	1	- 0.0	1	7			< 0.02	1		< 0.32	1	1
le Organie Compounds, TCLP (mgft, ppm)								-						-							
proberzene, TCLP			1	-		:	:	i	T	7	1	1	,	1	1	1	1	:		1	1
hterochenoi. TCLP				1	1	;	!	;	I		1		-						h		
2,4,6-Trichterophenol, TCLP					ľ	.		. 1	:		ľ			1	-	+	h				1
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Mphanol. TCLP			-	' -	T	1	1	1	T	1			1	1	T	-	T	1	T	1	Т
TO-1, 3-budadiene, TCLP			1	1		1	1	T	1	!	•		1	1	1	1	1	-	1	-	1
robenzene, TCLP	1		!	-	1	1	1	1	1		-	-		Ļ		1	1	-			T
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Rentrohiomoticut I.C.P						T		;	-	-	1	1		-		-	1	1	-	1	T
iorophenol, TCLM	1		-		-	T	-	-	1	-	-	1	-	-	-			-	1		f
TOP	•		h	1	T	T	T	7	1	1	;	•	1		1	1	1	1	1	1	1

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Table 1: D9 Area - Soil Boring Profiling Analytical Results Cottage Grove, MN Site

Block Numer: 4	Layer Number: 1	Soli Block (D: D9-1-4 D9-	Boring (D: D932 D9	Sample Date: 02-Feb-10	11 feet (DB)	als. TGLP (mgL, ppm)	Assenia. TCLP	ńum. TCLP	Cadmium, TCLP	Chronium, TCL ²	Leac, TCLP	Sele vium, TCLP	Silver, TQ.P	Mercury, TC.P	Reactivity (mg/kg, pgm)	Cyaride, Reactive	Sulfide, Reactive	Fleshpoint (°F)	Flashpoint	H (Standard Units)	at 25 Degrees C	
4	2	09-2-4	2060		15 - 20 feet		1	;	:	1	1	1	T	1		:	1		1	.	1	
•	~	39-2-4	286G	_	18 feet 2/		:	!	:	1	E	ł	1	1	-	1	1		1		ï	
4		D9-3-4 [20802		20 - 25 feet 20 - 25 feet (DB)		T	1	1	1	i	ī	1	1		1	ŧ		1		ſ	
•	8	D9-3-4	2630	-	ŧΙ		:	1	1	1	1	1	1	i		T	7	-	T		1	
4	5	D9-3-4 D		02-Feb-10 02	22 feet 22		h	1	1	ſ	1	:	1	•		:	1		1		ŀ	
		D9-3-4 D	D932		22 feet (DB)		1	1	1	1	-	i	;	;		1	1		T		ľ	
	-	09-1-5	D933		11 feet 10		!	1	I	1	Ŧ	T	ì	1		:	;	-	1		1	
•	-	D9-1-5	D914	69	10 - 15 teet 15		1	1	ī	1	1	1		1		;	•		1	.	ſ	
	2	D9-2-5 E	DBd3	_	15-20 feet		1	1	1	1	E	ł	1	٦	-	ï	;		ī		1	
•	2	D9-2-5 D	0914		18 Net 20		:	:	1	1	E	1	1	1		1	I		:		;	
•	8	D9-3-5 D4	6623	02-Feb-10 19	20 - 25 teet 20		< 0.050	< 0.25	< 0.0050	< 0.050	< 0.015	< 0.075	< 0.050	< 0.0008		< 0.025	< 100		>210	-	ŀ	
•	6	09-3-6 01	D914	19-Mar-09 19-	20 - 25 feet 2		1	1	T	i	1	;	,	,		1	1		ī		1	
•	3	09-3-6 09	0914	19-Mar-09 02-	22 teet 10 -		1	,	1	1	1	-	•	;		:	ľ		1	-	1	
0	-	D9-1-6 D9	0 \$26C	02-Feb-10 02-F	10 - 15 feet 11	-	T	5	!	1	1	1	1	ſ		T	ſ		1		!	
		D9-1-8 D9-	0 1000	P	11 feet 15 -:	-	T	T	1	3	5	1		1		1	1		1		,	
2	2	09-2-6 DB-2-6	D934 D83	02-Feb-10 02-Feb-10	15 - 20 feet 17 feet		< 0.050	< 0.25	< 0.0050	< 0.050	< 0.015	< 0.075	< 0.050	< C.0068		< 0.025	< 100		-210			
	•	- E- 60 9-3	34 D934		Met 20 - 25 feet		ī	1	1	1	1	;		7	-	1	:		1		1	
•	e	-8 DB-3-6	4 D924		feet 23 heet		!	!	1	1	Ţ	T	1	ł	-	1	1		1		:	
1	-	-8 D9-1-7	9836		rt 10 - 15 feet		•	1	0.013	Ť	v 	T	•	÷		Ĩ	1				1	
1	•	-1-BO 1-2	9260	_	bet 12 feet		< 0.050	< 0.25		< 0.050	< 0.015	× 0.675	~ 0.050	< 0.000B		< 0.025	< 100					
1	8	7 09-2-7	9060	-	15 - 20 field		T	1	:	1	1	1	1	T		1	1		:		!	
	~	r D9-2-	D835	0 03-Feb-1	M 171661		!	1	1	1	T	1	;	1		1	1		T		1	

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Table 1: DS Area - Sol Boring Profiling Analytical Results Contage Grow, MN Site

Blook Number:	2	-			8	*		6	•	6	D)	9
Layer Number		-		-		2	-		8		-	-
Soli block ID: Boring ID:	D935	D935		D912	9060	D912	D837	D837	10937	0837	D1-1-10	9180
Semple Data: Semple Deutr (best:	03-Feb-10 20 - 25 ket	03-Feb-10 24 feet	02-Feb-10	19-Mar-09 10 15 1660	03-Feb-10 15 - 20 feet	19 feet	03-Feb-10 10 - 15 feet	03-Feb-10 10.5 feet	03-Feb-10 15 - 20 feet	33-Feb-10 18 teet	19-Mar-09 10 - 15 teel	19-Mar-09 13 feet
Veletie Orgenic Compounde (mg/kg. ppn)												
1.1.1.2-Tertachloroethane		90				× 0.2*7		< 46.1 434				× 0.36
1,1,2,2-Tetrachloroethane			< 3.05			< 0.217		< 46.1 < 46.1		< 21,6		< 0.35
1,1,2-Tilchloroathane	1			1	1	< 0.217		< 48.1			1	< 0.35
1,1 Dichlorothano						< 0.217		- 46.1			1	< 0.35
1.1-Dictriorosthens	1	3°.αν		1	i	< 0.217		< 48.1			1	< 0.35
1.1-Diofiloroptopune		<u>あらい</u>	< 8.03		1	< 0.217	1	< 46.1			11	< 0.35 < 0.35
1.2.3-Titchisropropense	i	< 5.34				< 0.217		< 46.1			:	< 0.36
1,2,4 Triohiorobonzonio	1	< 5.34				< 0.217				< 21.6	T	< 0,35
1,2,4.Trimetryloenzene 1,2,00mmo, 3 aManananaa		13.3	23.1		T	< 0.217				< 21.6	1	< 0.35
1.2-Dibomosthene (EDB)		6534	8.05		1	< 0.217	1	< 46.1 < 46.1	1	21.0	1	< 0.36 20.35
1,2-Dichlorebeazene	1	15.0			1	0.555				108	ľ	< 0.35
1,2-Dichloroethane	1	¥6:5 ×			1	< 0.217				< 21.6		< 0.35
1.2-Dichlosethane (Total)	1	<107	ł	3	ŧ	1	1		1	< 43.3	1	3
1, 2-thothoroproparie		< 5.0.00 R.4.0			1	< 0.217	T	\$		21.8 4 FC	Ť	< 0.35
1.9-DioMorbiolizatio		<5.34	26.05	1	1	< 0.217		< 46.1		21.5	T	× 0.35
1,3-Dichleroprepane	1	< 6.94	× 9.00	1	1	< 0,217		< 46.1	-	< 21.6	-	< 0.35
, 4-Dictionbenzene		×5.3	< 8.05	1	1	< 0.217	1	< 46.1	E	23.7	1	< 0.36
2,2-UICHIOROPODERIA		40.30 13.0	< 8.05	1	1	< 0.217	1	< 48.1	1	< 21.6 1 4 1	1	< 0.35 - 0.976
2-Chlickoethylvinyl ether	1	< 13.4	< 20.1	1	1	11		< 115 < 115	ľ	54.1	1	1
2-Chlorotoluene	1	× 5.34	 8.00 	1	1	< 0.217	1	< 40.1	1	< 21.6		< 0.35
2-Hexauche		<13.4 2 2 2 4	< 20.1	1		1	T	< 115		< 54.1	1	1
2-Mercy light in bread		12.1	406	1	Ĩ I	-1001	1	< 45.1	1	0.12		10.05
4-Methy-2-pentanone (MIBK)		<13.4	< 20,1	ţ	1	< 0.542	Ĩ	< 115	!	< 54.1	1	< 0.875
Acetone	1	< 10.4	< 20.1	1	ł	< 0.542)	2	<110 <110	W.	< 04.1	I	< 0.875
Acrolein	1	< 534 56 1	< 80.5	1	1	1	1	< 461	1	< 218	1	1
Albitichterkte	1	1000	5 8 US	1	n	~0.917		< 401 ~ AR 1		10107		10.02
Bonzone	í	142	<2.01	Ì	1	0.0905	1	14.9	Ī	61.1	ľ	< 0.0875
Bromobenzene	1	10:57	× 0.05	;	-	< 0.217	1	< 48.1		< 21.0	1	< 0.35
Bromochloromethane	1	< 6.34	6.03	1	1	< 0.217	:	< 48.1		< 21.6	T	< 0.35
aroniotemene	T	101	00.9 2	T	,	< 0.217	-	< 48.1 . 20 0	:	<21.8	T	< 0.35
Bromorathana	1	<13.4		ľ		4040	1	111		1041		< 0.7 2.0 875
Certition disultade	1	< 3.34	< 8.05 <	1	1		1	< 46.1		812		
Carbon lotrachibrida	-	< 5.34	5.05		T	< 0.817	T	< 40.1		< 21.0	T	< 0.35
Chlarohanzane	i	< 5.34	< 2.05		1	< 0.217	i	< 46.1		< 21.6		< 0.35
Chlorooftaro	1	< 5.3%	< 6.05	1	1	< 0.217	ŧ	< 48.1	Т	< 21.6 01.0	1	< 0.35
Childrontesthane	1	< 5.8k	< 6.0b		1	120 >	1	< 45.1 < 45.1		<21.0 21.5	1	< 0.35
de-1,2.Dichlorcethene	ſ	< 5.34	< 2.05			< 0.217	1	< 43.1		<21.6	1	< 0.35
cis-1.3-Dich/arcpropene	1	< 5.34	< 8.05		1	< 0.217	ţ	< 46.1		<216	1	< 0.35
Cycloheena hihomoothoomaanaaa	1	50.0	8.80 - a.r.e	1	1		1	13		28.7		
Dibromonofication	1	4 5.34	L	ľ		< 0.217	ſ	< 46.1		21.5	h	50.35
Dishlorosifikaromethane		< 5.34	H		T	< 0,217	1	< 40.1	1	< 21.6	1	< 0.35
Dichlorofluoromethane	T	< 5.34 1 0 4	t	1	F	< 0.217	1	< 46.1	1	< 21.8	T	< 0.35
Ditacpropri etter (ury) etterij . Ditacpropri ether		8.77	< 805 805	11	T	× 0.542	11	< 115	1	1.45	T	< 0.875
Ediyrian zena	1	839	11	1	-	0.555	-	2600	1	451		< 0.0875
Hexachloro-1,3-butadiane	!	< 5.34		1	T	< 0.217	1	< 46.1	1	< 21.8	1	< 0.35
Isommiddetream (Cumena)	!	14.8	< 20.1	1		1.001	1	< 115 194	T	1.485 ×	1	1 20.
måp-Xylene	1	2090	÷ .	T	1	1	1	12100	h	1940		60.0 ř
Methylene Chloride	T	< 5.34	11	5	1	< 0.21/	1	< 48.1	ł	< 21.6	!	< 0.35
Madrya terte turbit athan Maakib aana	1	× 5.34	< 805 0.05	!	1	< 0.217	1	< 40.1	!	< 21.6	1	× 0.35
negulation compared to the compared of the compare		190'E >	2 802 ×			120 2	T	< 48.1	1	421.8	1	< 0.35
n-Propy/benzene	-	7.51	< 8.05	1	T	< 0.217	I	125	T	< 21.6	ſ	< 0.35
c-Xytente	1	213	49.3	1		1		0.452	1	484	1	1
Preciproprietuerio sac-Buthbarzena	T	4 5.34	< 8.05	11		10217	h	< 46.1 1.46.1		616 616 6	th	× 0.35
Styrene	1	19.5	< 8.05	T	1	< 0217	1	< 46.1		<21.5	1	< 0.35
Taris How January	!	223	808		-	< 0.217	3	< 48.1	1	<21.8	T	< 0.35
Totrahydroft.ran	T	¥ 159 ×	× 80.6			50217	IT	101 × 101		<210 < 210		2.03
Toluene	Т	1970	2.16	T	Ť	0.0716	1	12200	1	2610	Ĩ	- 0.0875
						i						

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Table 1: D9 Area - Boil Boring Profiling Analytical Results Cottage Grow, MN Site belief : Letter

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Tablo 1: D9 Area - Boil Boring Profiling Analytical Results Cottage Grove, MN Site

Block Numbers	2	-	8	•	8		•	6	8	6	10	9
Call Block ID:	3-7- 09-3-7	3-7-60	8-1-80	8-1-60	2 09-2-8	2 09-2-8	1-00 D9-1-9	09-1-9	2 D9-2-9	2 D9-2-9		00-1-10
Boring ID:		D935	D938	D912	D936	D912	C837	D837	D837		D916	D918
Sample Data:		03-Feb-10	03-Feb-10	13-Mar-08	03-Feb-10	19-Mar-09	03-Feb-10	03-Feb-10	03-Feb-10	_		18-Mar-09
		1001 17	12 1005	10 - 13 feat	10 - 20 1001	19 1091	10 - 15 loct	f0.6 feet	15 - 20 feet	-		13 feet
Lessenges Internation												
4.4-006	1		ľ									
4,4-DDT	1	1	1						1		T	
Addin	1		1	-				ſ	1	-	ſ	1
Algha-BHC					-		1		1	-	1	
Augura-cmidiane			1	1				1	Ē			1
Delta-BHC				1						1		
Dielicina							1			;	1	1 1
Endosultan 1 ^b	1		1	i		I		,	1		1	
Endonation 1/2												
Environtien Suttata							I	-				1
Enderne consta												
Endon Aldahurta	5						7	2				
Endrin Ketore											E	
Gamma-BHC							n			Π		
Gamma-Chlordane	1	!		1			-	1		1		
Heptachtor	1	1	•	ľ			1					
Heptachlor Epoxide	1	1		1	1	1	1	1	1			
Merioxychlor	1	1	-	1		1	!	1	,	;	1	
Texaphone	-		•	1		1	1	ľ	1	ł	1	1
Harbicides (mgkg)												
24.5-T		1	ł	ſ	:	1	1	1		1	1	1
2,4.0		1	ſ	T		***	1	1			ľ	1
2,4-06		1	1	1	!	1	i	-		T	T	
Dioamba	1	-	Т	1	Г	£	ī			1	-	
Dichlistyrop	1		T	1	1	1	i	1		1	1	-
OIWEX (c,r,0'IF)		1	1	1	i	1	1	1		-	1	:
Polychiorinated Bignerry (PCBs) (mgreg, ppm)												
PCB-1UT6 (Arcolor 1016)	< 7.39	1	!	< 0.188		i	×1.79	1	< 22	1	< 0.0351	1
PCB-1221 (Aroolor 1221)	8E.7.2	1	:	< 0.186		1	<1.79	-	< 2.2		< 0.0381	***
PCB-1232 (Aroclor 1232)	¢ 7.39	1	'	< 0.188	< 192	1	< 1.79	1	< 2.2	1	< 0.0361	
PC6-1242 (Aroolor 1242)	< 7.39		1	< 0.188		1	×1.8	3	< 2.2	:	< 0.0361	
PCB-1248 (Arookor 1248)	4.39	T	1	< 0.188	ł	T	×1.78	1		1	< 0.0361	
PC8-1264 (Arocior 1264)	150	1	T	2.30		T	28.9	1	33.1	;	0.873	-
PCB-1260 (Anotior 1260)	20.6	1	1	< 0.188		1	4.03	1	2.2 ×	T	< 0.0361	
PCB-1262 (Arcolor 1262)	c7.89		1	< 0.189		1	× 1.70	1	< 2.2		< 0.0361	
PC8-1268 (Aroctor 1268)	<7.39	i	1	< 0.188		T	e1.75	1	<22	1	< 0.0361	ľ
Total PCBs	171	1	7	2.35	5	1	828	1	55.1	ï	0.873	1
Metals (mg/kg, ppm)												
Arashic	1		1	!	1	1	1	1	1	1	ſ	1
Contraint.	:	1	1	1	:	1	1	1	1	ľ	İ	ţ
Chromient							1	1	1	T	T	!
-0.00	1360	ľ		1				5	1			! !
Setenturn	Ľ	ŀ	1	1	1		ľ			1	h	1
Silver		1	T	1		1		1	Í:		ſ	1
Mercury	3.60	-	1	i	***	i		1		1	1	1
Volatile Crgenic Compounds, TCLP (mg1, ppm)												
r, substitutional Mille, TOLP	1	ſ		T	3	1	1	1	:	ł	1	1
1.4-Dichlorobenzene, TOLP	1	ľ	1	1					ſ		h	1
2-Butanone (MEK), TCLP	ſ	!		1	ļ	I	1				1	1
Benzene, TCLP	1	T	1	T		1	1	!	1	T	T	1
Carbon tetrachioride, TCLP	1	T		***	1	1	T	T.	T	1	-	1
Callerooenzane, ICLP	1	1	T	!	1	1	1	T	1	1	-	
Teterbiocothene TCI D	1	1	1	1	1	1	'		1		T	ł
Tricklonethere. TCLP			1		1		1	1			1	1
Virvi chioride, TCLP	1	1				ľ			E		:	**
Semivolatile Organic Compounds, TCLP (mg/L, ppm)		t						ľ			r	
1.4-Dichlorobeitzene, TCLP	1	ľ		1	ľ	1	1	ľ	I	!	1	
2,4,5-Trichlerophenol, TCLP	1		-	1	1		1	ľ	I	1	ľ	Π
2.4.6-Trichlerophenol. TCLP	T			1	1	1	1	1		1	1	1
2.A-Unitrolouene, J.CLP 2.Methylohanovic-Crawfii. TCLP	1		ή	T	1	1	-	!	T	ł		
364-Meitylphenol, TCLP	1	T	†r	1	ſ			T i	1		1	1
Hexechioro-1,3-butadisne, TCLP		1	1	1		1	1	ľ	ľ			
Hexachlorobenzene. TCLP				1	1	1	:		Ŧ	1	-	1
Hereachioroethane, TCLP	:	!	7	T	1	1	ì	5	-	1	1	
Moderzene, ICLP	1	!	1	T	1	3	ī	5	1	T	1	
Peridana TCLP		h	h		T	T	1	Ī	+	1	1	
T internet i	ſ		ſ	ſ			-	Г	T		T	I

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Table 1: D9 Area - Soil Boring Profiling Analytical Results Cottage Grove, MN Site

	Block Number:	2	4	•	•		•				8	ę	ç
	Layer Number:		6)	-	-	~	4	-	-		2	-	-
	Soll Block ID:	D9-3-7	Z-E-60	8-1-80	8-1-60	D9-2-8	09-2-8	D8-1-9	09-1-9	D9-2-9	D9-2-9	D9-1-10	D9-1-10
	Boring ID:	D935	0835	0836	D912	9260	0912	0937	0837	7680	0937	D916	DS16
	Semple Uate:	03-Feb-10	03-Feb-10	CG-Heb-10	19-M&r-09	03-Feb-10	19-Mar-09	03-Feb-10	03-Feb-10	03-Feb-10	03-Feb-10	19-Mar-09	19-Mar-09
Ban	Sample Depth (bgs):	20 - 25 foet	24 feet	13 feet	10-16 feet	15 - 20 feet	19 feat	10 - 15 fbet	10.5 foot	15 - 20 feet	18 feet	10 - 15 feet	13 feet
euls, TCLP (mg/L, ppm)													
Ananio, TCLP		1	1	1	1	1	1	!	!	!	1	i	
Barium, TCLP		1	1	1	T	1	1	1	!		!	i	
Cadmium, TCLP		1	1	1	1	T	1	1	1	1	ſ	1	
Chromum, TCLP		!	:	1	•	1	1	Î	1	1	1	I	
Load, TCLP		!	i	1	1	1	1	ī	1	;	1	ľ	
Selenium, TCI P		1	1	T	1	1	1	1	I	-	!		
Sliver, TCLP		!	1	T	1	1	T	1	1	1	!	1	
Maroury, TCLP		!		1	•	1	1	ł	1	1	1	1	
scövity (mg/kg, ppm)													
Syankle, Readiive		1	ī	1	T	1	1)	1	ī	1	1	
Sutiste, Reactive		1	T	•		;	1	;	'	1	1	1	
ashpoint (°F)													
lashpoint		ī	1	1	1	÷	T	1	1	1	1	1	
(Standard Units)													
oH at 25 Degrees C		;	1	•	ł	ī	ł	1	T	1	i	1	
rcant Molature (%)													
Percent Molsture		55.3	58.4	68.2	12.4	13.9	6.2	63.2	56.6	6.99	5 69	8.70	417

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EX SITU SAMPLE RESULTS



Table 1: Soil Block D9 2-1 TCLP Metals Sampling Results Cottage Grove Site

Stockpile Manifest ID:	N/A	VIN
Sample Type:	In Situ Composite	In Situ Composite - Duplicate
Block ID:	D9 2-1	D9 2-1
Sample ID:	CGMN-ESC-D9201TCLPA-0-100713	CGMN-ESC-D9201TCLPA-0-100713 CGMN-ESC-D9201TCLPA-DB-100713
Laboratory ID:	10133367001	10133367002
Sample Date & Time:	7/13/2010 8:36	7/13/2010 8:36
Metals, TCLP (mg/L, ppm)		
Arsenic, TCLP	< 0.050	< 0.050
Barium, TCLP	0.50	0.40
Cadmium, TCLP	< 0.0050	< 0.0050
Chromium, TCLP	< 0.050	< 0.050
Lead, TCLP	< 0.015	< 0.015
Selenium, TCLP	< 0.075	< 0.075
Silver, TCLP	< 0.050	< 0.050
Mercury, TCLP	< 0.00080	< 0.00080

Table Notes:

N/A = Sample was collected in situ prior to excavation of soit block for profiling. There is no manifest ID associated with sample.

Data Notes:

Data tabulated by D. Armstrong of WESTON on 07/19/2010. Data tabulation QA'd by J. Savage of WESTON on 07/19/2010.

Analytical data provided in Pace Analytical Services data packages #10133367.



Table 2: Soil Block D9 1-3 Stockpile Sampling Results Cottage Grove Site

	Stocknile 001	Storknile 003 ¹	Starbuild 003
Starballa Hamifact ID.			
stockpile manifest ID:	D9 1-3 001-1 & D9 1-3 001-2	D9 1-3 002-1 & D9 1-3 002-2	D9 1-3 002-1 & D9 1-3 002-2
Sample Type:	Composite	Composite	Composite - Duplicate
Block ID:	D9 1-3	D9 1-3	D9 1-3
Sample ID:	CGMN-ESC-D9103001A-0-100716	CGMN-ESC-D9103002A-0-100716	CGMN-ESC-D9103001A-9-10071f CGMN-ESC-D9103002A-0-10071f CGMN-ESC-D9103002A-DB-10071f
Laboratory ID:	10133694001	10133694002	10133694003
Sample Date & Time:	07/16/2010 11:45	07/16/2010 11:54	07/16/2010 11:54
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	< 0.0411	< 0.0397	< 0.0388
PCB-1221 (Aroclor 1221)	< 0.0411	< 0.0397	< 0.0388
PCB-1232 (Aroclor 1232)	< 0.0411	< 0.0397	< 0.0388
PCB-1242 (Arocior 1242)	< 0.0411	< 0.0397	< 0.0388
PCB-1248 (Araclar 1248)	9.72	0.538	0.463
PCB-1254 (Arador 1254)	3.82	0.426	< 0.0388
PCB-1260 (Aroclor 1260)	1.15	0.511	1.56
PCB-1262 (Aroclor 1262)	< 0.0411	< 0.0397	< 0.0388
PCB-1268 (Aroclor 1268)	< 0.0411	< 0.0397	< 0.0388
Total PCB	14.7	1.48	2.02
Metats, TCLP (mg/L, ppm)			
Lead, TCLP	< 0.015	< 0.015	< 0.015
Percent Moisture (%)			
Percent Moisture	19.6	16.8	15.0

 Table Notes:

 ¹ Stockpile staged in two separate sub-piles.

Data Notes: Data tabulated by D. Armstrong of WESTON on 07/22/2010. Data tabulation QAd by G. Witmer of WESTON on 07/22/2010. Analytical data provided in Pace Analytical Services data package #10133694.

2:Nm-cottage groveID9_ConstructionICCRMppendiciesNppendix D (Sample Results)ICGMN_D9_Excavation_Soil_Block_Data - 1-3_(W)



Table 2: Soil Block D9 1-3 Stockpile Sampling Results Cottage Grove Site

	Stockpile 003 ¹	Stockpile 004
Stockpile Manifest ID:	D9 1-3 003-1 & D9 1-3 003-2	D9 1-3 004
Sample Type:	Composite	Composite
Block ID:	D9 1-3	D9 1-3
Sample ID:	CGMN-ESC-D9103003A-0-100716	CGMN-ESC-D9103004A-0-10071
Laboratory ID:	10133694004	10133694005
Sample Date & Time:	07/16/2010 11:52	07/16/2010 11:45
Polychlorinated Biphenyls (mg/kg, ppm)		
PCB-1016 (Aroclor 1016)	< 0.0367	< 0.0368
PCB-1221 (Aroclor 1221)	< 0.0367	
PCB-1232 (Aroclor 1232)	< 0.0367	< 0.0368
PCB-1242 (Aroclor 1242)	< 0.0367	< 0.0368
PCB-1248 (Aroclor 1248)	< 0.0367	< 0.0368
PCB-1254 (Aradior 1254)	0.199	0.197
PCB-1260 (Aroclor 1260)	0.165	0.0805
PCB-1262 (Aroclor 1262)	< 0.0367	< 0.0368
PCB-1268 (Aroclor 1268)	< 0.0367	< 0.0368
Total PCB	0.364	0.278
Metals, TCLP (mg/L, ppm)		
Lead, TCLP	< 0.015	< 0.015
Percent Moisture (%)		
Percent Moisture	10.4	10.4

Data Notes: Data tabulated by D. Armstrong of WESTON on 07/22/2010. Data tabulation QA'd by G. Witmer of WESTON on 07/22/20 Analytical data provided in Pace Analytical Services data pa

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Table 3: Soil Block D9 2-2 Stockpile Sampling Results Cottage Grove Site

	Stockpile 001 ¹	Stockpile 002
Stockpile Manifest ID:	D9 2-2 001-1 & D9 2-2 001-2	D9 2-2 002
Sample Type:	Composite	Composite
Block ID:	D9 2-2	D9 2-2
Sample ID:	CGMN-ESC-D202001A-0-10072(CGMN-ESC-D202002A-0-100726
Laboratory ID:	10134342001	10134342002
Sample Date & Time:	07/26/2010 11:39	07/26/2010 11:33
Polychlorinated Biphenyls (mg/kg, ppm)		
PCB-1016 (Aroclor 1016)	< 0.0423	< 0.0393
PCB-1221 (Aroctor 1221)	< 0.0423	< 0.0393
PCB-1232 (Aroclor 1232)	< 0.0423	
PCB-1242 (Aroclor 1242)	< 0.0423	
PCB-1248 (Arocior 1248)	< 0.0423	< 0.0393
PCB-1254 (Aroclor 1254)	21.1	6.06
PCB-1260 (Aroclor 1260)	4.64	1.22
PCB-1262 (Aroclor 1262)	< 0.0423	< 0.0393
PCB-1268 (Aroclor 1268)	< 0.0423	< 0.0393
Total PCB	25.7	7.28
Percent Moisture (%)		
Percent Moisture	21.9	16.3

Table Notes: ¹ Stockpile staged in two separate sub-piles.

Data Notes:

Data tabulated by R. McLoughlin of WESTON on 07/30/2010. Data tabulation CA'd by J. Savage of WESTON on 07/30/2010. Analytical data provided in Pace Analytical Services data package #10134342. Û

ndix D (Sample Results)/CGMN_D9_Excavation_Soll_Block_Date - 2-2_(W)

2:\3m-cottage grove\09_Construction\CCR\4ppe



Table 4: Soil Block D9 2-7 Stockpiles 001 002 and Soil Block 2-9 Sampling Results Cottage Grove Site

	Stockpile 001 ¹	Stockpile 001 ¹	Stockpile 002 ¹
Stockpile Manifest ID:	D9 2-7 001-1 & D9 2-7 001-2	D9 2-7 001-1 & D9 2-7 001-2	D9 2-7 002-1 & D9 2-7 002-2
Sample Type:	Composite	Composite - Duplicate	Composite
	D9 2-7	D9 2-7	10 2-2
Sample ID:	CGMN-ESC-D9207001A-0-100730	CGMN-ESC-D9207001A-0-100730 CGMN-ESC-D9207001A-DB-100730 CGMN-ESC-D92070024-0-100730	CGMN-ESC-D9207002A-0-100730
Laboratory ID:	10134759003	10134759004	10134759005
Sample Date & Time:	07/30/2010 12:13	07/30/2010 12:13	07/30/2010 12:21
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	< 0.711	< 0.460	< 0.82
PCB-1221 (Araclar 1221)	11/10 >	< 0.460	
PCB-1232 (Aroclor 1232)	< 0.711	2010	
PCB-1242 (Aroclar 1242)	<0.711	0.010	
PCB-1248 (Aroclor 1248)	< 0.711		
PCB-1254 (Aroclor 1254)	38.5	29.8	17 5
PCB-1260 (Aroclor 1260)	7.76	6.54	3.91
PCB-1262 (Aroclor 1262)	117.0 >	< 0.460	
PCB-1263 (Aroclor 1268)	< 0.711	< 0.460	
Total PCB	46.3	36.3	214
Volatile Organic Compounds, TCLP (mg/L, ppm)			1 2 1 2
Benzene, TCLP	0.509	0.151	0.425
pH (Standard Units)			
pH at 25 Degrees C	7.8	.8.8	76
Percent Moisture (%)			
Percent Moisture	53.6	28.2	59.8

Table Notes: ' Stockpile staged in two separate sub-piles. — = Sample not analyzed for this constituent.

Data Notes:

Data labulated by D. Armstrong of WESTON on 08/04/2010. Data labulation QA'5 by J. Savage of WESTON on 08/05/2010. Analytical data provided in Pace Analytical Services data package #10134759.





Table 4: Soil Block D9 2-7 Stockpiles 001 002 and Soil Block 2-9 Sampling Results Cottage Grove Site Cottage Grove Site

L

Stockplie Manifest ID: D9 2-9 001-1 & D9 2-9 002-1 & D9 2-9 002-1 & D0 000-site Sample Type: Composite Composite Block NT Block NT D9 2-9 Composite Composite Block NT Sample Drye: Composite Comosite		Stockpile 001	Stockpile 002 ¹
Sample Type: Composite Composite Block (D: 10134759001-0-100730 D3 2-9 D9 2-9 Sample Date & Time: 07/30/2010 11:57 07/30/2010 12:04 Laboratory ID: 07/30/2010 11:57 07/30/2010 12:04 Sample Date & Time: 07/30/2010 11:57 07/30/2010 12:04 Menyls (mg/kg, ppm) < 0.662 < 0.662 < 0.612 1221) < 0.662 < 0.662 < 0.652 < 0.617 1221) < 0.662 < 0.662 < 0.652 < 0.677 < 0.77 1221) < 0.662 < 0.662 0.077 < 0.77 < 0.77 < 0.77 1224) < 0.662 < 0.662 0.0752 < 0.77 < 0.77 < 0.77 1260) < 0.662 < 0.662 0.077 < 0.77 < 0.77 < 0.77 < 0.77 < 0.77 1260) < 0.662 < 0.662 0.0752 < 0.77 < 0.77 < 0.77 < 0.77 < 0.77 < 0.77 < 0.77 < 0.77 < 0.77 < 0.77 < 0.77 < 0.77 < 0.	Stockpile Manifest ID:	D9 2-9 001-1 & D9 2-9 001-2	D9 2-9 002-1 & D9 2-9 002-2
Block ID: D9 2-9 D9 2-9 Sample ID: CGMN-ESC-D920901A-0-100730 CGMN-ESC-D920902A-0-11 Laboratine ID: CGMN-ESC-D920901A-0-100730 CGMN-ESC-D920902A-0-11 Sample Date & Time: 07130120101157 071301201012004 Sample Date & Time: 07130120101157 071301201012004 1016) Sample Date & Time: 07130120101157 071301201012004 1016) Sample Date & Time: 07130120101157 071301201012004 1016) Sample Date & Time: 07130120101157 07130120102 1016) Sample Date & Time: 071301201157 071301201201204 1016) Sample Date & Time: 071301201201157 071301201204 1016) Sample Date & Time: 0713012012011157 07130120120120120120120120120120120120120120	Sample Type:	Composite	Composite
Sample ID: CGMN-ESC-D9209001A-0-100730 CGMN-ESC-D9209002A-0-10 Laboratory ID: 10134759001 10134759002 Sample Date & Time: 07300/2010 11:57 07730/2010 12:04 Memyls (mg/kg, ppm) < 0.662 < 0.662 < 0.662 1016) < 0.662 < 0.662 < 0.662 < 0.662 1221) < 0.662 < 0.662 < 0.662 < 0.662 < 0.662 1221) < 0.662 < 0.662 < 0.662 < 0.662 < 0.662 < 0.662 < 0.662 < 0.277 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.177 < 0.176 < 0.177 < 0.176 < 0.175 < 0.176 < 0.176 < 0.177 < 0.176 < 0.176 < 0.176 < 0.176 < 0.1752 < 0.126 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176 < 0.176	Block ID:	D9 2-9	D9 2-9
Laboratory ID: 10134759001 10134759002 Sample Date & Time: 07/30/2010 11:57 07/30/2010 12:04 Menyls (mg/kg, ppm) < 0.662	Sample ID:	CGMN-ESC-D9209001A-0-100730	CGMN-ESC-D9209002A-0-100730
Sample Date & Time: 07/30/2010 11:57 07/30/2010 12:04 fneryls (mg/kg, ppm) < 0.662 < 0.662 < 0.662 < 0.662 < 0.662 < 0.662 < 0.662 < 0.662 < 0.77 < 0.773 < 0.773 < 0.773 < 0.773 < 0.723 < 0.77 < 0.772 < 0.772 < 0.772 < 0.772 < 0.772 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 < 0.0752 <th>Laboratory ID:</th> <th>10134759001</th> <th>10134759002</th>	Laboratory ID:	10134759001	10134759002
henvis (mg/kg, pem) < 0.662	Sample Date & Time:	07/30/2010 11:57	07/30/2010 12:04
101(6) < 0.662 < 0 1221) < 0.662 < 0 1221) < 0.662 < 0 1232) < 0.662 < 0 1242) < 0.662 < 0 1248) < 0.662 < 0 1249) < 0.662 < 0 1248) < 0.662 < 0 1264) 8.55 0.0772 1269) 3.55 0.0772 1260) 12.1 0.0752 1260) 12.1 0.352 mounds, TCLP (mg/L, ppm) 0.116 0 0.166 0.352 0 0.116 0 0.166 0.352 0 0.116	Polychlorinated Biphenyls (mg/kg, ppm)		
1221) <0.662	PCB-1016 (Aroclor 1016)	< 0.662	
1232) < 0.662	PCB-1221 (Aroclor 1221)	< 0.662	< 0.0353
1242) < 0.662	PCB-1232 (Aroclor 1232)	< 0.662	
1248) < 0.662	PCB-1242 (Aroclor 1242)	< 0.662	
1264) 8.55 0.277 1260) 3.55 0.0752 1261) 3.55 0.0752 1262) <0.662	PCB-1248 (Aroclor 1248)	< 0.662	< 0.0353
1260) 3.55 0.0752 1262) 1262) 1263) 12.1 0.352 1264) 12.1 0.352 mpounds, TCLP (mg/l, ppm) 0.116 0 0.116 0 0.116 0 0.116 0 0.116	PCB-1254 (Aroclor 1254)	8.55	
1262) < 0.662	PCB-1260 (Aroctor 1260)	3.55	0.0752
1268) < 0.662 < <	PCB-1262 (Aroclor 1262)	< 0.662	< 0.0353
12.1 0.352 mpounds, TCLP (mg/L, ppm) 0.116 U.116 0.52	PCB-1268 (Aroclor 1268)	< 0.662	< 0.0353
mpounds, TCLP (mg/l, ppm) 0.116 65 0 0.22 6.5	Total PCB	12.1	
0.116 0.116 0 502 6.5	Volatile Organic Compounds, TCLP (mg/L, ppm)		
502 65	Benzene, TCLP	0.116	< 0.05
50.2	pH (Standard Units)		
50.2	pH at 25 Degrees C		
50.2	Percent Moisture (%)		
	Percent Moisture	50.2	6.5

Table Notes: 1 Stockpile staged in two separate sub-piles. — = Sampla not analyzed for this constituent.

Data Notes:

Data tabulated by D. Armstrong of WESTON on Us/04/2010. Data tabulation QA'd by J. Savage of WESTON on 08/05/2010. Analytical data provided in Pace Analytical Services data package i

Z13m-collage grove(D9_Construction(CCRIAppendicies(Appendx D (Sample Reexits)/CGMN_D9_Excavation_Soil_Block_Data - 2:9_2:7_0018002_(W)



Table 5: D9 Drummed Soil Cuttings Sampling Results Cottage Grove Site

Stockpile Manifest ID:	D9 Drums
Sample Type:	Composite
Block ID:	N/A
Sample ID:	CGMN-SBC-D9DRUMS-0-100730
Laboratory ID:	10134759006
Sample Date & Time:	07/30/2010 11:45
Polychlorinated Biphenyls (mg/kg, ppm)	
PCB-1016 (Aroclor 1016)	< 0.468
PCB-1221 (Aroclor 1221)	< 0.468
PCB-1232 (Aroclor 1232)	< 0.468
PCB-1242 (Aroclor 1242)	< 0.468
PCB-1248 (Arocior 1248)	5.86
PCB-1254 (Aroclor 1254)	4.26
PCB-1260 (Aroclor 1260)	1.21
PCB-1262 (Aroclor 1262)	< 0.468
PCB-1268 (Aroclor 1268)	< 0.468
Total PCBs	11.3
Volatile Organic Compounds, TCLP (mg/L, ppm)	
1,1-Dichloroethene, TCLP	< 0.05
1,2-Dichloroethane, TCLP	< 0.05
1,4-Dichlorobenzene, TCLP	< 0.05
2-Butanone (MEK), TCLP	< 0.2
Benzene, TCLP	< 0.05
Carbon tetrachloride, TCLP	< 0.05
Chlorobenzene, TCLP	< 0.05
Chloroform, TCLP	< 0.05
Tetrachloroethene, TCLP	< 0.05
Trichloroethene, TCLP	< 0.05
Vinyl chloride, TCLP	< 0.02
Percent Moisture (%)	
Percent Moisture	29.5

Data Notes:

Data tábulated by D. Armstrong of WESTON on 08/04/2010.

Data tabulation QA'd by J. Savage of WESTON on 08/05/2010.

Analytical data provided in Pace Analytical Services data package #10134759.

Z:\3m-cottage grove\D9_Construction\CCR\Appendicies\Appendix D (Sample Results)\CGMN_D9_Excavation_Soll_Block_Data - Drums_(W)



Table 6: Soil Block D9 1-9 Stockpiles 001 and 002, Soil Block 2-4 Stockpile 001 and Soil Block 2-7 Stockpile 003, Sampling Results Cottage Grove Site

	Stockpile 001-1	Stockpile 001-2	Stockpile 001-2	Stocknile 002-1
Stockpile Manifest ID:	D9 1-9 001-1	D9 1-9 001-2	D9 1-9 001-2	D9 1-9 002-1
Sample Type:	Composite	Composite	Composite Duolicate	Composite
Block ID:	D9 1-9	D9 1-9	D9 1-9	Da 1.a
Sample ID:	CGMN-ESC-D9109001D-0-100802 CGMN-ESC-D9109001E-0-100802	CGMN-ESC-D9109001E-0-100802	CGMN-ESC-D9109001E-DB-100802	CGMN-FSC-D91090020-0-100802
Laboratory ID:	10134878001	10134878002	10134878003	10134878004
Sample Date & Time:	8/2/10 12:01	8/2/10 12:07	8/2/10 12:07	8/2/10 12-12
Polychlorinated Biphenyls (mg/kg, ppm)				
PCB-1016 (Aroclor 1016)				
PCB-1221 (Aroclor 1221)				
PCB-1232 (Aroclor 1232)				
PCB-1242 (Aroclar 1242)	1			
PCB-1248 (Aroclar 1248)				
PCB-1254 (Aroclor 1254)				
PCB-1260 (Aroclor 1260)				
PCB-1262 (Aroclor 1262)				
PCB-1268 (Aroclor 1268)				
Total PCB				
Volatile Organic Compounds, TCLP (mg/L, ppm)				
				<0.0500
1,2-Dichloroethane, TCLP				<0.0500
1,4-Dichlorobenzene, TCLP				<0.0500
2-Butanone (MEK), TCLP				<0.200
Benzene, TCLP	<0.0500	<0.0500	<0.0500	<0.0500
Carbon tetrachloride, TCI P	1		1 Minute	<0.0500
Chlorobenzene, TCLP			1	<0.0500
Chloroform, TCLP			-	<0.0500
Tetrachloroethene, TCLP	0.415	0.697	0.677	0.0718
Trichloroethene, TCLP	(Annual)			<0.0500
Vinyl chloride, TCLP				<0.0200
pH (Standard Units)				
pH at 25 Degrees C	***	8.2	7.7	7.9
Percent Moisture (%)				
Percent Moisture	-			

¹ Stockpile staged in two separate sub-piles. Table Notes:

Data Notes: Data Iabulated try M.Caims of WESTON on 08066/2010. Data tabulation Q.A'd by J. Savage of WESTON on 08066/2010. Analytical data provided in Pace Analytical Services data package #10134878.

Zi3m+collage grove(D9_Construction/CCRV4ppendicies4xpendix D (Sample Results)/CGMN_D9_Excavation_SM_Block_Data - 1-9_2+4_001_27_003_(W)



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Table 6: Soil Block D9 1-9 Stockpiles 001 and 002, Soil Block 2-4 Stockpile 001 and Soil Block 2-7 Stockpile 003, Sampling Results Cottage Grove Site

	Stockpile 002-2	Stockpile 001 ¹	Stocknile 003
Stockpile Manifest ID:	D9 1-9 002-2	D9 2-4 001-1 & D9 2-4 001-2	D9 2-7 003
Sample Type:	Composite	Composite	Composite
Block ID:	D9 1-9	D9 2-4	Dia 2-7
Sample ID:	CGMN-ESC-D9109002E-0-100802 CGMN-ESC-D9204001A-0-100802	GMN-ESC-D9204001A-0-100802	CGMN-FSC-D9207003A-0-100802
Laboratory ID:	10134878005	10134878007	10134878006
Sample Date & Time:	8/2/10 12:16	8/2/10 11:55	8/2/10 11-46
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Arocior 1016)		0// 02	
PCB-1221 (Araclar 1221)			20.1
PCB-1232 (Aroclor 1232)			
PCB-1242 (Arocior 1242)			
PCB-1248 (Aroclor 1248)			
PCB-1254 (Arocior 1254)		110	317
PCB-1260 (Arocior 1260)	reven		110
PCB-1262 (Arocior 1262)			24 0F
PCB-1268 (Arocior 1268)			
Total PCB	manu and a second se	13.1	37 79
/olatile Organic Compounds, TCLP (mg/L, ppm)			
1,1-Dichlaroethene, TCLP			
2 Dichlarocthane, TCLP			
1.4-Dichlorobenzene, TCLP			
2-Butanone (MEK), TCLP			
Benzene, TCLP	<0.0500		0.536
Carbon tetrachloride, TCLP			
Chlorobenzene, TCLP			
Chloroform, TCLP			
Tetrachloroethene, TCLP	0.0611		venini
Trichloroethene, TCLP			
Vinyl chloride, TCLP			
oH (Standard Units)			
pH at 25 Degrees C			
Percent Moisture (%)			
Percent Moisture		26.5	68.7

Table Notes: ¹ Stockpile staged in two separate sub-piles.

Data Notes: Data idoulated by M.Ceinns of WESTON on 08/06/2010. Data tabulation QAd by J. Savage of WESTON on 08/06/2010. Analyticat data provided in Pace Analyticat Savrices data package a

213m-collage groveID9_ConstructionICCRVppendiseWependix D (Sumple Results)ICGMN_D9_Exconveitor_Sox_Block_Data - 1+9_2.4_001_2:7_003_{(W)}



Table 7: Soil Block D9 2-4 Stockpile 002 and 003 Sampling Results Cottage Grove Site

	Stockpile 002 ¹	Stockpile 003 ¹
Stockpile Manifest ID:	D9 2-4 002-1 & D9 2-4 002-2	D9 2-4 003-1 & D9 2-4 003-2
Sample Type:	c Composite	Composite
Block ID:	D9 2-4	D9 2-4
Sample ID:	ICGMN-ESC-D9204002A-0-10080	CGMN-ESC-D9204003A-0-100804
Laboratory ID:	10135081001	10135081002
Sample Date & Time:	08/04/2010 08:00	08/04/2010 08:07
Polychlorinated Biphenyls (mg/kg, ppm)		
PCB-1016 (Arodor 1016)	<0.259	<0.06
PCB-1221 (Aroclor 1221)	<0.259	
PCB-1232 (Aroclor 1232)	<0.259	
PCB-1242 (Aroclor 1242)	<0.259	
PCB-1248 (Aroclor 1248)	<0.259	<0.06
PCB-1254 (Aroclor 1254)	5.68	17.4
PCB-1260 (Arocior 1260)	1.17	2.88
PCB-1262 (Arocior 1262)	<0.259	<0.06
PCB-1268 (Aroclor 1268)	<0.259	
Total PCB	6.85	20.3
Percent Moisture (%)		
Percent Moisture	36.4	45.0

Table Notes: ¹ Stockpile staged in two separate sub-piles.

Data Notes:

Data tabutated by R. McLoughlin of WESTON on 08/10/2010. Data labulation QA'd by D. Amistrong cf WESTON on 08/10/2010. Analytical data provided in Pace Analytical Services data package #10135081.

ZA3m-cottage grovelD9_Construction/CCRMppendicies/Appendix D (Sample Results)/CCMN_D9_Excavation_Soil_Block_Data - 24_002_003 (W)



Table 8: Soil Block D9 3-1 Sampling Results Cottage Grove Site

	Stockpile 001 ¹	Stockpile 002 ¹	Stockpile 003 ¹
Stockpile Manifest ID:	D9 3-1 001-1 & D9 3-1 001-2	D9 3-1 002-1 & D9 3-1 002-2	D9 3-1 003-1 & D9 3-1 002-2
Sample Type:	Composite	Composite	Composito
Block ID:	D9 3-1	D9 3-1	
Sample ID:	CGMN-ESC-D9301001A-0-100810	CGMN-ESC-E	CGMN-ESC-D9301003A-0-10081
Laboratory ID:	10135496001		10135496003
Sample Date & Time:	08/10/2010 08:45	08/10/2010 08:53	08/10/2010 04-02
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	<0.755	<0.416	919.07
PCB-1221 (Aroclor 1221)	<0.755		
PCB-1232 (Arocior 1232)	<0.755		
PCB-1242 (Aroclor 1242)	20.02		
PCB-1248 (Arocior 1248)			
	ce / n>	<0.416	<0.615
PCB-1254 (Arocior 1254)	1.22	7.42	23.9
PCB-1260 (Aroclor 1260)	<0.755	1.62	5 34
PCB-1262 (Aroclor 1262)	<0.755		
PCB-1268 (Araclar 1268)	<0.755		
Total PCB	1.22	9.04	29.2
Volatile Organic Compounds, TCLP (mg/L, ppm)			101
Benzene, TCLP	<0.05	0.0894	0 596
Percent Moisture (%)			000-0
Percent Moisture	12.6	20.6	46.3

Table Notes: ¹ Stockpile staged in two separate sub-piles.

Data Notes: Deta tebulated by R. McLoughlin of WESTON on 08/16/2010. Data tabulation QAd by J. Savage of WESTON on 08/16/2010. Analytical data provided in Pace Analytical Services data package #10135496.

2/3m-collage growDR_construction(CCRAppendicies/vppendx D (Semple Results)/CGMN_D9_Excavation_Soil_Block_Calls - 3-1_(V/)



Table 9: Soil Block D9 1-9 Stockpile 001 and 002 Sampling Results Cottage Grove Site Cottage Grove Site

		Stockpile 001 ¹	
Stockpile Manifest ID:	D9 1-9 001-1	D9 1-9 001-2	D9 1-9 001-2
Sample Type:	Grab	Grab	Grab - Duplicate
Block ID:	D9 1-9	D9 1-9	D9 1-9
Sample ID:	CGMN-ES-D9109001B-0-100811	CGMN-ES-D9109001C-0-100811	CGMN-ES-D9109001C-DB-0-10081-
Laboratory ID:	10135603001	10135603002	10135603003
Sample Date & Time:	08/11/2010 09:40	08/11/2010 09:46	08/11/2010 09:46
Volatile Organic Compounds (mg/kg, ppm)			
1,1,1,2-Tetrachioroethane	< 0.0692	< 1.36	< 3.55
1,1,1-Trichloroethane	0.366	1.41	
1,1,2,2-Tetrachloroethane	< 0.0692	< 1.36	
1,1,2-Trichloroethane	< 0.0692	< 1.36	
1,1,2-Trichlorotrifluoroethane	< 0.0692	< 1.36	
1,1-Dichloroethane	< 0.0692	< 1.36	
1,1-Dichloroethene	< 0.0692	< 1.36	
1,1-Dichtoropropene	< 0.0692	< 1.36	
1,2,3-Trichlorobenzene	< 0.0692	< 1.36	
1,2,3-Trichloropropane	< 0.0692	< 1.36	
1,2,4-Trichlorobenzene	0.286	< 1.36	
1,2,4-Trimethylbenzene	0.806	12.3	23.4
1,2-Dibromo-3-chloropropane	< 0.277	< 5.42	
1,2-Dibromoethane (EDB)	< 0.0692		
1,2-Dichlorobenzene	5.24	22.6	40.0
1,2-Dichloroethane	< 0.0692	< 1.36	
1,2-Dichloropropane	< 0.0692	< 1.36	
1,3,5-Trimethylbenzene	1.57	9.32	12.5
1,3-Dichlorobenzene	2.70	4.69	7.64
1,3-Dichloropropane	< 0.0692	< 1.36	< 3.55
1,4-Dichlorobenzene	0.822	2.69	5.24
2,2-Dichloropropane	< 0.277	< 5.42	< 14.2
2-Butanone (MEK)	< 0.692	< 13.6	
2-Chlorotoluene	< 0.0692	< 1.36	< 3.55
4-Chlorotoluene	< 0.0692	< 1.36	
4-Methyl-2-pentanone (MIBK)	< 0.692	< 13.6	< 35.5
Acetone	< 0.692	< 13.6	
Allyi chloride	< 0.277	< 5.42	
Benzene	< 0.0277	< 0.542	
Bromobenzene	< 0.0692	< 1.36	
Bromochloromethane	< 0.0692	< 1.36	
Bromodichloromethane	< 0.0692	< 1.36	
Bromoform	< 0.554	< 10.8	< 28.4
Bromomethane	< 0.692	< 13.6	
Carbon tetrachloride	< 0.277	< 5.42	
Chlorobenzene	< 0.0692	< 1.36	
Chloroethane	< 0.692	< 13.6	
Chloroform	< 0.0692	< 1.36	-
Chloromethane	< 0.277	< 5.42	
cis-1,2-Dichloroethene	0.224	< 1.36	
cis-1,3-Dichtoropropen€	< 0.0692	< 1.36	< 3.55

2:13rr-cottage groveID9_ConstructionICCRNppendiciesUppendix D (Semple Results)ICGMN_D9_Excavation_Soil_Block_Data - 1-9_001_002(W)



Table 9: Soil Block D9 1-9 Stockpile 001 and 002 Sampling Results Cottage Grove Site

		Stocknile 001 ¹	
Stocknile Manifact ID-	D0 4 -0 001 4		
Sampa Tures		7-100 6-1 EC	D9 1-9 001-2
	Grau	Grab	Grab - Duplicate
Block ID:	D9 1-9	D9 1-9	D9 1-9
Sample ID:	CGMN-ES-D9109001B-0-100811	CGMN-ES-D9109001C-0-100811	CGMN-ES-D9109001C-DB-0-100814
Laboratory ID:	10135603001	10135603002	10135603003
Sample Date & Time:	08/11/2010 09:40	08/11/2010 09:46	08/11/2010 09:46
Dibromochloromethane	< 0.0692	< 136	
Dibromomethane	< 0.0692	< 136	
Dichlorodifluoromethane	< 0.0692	< 1.36	
Dichlorofluoromethane	< 0.0692	< 1.36	
Diethyl ether (Ethyl ether)	< 0.277	< 5.42	
Ethylbenzene	2.81	22.6	123
Hexachloro-1,3-butadiene	< 0.277	< 5.42	
Isopropylbenzene (Cumene)	0.126	< 1.36	3.76
Methylene Chloride	< 0.277	< 5.42	
Methyl-tert-butyl ether	< 0.0692	< 1,36	
Naphthalene	< 0.277	< 5.42	
n-Butylbenzene	< 0.0692	< 1.36	
n-Propylbenzene	0.131	< 1.36	3.84
p-lsopropyitoluene	0.155	< 1.36	
sec-Butylbenzene	< 0.0692	< 1.36	
Styrene	< 0.0692	< 1.36	
tert-Butylbenzene	< 0.0692	< 1.36	
Tetrachloroethenc	10.1	37.8	47.7
Tetrahydrofuran	< 0.692	< 13.6	< 35.5
Ioluene	9.01	49.5	268
trans-1,2-Dichloroethene	< 0.0692	< 1.36	< 3.55
trans-1,3-Dichloropropene	< 0.0692	< 1.36	
Trichloroethene	0.141	< 1.36	
Trichlorofluoromethane	< 0.0692	< 1.36	
Vinyl chloride	< 0.0277	< 0.542	< 1.42
Xylene (Total)	20.1	384	936
Percent Moisture (%)			
Percent Moisture	25.2	28.5	27.9

 Table Notes:
 *

 * Stockpile staged in two separate sub-piles.

Data Notes:

Data tabulated by U. Armstrong of WESTCN on 08/16/2010. Data tabulation GAd by J. Savage of WESTON on 08/17/2010. Analytical data provided in Pace Analytical Services data package #10135603.

2:3m-collage groveID9_ConstructionICCRMspeerdicateSAppendix D (Sample Recutb)/CCAM_D9_Exchansion_Soli_Book_Data - 1.6_001_002(M)



Table 9: Soil Block D9 1-9 Stockpile 001 and 002 Sampling Results Cottage Grove Site

Stockpile Manifest ID sample US D9 1-3 002-1 Grab D9 1-3 002-2 Grab D9 1-9 Bool 7-3 Sample UD sample UD sample Date Time: ColMNES-D9109002E-0-1006111 CGMNES-D9109002C-0-1 00711201009:40 0711201009:40 Sample Date Time: 08711201009:42 00711201009:40 0711201009:40 Intersection: 08711201009:42 00711201009:40 0711201009:40 Intersection: 08711201009:42 00711201009:40 0711201009:40 Intersection: 08711201009:42 00711201009:40 0711201009:40 Intersection: 08711201009:42 00711201009:40 0716 Intersection: 08711201009:42 00711201009:40 0716 Intersection: 08711201009:42 0708 0708 Intersection: 08711201009:42 0.460 0.460 Intersection: 0.316 0.647 0.647 Intersection: 0.316 0.647 0.646 Intersection: 0.316 0.647 0.647 Intersection: 0.316 0.647 0.647 Intersection: 0.316 0.647 <th></th> <th>Stockpile 002</th> <th></th>		Stockpile 002	
eType: Grab Grab Grab Dick(D) CGMNESSD90-100811 CGMNESSD90-20081 Dick(D) CGMNESSD90-100814 10135603005 RD 0111/2010 09:42 08/11/2010 09:49 RD CGMNESSD9100013-42 08/11/2010 09:49 RD CGMNESSD9100013-42 08/11/2010 09:49 RD CG316 CGMNESSD910013-43 RD CG316 CG316 CG316 CG316 CG316 CG316 CG316 CG316 CG316 CG316 CG36 CG316 CG316 CG37 CG316 CG316 CG36 CG316 CG316 CG36 <th>Stockpile Manifest ID:</th> <th></th> <th></th>	Stockpile Manifest ID:		
Jock ID D9 1.9 D9 1.9 D9 1.9 Jock ID ColMLES-D910902B-0-100811 ColMLES-D91090025-0-100812 A Tuny LD 08/11/2010 09:42 08/11/2010 09:43 A Tuny LD 08/11/2010 09:43 08/11/2010 09:43 A Tuny LD 08/11/2010 09:43 08/11/2010 09:43 A Tuny LD 0.316 0.11/2010 09:43 A Tuny LD 0.316 0.316 0.316 A Tuny LD 0.316 0.460 0.361 A Tuny LD 0.316 0.460 0.361 A Tuny LD 0.361 0.361 A Tuny LD 0.361 0.361 A Tuny LD 0.460 0.361 A Tuny LD 0.460 0.378 A Tuny LD 0.361 0.361 A Tuny LD 0.378 0.378 <th>Sample Type:</th> <th>Grab</th> <th>Grab</th>	Sample Type:	Grab	Grab
Opte ID: CGMN-ES-D9109002B-0-100811 CGMN-ES-D9109002C-0-1 Liby ID: 08/11/2010 09:42 08/11/2010 09:42 A Time 08/11/2010 09:42 08/11/2010 09:43 A Dise000000000000000000000000000000000000	Block ID:	D9 1-9	D9 1-9
tecy ID: 10135603004 10135603005 & Time: 08/11/2010 09:43 08/11/2010 09:43 < 0.316 < 0.316 0.0116 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 $& 0.460$ < 0.322 0.316 $& 0.460$ < 0.322 < 0.316 $& 0.547$ < 0.326 < 0.316 $& 0.547$ < 0.322 < 0.316 $& 0.547$ < 0.326 < 0.316 $& 0.547$ < 0.326 < 0.316 $& 0.547$ < 0.326 < 0.316 $& 0.600$ < 0.326 < 0.316 $& 0.678$ < 0.316 $& 0.676$ $& 0.678$ < 0.316 $& 0.676$ $& 0.678$ < 0.316 $& 0.676$ $& 0.678$ < 0.316 <	Sample ID:	CGMN-ES-D9109002B-0-100811	CGMN-ES-D9109002C-0-100811
B. Time: 08/11/2010 09:43 6. 11/2010 09:43 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.316 < 0.316 <0.400 < 0.320 <0.316 < 14.3 7.08 < 0.316 <0.547 < 0.316 <0.547 < 0.316 <0.547 < 0.316 <0.547 < 0.316 <0.547 < 0.316 <0.547 < 0.316 <0.547 < 0.316 <0.547 < 0.316 <0.547 < 0.316 <0.547 < 0.316 <0.546 < 0.316 <0.546 <th>Laboratory ID:</th> <th>10135603004</th> <th>10135603005</th>	Laboratory ID:	10135603004	10135603005
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Sample Date & Time:	08/11/2010 09:42	08/11/2010 09:49
ne <th>Volatile Organic Compounds (mg/kg, ppm)</th> <th></th> <th></th>	Volatile Organic Compounds (mg/kg, ppm)		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1,1,1,2-Tetrachioroethane	< 0.316	< 0.116
let < 0.316 < 0.316 finite < 0.316 0.640 finite < 0.316 0.676 finite < 0.316 < 0.316 finit<	1,1,1-Trichloroethane	< 0.316	< 0.116
Itane (0.316) (0.316) (0.316) (0.316) (0.316) (0.316) (0.316) (0.316) (0.316) (0.316) (0.316) (0.316) (0.316) (0.316) (0.367) (0.316) (0.367) (0.316) (0.367) (0.316) (0.367) (0.316) (0.367) (0.316) (0.367) (0.316) (0.367) (0.316) (0.367) (0.316) (0.366) (0.316)	1,1,2,2-Tetrachioroethane	< 0.316	
Itane < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 < 0.316 0.460 $= 0.352$ < 0.316 0.460 $= 0.352$ < 0.316 0.460 $= 0.316$ < 0.316 0.547 $= 0.316$ < 0.316 0.547 $= 0.316$ < 0.316 0.678 $= 0.316$ < 0.316 0.678 $= 0.316$ < 0.316 0.678 $= 0.316$ < 0.316 0.678 $= 0.316$ < 0.316 0.678 $= 0.126$ < 0.316 < 0.316 $= 0.126$ < 0.316 < 0.316 $= 0.126$ < 0.316 < 0.316 $= 0.126$ < 0.316 < 0.316 $= 0.126$ < 0.316 < 0.316 $= 0.126$ < 0.316 < 0.316 $= 0.00000000000000000000000000000000000$	1,1,2-Trichloroethane	< 0.316	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1,1,2-Trichlorotrifluoroethane	< 0.316	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1,1-Dichloroethane	< 0.316	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1,1-Dichloroethene	< 0.316	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1,1-Dichloropropene	< 0.316	
	1,2,3-Trichlorobenzene	< 0.316	
$\begin{array}{l c c c c c c c c c c c c c c c c c c c$	1,2,3-Trichloropropane	< 0.316	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1,2,4-Trichlorobenzene	0.352	0.460
pane <126 <128 b) 14.3 <0.316	1,2,4-Trimethylbenzene	< 0.316	
B) (0.316) (0.316) (0.886) (0.11, 0) (0.11, 0) (0.886) (0.886) (0.11, 0) (0.11, 0) (0.886) (0.886) (0.11, 0) (0.12, 0) (0.886) (0.886) (0.11, 0) (0.12, 0) (0.886) (0.986) (0.12, 0) (0.316) (0.67, 8) (0.67, 8) (0.12, 0) (0.316) (0.316) (0.67, 8) (0.12, 0) (0.316) (0.316) (0.316) (0.12, 0) (0.316) (0.316) (0.316) (0.12, 0) (0.316) (0.316) (0.316) (0.12, 0) (0.316) (0.316) (0.316) (0.12, 0) (0.316) (0.316) (0.316) (0.12, 0) (0.316) (0.316) (0.316) (0.12, 0) (0.316) (0.316) (0.316) (0.12, 0) (0.316) (0.316) (0.316) (0.12, 0) (0.316) (0.316) (0.316) (0.12, 0) (0.316) (0.316) (0.	1,2-Dibromo-3-chloropropane	< 1.26	< 0.465
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1,2-Dibromoethane (EDB)	< 0.316	< 0.116
<0.316	1,2-Dichlorobenzene		
< < < < <th< th=""> <td>1,2-Dichloroethane</td><td>< 0.316</td><td>< 0.116</td></th<>	1,2-Dichloroethane	< 0.316	< 0.116
2.80 0.886 3.58 0.686 3.58 3.58 3.58 0.678 1.14 0.678 7.1 <	1,2-Dichloropropane		< 0.116
3.58 3.58 3.78 (0.678) 1.14 0.678 1.14 < 1.26	1,3,5-Trimethylbenzene	2.80	0.886
< 0.316 1.14 0.678 1.14 < 1.26	1,3-Dichlorobenzene		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1,3-Dichloropropane		< 0.116
 <1.26 <1.316 <3.16 <1.26 <0.316 	1,4-Dichlorobenzene		
 <3.16 <3.16 <3.16 <3.16 <3.16 <3.16 <3.16 <3.16 <3.16 <1.26 <3.16 	2,2-Dichloropropane	< 1.26	< 0.465
 	2-Butanone (MEK)	< 3.16	
MBK) < 0.316 < 0.316 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 < 3.16 <	2-Chiorotoluene	< 0.316	
MBK) (3.16) (3.16) (3.16) (3.16) (3.126) (3.126) (3.126) (3.16) (4-Chloratoluene	< 0.316	v
 <ul< td=""><td>4-Methyl-2-pentanone (MIBK)</td><td>< 3.16</td><td></td></ul<>	4-Methyl-2-pentanone (MIBK)	< 3.16	
 <126 <126 <0.126 <0.316 	Acetone	< 3.16	
 <ul< td=""><td>Aliyi chloride</td><td>< 1.26</td><td></td></ul<>	Aliyi chloride	< 1.26	
 <ul< td=""><td>Benzene</td><td>< 0.126</td><td></td></ul<>	Benzene	< 0.126	
 <ul< td=""><td>Bromobenzene</td><td>< 0.316</td><td></td></ul<>	Bromobenzene	< 0.316	
 <ul< td=""><td>Bromochloromethane</td><td>< 0.316</td><td></td></ul<>	Bromochloromethane	< 0.316	
 < 2.53 < 2.53 < 3.16 < 1.26 < 0.316 	Bromodichloromethane	< 0.316	
 <3.16 <1.26 <1.26 <0.316 <1.3.16 <1.3.16 <1.3.16 <1.3.16 <0.316 <0.316 <0.316 	Bromoform	< 2.53	v
 <1.26 <0.316 <0.316 <0.316 <0.316 <0.316 <0.316 	Bromomethane	< 3.16	< 1.16
 < 0.316 < 3.16 < 0.316 < 0.316 < 0.316 < 0.316 	Carbon tetrachloride	< 1.26	
 <3.16 <0.316 <0.316 <0.316 <0.316 <0.316 	Chlorobenzene	< 0.316	
 < 0.316 < 1.26 < 0.316 < 0.316 	Chloroethane	< 3.16	< 1.16
<pre>< 1.26 < 2.316 < 0.316</pre>	Chloroform	< 0.316	< 0.116
< 0.316 < 0.316 < 0.316	Chloromethane	< 1.26	
< 0.316	cis-1, 2-Dichloroethene	< 0.316	
	cis-1,3-Dichloropropent	< 0.316	i < 0.116

r

Z\3m-collage grove\D9_Construction\CCA\Appendides\Appendix D (Sample Results)\CGMN_D9_Excavation_Soit_Block_Data - 1-9_001_002|W|



Table 9: Soil Block D9 1-9 Stockpile 001 and 002 Sampling Results Cottage Grove Site

		Stockpile 002	le 002 ¹
	Stockpile Manifest ID:	D9 1-9 002-1	D9 1-9 002-2
	Sample Type:	Grab	Grab
	Block ID:	D9 1-9	D9 1-9
	Sample ID:	CGMN-ES-D9109002B-0-100811	CGMN-ES-D9109002C-0-100811
	Laboratory ID:	10135603004	10135603005
	Sample Date & Time:	08/11/2010 09:42	08/11/2010 09:49
Dibromochloromethane		< 0.316	
Dibromomethane		< 0.316	
Dichlorodifluoromethane		< 0.316	
Dichlorofluoromethane		< 0.316	
Diethyl ether (Ethyl ether)		< 1.26	
Ethylbenzene		0.946	1.63
Hexachloro-1,3-butadiene		< 1.26	< 0.465
Isopropylbenzene (Cumene)		< 0.316	
Methylene Chloride		< 1.26	< 0.465
Methyl-tert-butyl ether		< 0.316	
Naphthalene		< 1.26	
n-Butylbenzene		< 0.316	< 0.116
n-Propylbenzene		< 0.316	
p-lsopropyltoluene		< 0.316	< 0.116
sec-Butylbenzene		< 0.316	
Styrene		< 0.316	< 0.116
tert-Butylbenzene		< 0.316	< 0.116
Tetrachloroethene		2.76	1.53
Tetrahydrofuran		< 3.16	< 1.16
Toluene		2.75	1.94
trans-1,2-Dichloroethene		< 0.316	<0.116
trans-1,3-Dichloropropene		< 0.316	< 0.116
Trichloroethene		< 0.316	< 0.116
Trichlorofluoromethane		< 0.316	< 0.116
Vinyl chloride		< 0.126	< 0.0465
Xylene (Total)		34.4	16.0
Percent Moisture (%)			
Percent Moisture		23.7	30.6

Table Notes: ¹ Stockpile staged in two separate sub-piles.

Data Notes: Data tabulated by D. Armstrong of WESTON on 08/16/2010. Data tabulation QAd by J. Savage of WESTON on 08/17/2010. Analytical data provided in Pace Analytical Services data providegt

2.13m-cottage grove(D9_Construction)CCRV-ppendicesIAppendix D (Sample Results))CGMN_D9_Excevation_Soli_Box_Data - 1-9_001_002(W)



Table 10: Soil Block D9 3-7 Stockpile 001 and 002 Sampling Results Cottage Grove Site

	Stock	Stockpile 001 ¹	Stockpile 002 ¹
Stockpile Manifest ID:	D9 3-7 001-1 & D9 3-7 001-2	D9 3-7 001-1 & D9 3-7 001-2	D9 3-7 002-1 & D9 3-7 002-2
Sample Type:	Composite	Composite - Duplicate	Composite
Block ID:	D9 3-7	D9 3-7	D9 3-7
Sample ID:	Sample ID: CGMN-ESC-D9307001A-0-100811	CGMN-ESC-D9307001A-DB-100811	CGMN-ESC-D9307002A-0-100811
Laboratory ID:	10135603006	10135603007	10135603008
Sample Date & Time:	08/11/2010 09:58	08/11/2010 09:58	08/11/2010 10:05
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	< 0.952	< 2.34	< 2.85
PCB-1221 (Aroclor 1221)	< 0.952	< 2.34	< 2.85
PCB-1232 (Aroclor 1232)	< 0.952	< 2.34	< 2.85
PCB-1242 (Arocior 1242)	< 0.952	< 2.34	< 2.85
PCB-1248 (Aroclor 1248)	< 0.952	< 2.34	< 2.85
PCB-1254 (Aroclor 1254)	19.0	21.9	47.7
PCB-1260 (Aroclor 1260)	4.51	4.89	10.8
PCB-1262 (Aroclor 1262)	< 0.952	< 2.34	< 2.85
PCB-1268 (Aroclor 1268)	< 0.952	< 2.34	< 2.85
Total PCBs	23.5	26.8	58.5
Volatile Organic Compounds, TCLP (mg/L, ppm)			
Benzene, TCLP	0.0591	0.0685	0.350
Metals, TCLP (mg/L, ppm)			
Lead, TCLP	< 0.015	< 0.015	< 0.015
Percent Moisture (%)			
Percent Moisture	30.7	29.5	42.0

Table Notes:

¹ Stockpile staged in two separate sub-piles.

Data Notes:

Data tabulation QA'd by J. Savage of WESTON on 08/17/2010. Analytical data provided in Pace Analytical Services data package #10135603. Data tabulated by D. Armstrong of WESTON on 08/16/2010.

Z\3m-cottage groveID9_Construction\CCRWppendiclesWppendix D (Sample Results)\CGMN_D9_Excavation_Soil_Block_Data - 3-7_001_002(W)



Table 11: Soil Block D9 3-5 Sampling Results Cottage Grove Site

		Stockpile 002 ¹	Stockpile 003	Stocknile 004
Stockpile Manifest ID:	D9 3-5 001-1 & D9 3-5 001-2	D9 3-5 002-1 & D9 3-5 002-2	D9 3-5 003-1 & D9 3-5 003-2	DO 2 E OUL
Sample Type:	Composite	Composite	Comneite	
Block ID:	D9 3-5	D9 3-5	DO 9 E	
Samula ID-	CGMN ESC.	COMPERSION OF 10001	C-C 60	
	10001-0-VI 00000-00-00-VIII-00-0	CGMN-EQC-D3303002A-0-100812	CGMN-ESC-D9305003A-0-100812	CGMN-ESC-D9305004A-0-100812
		10135735002	10135735003	10135735004
Sample Date & Time:	08/12/2010 16:28	08/12/2010 16:32	08/12/2010 16:36	08/12/2010 16-38
Polychlorinated Biphenyls (mg/kg, ppm)				
PCB-1016 (Amelor 1016)	-0 07			
	C+0.U~	<0.464	<0.748	<0,729
PUB-1221 (Arocior 1221)	<0.645	<0.464	<0.748	
PCB-1232 (Aroclor 1232)	<0.645	<0.464	20 748	671.0×
PCB-1242 (Araclar 1242)	<0.645	<0 A64	012.07	871.04
PCB-1248 (Aroclor 1248)	<0.645		047.07	50.1Z9
PC:R-1754 (Amelar 1954)			<0.148	<0.729
	3.14	2.00	22.2	33.1
PUB-1200 (Arocior 1200)	0.780	<0.464	5.23	7.53
PCB-1262 (Arocior 1262)	<0.645	<0.464	<0 748	0.7.02
PCB-1268 (Arocior 1268)	<0.645	<0.464	20.248	87.104 002 04
Total PCBs	3.92	2.00	N 70	10.5
Percent Moisture (%)			21.1	40.0
Percent Moisture	48.8	28.9	55 Q	E4 0
		40.04	00.3	0 4 .6

Table Notes:

¹ Stockpile staged in two separate sub-piles.

Data Notes:

Data tabulated by R. McLoughlin of WESTON on 08/18/2010. Data tabulation QA'd by D. Armstrong of WESTON on 08/19/2010. Analytical data provided in Pace Analytical Services data package #10135735.



Table 12: Soil Block D9 3-3 Stockpiles 001 - 002 and Soil Block D9 3-6 Sampling Results Cottage Grove Site Cottage Grove Site

	Stockpile 001 ¹	Stockpile 002 ¹
Stockpile Manifest ID:	D9 3-3 001-1 & D9 3-3 001-2	D9 3-3 002-1 & D9 3-3 002-2
Sample Type:	Composite	Composite
Block ID:	D9 3-3	D9 3-3
Sample ID:	CGMN-ESC-D9303001A-0-100817	CGMN-ESC-D9303002A-0-100817
Laboratory ID:	10135995004	10135995005
Sample Date & Time:	08/17/2010 16:26	08/17/2010 16:30
Polychlorinated Biphenyls (mg/kg, ppm)		
PCB-1016 (Aroclor 1016)	< 0.855	< 0.69
PCB-1221 (Aroclor 1221)	< 0.855	
PCB-1232 (Aroclar 1232)	< 0.855	269.0 >
PCB-1242 (Aroclor 1242)	< 0.855	2697
PCB-1248 (Aroclar 1248)	< 0.855	< 0.697
PCB-1254 (Aroclor 1254)	83.5	40.8
PCB-1260 (Arocior 1260)	8.59	4.35
PCB-1262 (Aroclor 1262)	< 0.855	2.69.C >
PCB-1268 (Aroclor 1268)	< 0.855	
Total PCBs	92.1	45.2
Volatile Organic Compounds, TCLP (mg/L, ppm)		
Benzene, TCLP	0.655	0.637
Metals, TCLP (mg/L, ppm)		
Lead, TCLP		
Mercury, TCLP		
Percent Moisture (%)		
Percent Moisture	61.6	52.7

 Table Notes:
 1

 ¹ Stockpile staged in two separate sub-piles.
 -- = Sample not analyzed for corresponding compound.

Data Notes:

Data tabulated by D. Armstrong of WESTON on 08/24/2010. Data tabulation QA'ti by R. McLoughlin of WESTON on 08/24/2010. Analytical data provided in Pace Analytical Services data package #10135995.

2:3m-college grovelD9_ConstructionICCRAppendiciosVepandix D (Semple Results)ICGMN_D9_Excervation_Soli Block_Data - 3-3_001_082_3-6(W)

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Table 12: Soil Block D9 3-3 Stockpiles 001 - 002 and Soil Block D9 3-6 Sampling Results Cottage Grove Site

	Stockpile 001 ¹	Stockpile 002 ¹	Stocknile 003 ¹
Stockpile Manifest ID:	D9 3-6 001-1 & D9 3-6 001-2	D9 3-6 002-1 & D9 3-6 002-2	D9 3-6 003-1 & D9 3-6 002-2
Sample Type:	Composite	Composite	Composito
Block ID:	D9 3-6	D9 3-6	D0 3-6
Sample ID:	CGMN-ESC-D9306001A-0-100817	CGMN-ESC-09306001A-0-100817 CGMN-ESC-0930602A-0-100817 CGMN-ESC-09306001A-0-100817	CGMN-ESC-D0306003A-0-100817
Laboratory ID:	10135995001	10135995002	101350050-0-10001/
Sample Date & Time:	08/17/2010 16:22	08/17/2010 16:14	08/17/2010 16-15
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclar 1016)	< 0.629	< 0.754	309 0 2
PCB-1221 (Aroctor 1221)	< 0.629	< 0.751	20000
PCB-1232 (Aroclor 1232)	< 0.629		 0.033 0.835
PCB-1242 (Aroclor 1242)	< 0.629		< 0.000 < 0.835
PCB-1248 (Aroclor 1248)	< 0.629	< 0.751	< 0.835
J-1254 (Aroclor 1254)	47.0	166	60.5
PCB-1260 (Aroclor 1260)	5.36	16.1	6 98
PCB-1262 (Aroclor 1262)	< 0.629	< 0.751	< 0 836
PCB-1268 (Aroclor 1268)	< 0.629	< 0.751	 C B 35
Total PCBs	52.4	182	67.5
Volatile Organic Compounds, TCLP (mg/L, ppm)			
Benzene, TCLP	0.621	0.821	0.700
Metals, TCLP (mg/L, ppm)			00.00
Lead, TCLP	< 0.015	< 0.015	< 0.015
Mercury, TCLP	< 0.0008	< 0.0008	v
Percent Moisture (%)			
Percent Moisture	47.6	56.2	60.5

Table Notes:

¹ Stockpile staged in two separate sub-piles. --- = Sample not analyzed for corresponding compound.

Data Notes:

Data tabulated by D. Armstorig of WESTON on 08/24/2010. Data tabulation QA'd by R. McLoughlin of WESTON on 08/24/2010. Analytical data provided in Pace Analytical Services data package #



Table 13: Soil Block D9 3-3 Stockpiles 003 - 005 and Soil Block D9 3-4 Stockpile 001 Sampling Results Cottage Grove Site

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	Stock	Stockpile 003 ¹	Stockpile 004 ¹
Stockpile Manifest ID:	D9 3-3 003-1 & D9 3-3 003-2	D9 3-3 003-1 & D9 3-3 003-2	D9 3-3 004-1 & D9 3-3 004-2
Sample Type:	Composite	Composite - Duplicate	Composite
Block ID:	D9 3-3	D9 3-3	
Sample ID:	CGMN-ESC-D9303003A-0-100819	CGMN-ESC-D9303003A-0-100819 CGMN-ESC-D9303003A-DB-100819	CGMN-ESC-E
Laboratory ID:	10136152001	10136152002	1
Sample Date & Time:	08/19/2010 11:35	08/19/2010 11:35	08/19/2010 11:42
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroctor 1016)	< 0.581	< 0.554	< N 793
PCB-1221 (Aroclor 1221)	< 0.581	< 0.554	< 0.793
PCB-1232 (Aroctor 1232)	< 0.581	< 0.554	< 0.793
PCB-1242 (Aractar 1242)	< 0.581	< 0.554	5 U 203
PCB-1248 (Arocior 1248)	< 0.581	< 0.554	< 0.793
PCB-1254 (Aroclor 1254)	42.8	35.6	93.8
PCB-1260 (Arodor 1260)	4.22	3.41	9.16
PCB-1262 (Arodor 1262)	< 0.581	< 0.554	< 0.793
PCB-1268 (Arodor 1268)	< 0.581	< 0.554	20.793
Total PCBs	47.0	39.0	103
Volatile Organic Compounds, TCLP (mg/L, ppm)			
Benzene, TCLP	0.152	0.119	0.904
Metals, TCLP (mg/L, ppm)			
Lead, TCLP			
Percent Moisture (%)			
Percent Moisture	43.2	40.5	58.4

Table Notes:

¹ Stockpile staged in two separate sub-piles.

--- = Sample not analyzed for corresponding compound.

Data Notes:

Analytical data provided in Pace Analytical Services data package #10136152. Data tabulation QA'd by R. McLoughtin of WESTON on 08/25/2010. Data tabulated by D. Armstrong of WESTON on 08/25/2010.



Table 13: Soil Block D9 3-3 Stockpiles 003 - 005 and Soil Block D9 3-4 Stockpile 001 Sampling Results Cottage Grove Site

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	Stockpile 005 ¹	Stockpile 001 ¹
Stockpile Manifest ID:	D9 3-3 005-1 & D9 3-3 005-2	D9 3-4 001-1 & D9 3-4 001-2
Sample Type:	Composite	Composite
Block ID:	D9 3-3	D9 3-4
Sample ID:	CGMN-ESC-D9303005A-0-100819	CGMN-ESC-D
Laboratory ID:	10136152004	10136152005
Sample Date & Time:	08/19/2010 11:48	08/19/2010 11:53
Polychlorinated Biphenyls (mg/kg, ppm)		
PCB-1016 (Aroclor 1016)	< 0.763	< 0.667
PCB-1221 (Aroclor 1221)	< 0.763	
PCB-1232 (Aroclor 1232)	< 0.763	
PCB-1242 (Arocior 1242)	< 0.763	
PCB-1248 (Arocior 1248)	< 0.763	
PCB-1254 (Aroclor 1254)	70.4	28.8
PCB-1260 (Aroclor 1260)	6.87	3.09
PCB-1262 (Aroclor 1262)	< 0.763	< 0.667
PCB-1268 (Aroclor 1268)	< 0.763	
Total PCBs	77.3	31.9
Volatile Organic Compounds, TCLP (mg/L, ppm)		
Benzene, TCLP	0.734	0.167
Metals, TCLP (mg/L, ppm)		
Lead, TCLP		< 0.015
Percent Moisture (%)		
Percent Moisture	56.7	50.5

Table Notes:

¹ Stockpile staged in two separate sub-piles.

--- = Sample not analyzed for corresponding compound.

Data Notes:

Analytical data provided in Pace Analytical Services data package # Data tabulation QA'd by R. McLoughlin of WESTON on 08/25/2010. Data tabulated by D. Armstrong of WESTON on 08/25/2010.

23/3m-cottage grove/D9_Construction/CCRAppendictos/Appendix D (Sample Results)/CGMA, D9_Excavation_Suij Block_Data - 3-3_003-005_3-4_001(M)



Table 14: Soil Block D9 3-4 Stockpiles 002 - 004 Sampling Results

Site
Grove 8
ottage (
U

		Stockpile 002 ¹	Stockpile 003 ¹	Stockpile 004
Interface Composite Composite Composite Composite Composite Composite Composite D9 34 D1 34 D1 34 D1 34	Stockpile Manifest ID:	D9 3-4 002-1 & D9 3-4 002-2	D9 3-4 003-1 & D9 3-4 003-2	D9 3-4 004
Block (D: D9 3.4 D9 3.4 <thd9 3.4<="" th=""> <thd9 3.4<="" th=""> <thd9 3.4<="" th=""><th>Sample Type:</th><th>Composite</th><th>Composite</th><th>Comnosite</th></thd9></thd9></thd9>	Sample Type:	Composite	Composite	Comnosite
Imple ID: CGMN-ESC-D9304002A-0-100820 CGMN-ESC-D9304003A-0-100820 CGMN-ESC-D9304004A-0-1018502003 atiory ID: 10136202010 08/20/20110 10136202003 10136202003 atiory ID: 08/20/20110 08/20/20110 08/20/2010 08/20/2010 10136202003 atiory ID: 08/20/2010 08/20/2010 08/20/2010 08/20/2010 10136202003 atiory ID: 08/20/2010 08/20 08/20/2010 08/20/2010 10136202003 atiory ID: 08/20/2010 08/20 08/20/2010 08/20/2010 08/20/2010 08/20/2010 atiory ID: 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 atiory ID: 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 08/20/2010 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0<	Block ID:	D9 3-4	D9 3-4	D9 3-4
ationy ID: 10136202001 10136202003 10136202003 e A Time: 08720/2010 08:50 08720/2010 08:50 08720/2010 09:00 e A Time: e 0.576 e 0.585 0820/2010 09:00 e 0.576 e 0.585 e 0.585 e 0.585 e 0.58 e 0.585 e 0.585 e 0.585 e 0.58 e 0.585 e 0.59 e 0.51 e 0.51 e 0.5	Sample ID:	CGMN-ESC-D9304002A-0-100820	CGMN-ESC-D9304003A-0-100820	CGMN-ESC-D9304004A-0-100821
& Time: 08/20/2010 08:41 08/20/2010 08:50 08/20/2010 09:00 < 0.576 < 0.585 < 0.576 < 0.576 < 0.585 < 0.576 < 0.576 < 0.585 < 0.576 < 0.576 < 0.585 < 0.585 < 0.576 < 0.585 < 0.585 < 0.576 < 0.585 < 0.585 < 4.81 50.5 < 0.585 < 4.81 50.5 < 0.585 < 4.64 < 0.585 < 0.585 < 0.576 50.5 < 0.585 < 0.530 0.478 < 0.585 < 0.76 50.4 < 0.786 < 0.730 0.478 < 0.585 < 0.015 0.015 < 0.015	Laboratory ID:	10136202001	10136202002	10136202003
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Sample Date & Time:	08/20/2010 08:41	08/20/2010 08:50	08/20/2010 09:00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Polychlorinated Biphenyls (mg/kg, ppm)			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	PCB-1016 (Aroclor 1016)	< 0.576	< 0.585	< 0.351
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	PCB-1221 (Aroclor 1221)	< 0.576	< 0.585	< 0.351
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	PCB-1232 (Aroclor 1232)	< 0.576	< 0.585	< 0.351
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	PCB-1242 (Aroclor 1242)	< 0.576	< 0.585	< 0.351
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	PCB-1248 (Aroclor 1248)	< 0.576	< 0.585	< 0.351
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	PCB-1254 (Aroclor 1254)	48.1	50.5	< 0.351
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	PCB-1260 (Aroclor 1260)	4.95	4.64	< 0.351
266) <	PCB-1262 (Aroclor 1262)	< 0.576	< 0.585	< 0.351
53.1 55.1 56.1 pounds, TCLP (mg/L, ppm) 0.230 0.478 ppm) 0.230 0.478 ppm) 0.015 1 ppm 0.015 5.9	PCB-1268 (Aroclor 1268)	< 0.576	< 0.585	< 0.351
ppounds, TCLP (mg/L, ppm) 0.230 0.478 1 ppm) 0.015 0.015 1 ppm 0.015 0.015 5.9	Total PCBs	53.1	55.1	<0.351
ppm) 0.230 0.478 0 0.015 0.015 0.015 0.015 1 42.7 43.6 5.9	Volatile Organic Compounds, TCLP (mg/L, ppm)			
ppm) 0.015 0.015 - - - - 5.9 - - - - 5.9	Benzene, TCLP	0.230	0.478	< 0.05
0.015 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005	Metals, TCLP (mg/L, ppm)			
42.7 43.6 5.9	Lead, TCLP	0.015	0.015	< 0.015
42.7 43.6 43.6	Percent Moisture (%)			
	Percent Moisture	42.7	43.6	5.9

Table Notes: ¹ Stockpile staged in two separate sub-piles.

Data Notes:

ruce noues. Data tabulased by R. MeLoughin of WESTON on 08(26/2010). Data tabulasion GA'd try D. Armstrong of WESTON on 08(27/2010). Analytical data provided in Pace Analytical Services data package #10135202.

Zi.3m-cottage grovelD9_ConstructorhCCRNeppendiciesNapendix 0 (Sample Results)ICGMN_D9_Excavation_Soli_Block_Data - 3.4_002-004(M)

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Table 15: Soil Block D9 2-7 Stockpiles 001-1 and 001-2 Sampling Results **Cottage Grove Site**

	Stockpile 001	Stockaile 001	Stocknile 001-1 ¹	Stocknile 001-21
Stockpile Manifest ID:	D9 2-7 001-1 & D9 2-7 001-2	D9 2-7 601-1 & D9 2-7 001-2	D9 2-7 001-1	- 100 3-7 001 -2
Sample Type:	Composite	Composite - Duplicate	Composite	Composite
Block ID:	D9 2-7	D9 2-7	D9 2-7	D9 2-7
Sample ID:	CGMN-ESC-D9207001A-0-100730	CGMN-ESC-D92070014-0-100730 CGMN-ESC-D9207001A-DB-100730 CGMN-ESC-D9207001D-0-100908 CGMN-ESC-D9207001E-0-100008	CGMN-ESC-D9207001D-0-100908	CGMN-FSC-D9207001E-0-100008
Laboratory ID:	10134759003	10134759004	10137533001	10137533002
Sample Date & Time:	07/30/2010 12:13	07/30/2010 12:13	09/08/2010 11:36	09/08/2010 11-38
Polychlorinated Biphenyls (mg/kg, ppm)				
PCB-1016 (Aroclor 1016)	< 0.711	< 0.460		
PCB-1221 (Aroclor 1221)	< 0.711	< 0.460		
PCB-1232 (Aroclor 1232)	< 0.711	< 0.460		
PCB-1242 (Aroclor 1242)	< 0.711	< 0.460		
PCB-1248 (Aroclor 1248)	< 0.711	< 0.460		
PCB-1254 (Aroclor 1254)	38.5	29.8		
PCB-1260 (Aroclor 1260)	7.76	6.54		
PCB-1262 (Arnclor 1262)	< 0.711	< 0.460		
PCB-1268 (Aroclor 1268)	< 0.711	< 0.460		
Total PCB	46.3	36.3		
Volatile Organic Compounds, TCLP (mg/L, ppm)				
	See Note 2	See Note 2	< 0.050	0.116
pH (Standard Units)				
pH at 25 Degrees C	. 7.8	8.8		
Percent Moisture (%)				
Percent Moisture	53.6	28.2		

Table Notes:

¹ Sample from the stockpile collected after conditioning the stockpile with Line Kilh Dust (LKD) to reduce VOCs. ² This VOC TCLP result is from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results of samples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 2-7 001-1 and D9 2-7 001-2 (collected on 09/08/2010). --- = Sample not analyzed for this constituent.

Data Notes: Data tabulated by R. McLoughlin of WESTON on 09/14/2010. Data tabulation QA'd by J. Savage of WESTON on 09/15/2010. Analytical data provided in Pace Analytical Services data package #10134759 & #10137533.



Table 16: Soil Block D9 2-7 Stockpile 003 Sampling Results Cottage Grove Site

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	Stockpile 003	Stockpile 003 ¹
Stockpile Manifest ID:	D9 2-7 003	D9 2-7 003
Sample Type:	Composite	Composite
Block ID:	D9 2-7	D9 2-7
Sample ID:	CGMN-ESC-D9207003A-0-100802 CGMN-ESC-D9207003A-0-100908	CGMN-ESC-D9207003A-0-100908
Laboratory ID:	10134878006	10137533003
Sample Date & Time:	8/2/10 11:46	09/08/2010 11:41
Polychlorinated Biphenyls (mg/kg, ppm)		
PCB-1016 (Aroclor 1016)	<1.05	
PCB-1221 (Aroclor 1221)	<1.05	
PCB-1232 (Aroclor 1232)	<1.05	
PCB-1242 (Aroclor 1242)	<1.05	
PCB-1248 (Aroctor 1248)	<1.05	
PCB-1254 (Aroclor 1254)	31.7	
PCB-1260 (Aroclor 1260)	609	
PCB-1262 (Aroclor 1262)	<1.05	
PCB-1268 (Aroclor 1268)	<1.05	
Total PCB	37.8	
Volatile Organic Compounds, TCLP (mg/L, ppm)		
Benzene, TCLP	See Note 2	< 0.050
Percent Moisture (%)		
Percent Moisture	68.7	

Table Notes:

¹ Sample from the stockpile collected after conditioning the stockpile with Lime Klin Dust (LKD) to reduce VOCs. ² This VOC TCLP result is from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been

This YOC FOLF results from a sample contected prior to containoning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results of samples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 2-7 003 (collected on 09/08/2010).

--- = Sample not analyzed for this constituent.

Data Notes:

Data tabulated by R. McLoughlin of WESTON on 09/14/2010. Data tabulation QA'd by J. Savage of WESTON on 09/15/2010. Analytical data provided in Pace Analytical Services data package #10134878 & #10137533.

233m-cottage groveUD9_ConstructionICCRNAppendiciesIAppendix D (Sample Results)ICGMN_D9_Excavation_Soil_Block_Data - 2.7_003 PC_{(W)}



Table 17: Soil Block D9 3-1 Stockpiles 003-1 and 003-2 Sampling Results

Cottage Grove Site

	Stockpile 003	Stockpile 003-1 ¹	Stockpile 003-2 ¹
Stockpile Manifest ID:	D9 3-1 003-1 & D9 3-1 003-2	D9 3-1 003-1	D9 3-1 003-2
Sample Type:	Composite	Composite	Composito
Block ID:	D9 3-1	D9 3-1	D9 3-1
Sample ID:	CGMN-ESC-D9301003A-0-100810	CGMN-ESC-D9301003A-0-100810 CGMN-ESC-D9301003D-0-100908 CGMN-ESC-D9301003E-0-100908	CGMN-ESC-D9301003E-0-100908
Laboratory ID:	10135496003	10137533004	10137533005
Sample Date & Time:	08/10/2010 09:02	09/08/2010 11:44	09/08/2010 11-47
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Arocior 1016)	<0.615		
PCB-1221 (Aroclor 1221)	<0.615		
PCB-1232 (Aroclor 1232)	<0.615		
PCB-1242 (Aroclor 1242)	<0.615		
PCB-1248 (Aroclor 1248)	<0.615		
PCB-1254 (Aroclor 1254)	23.9		
PCB-1260 (Aroclor 1260)	5.34		
PCB-1262 (Arociar 1262)	<0.615		
PCB-1268 (Arocior 1268)	<0.615		
Total PCB	29.2		
Volatile Organic Compounds, TCLP (mg/L, ppm)			
Benzene, TCLP	See Note 2	< 0.050	< 0.050
Percent Moisture (%)			
Percent Moisture	46.3		

Table Notes:

¹ Sample from the stockpile collected after conditioning to reduce VOCs.

² This VOC TCLP result is from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results of samples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 3-1 003-1 & D9 3-1 003-2 (collected on 09/08/2010). --- = Sample not analyzed for this constituent.

Data Notes:

Data tabulated by R. McLoughlin of WESTON on 09/14/2010. Data tabulation QA'd by J. Savage of WESTON on 09/15/2010. Analytical data provided in Pace Analytical Services data package #10135496 & #10137533.

Z1377-cottage grove/D9_Construction/CCRWppendicies/Appendix D (Sample Results)/CGMN_D9_Excovation_Soil_Block_Data - 3-1_003_PC (W)



Table 18: Soil Block D9 3-3 Stockpiles 001-1 and 001-2 Sampling Results

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Ctarlanda Manifest IN.		•	
Stockplie manifest IU:	D9 3-3 001-1 & D9 3-3 001-2	D9 3-3 001-1	D9 3-3 001-2
Sample Type:	Composite	Composite	Composite
Block ID:	D9 3-3	D9 3-3	D9 3-3
Sample ID: (CGMN-ESC-D9303001A-0-100817	CGMN-ESC-D9303001A-0-100817 CGMN-ESC-D9303001D-0-100908 CGMN-ESC-D9303001E-0-100908	CGMN-ESC-D9303001E-0-100908
Laboratory ID:	10135995004	10137533006	10137533007
Sample Date & Time:	08/17/2010 16:26	09/08/2010 09:50	09/08/2010 11:33
ed Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	< 0.855		
PCB-1221 (Aroclor 1221)	< 0.855		
PCB-1232 (Aroclor 1232)	< 0.855		
PCB-1242 (Arocior 1242)	< 0.855		
Aroclor 1248)	< 0.855		
PCB-1254 (Aroclor 1254)	83.5		
PCB-1260 (Aroclor 1260)	8.59		
PCB-1262 (Aroclor 1262)	< 0.855		
PCB-1268 (Aroclor 1268)	< 0.855		
Total PCBs	92.1		
Volatile Organic Compounds, TCLP (mg/L, ppm)			
	See Note 2	< 0.050	< 0.050
Percent Moisture (%)			
Percent Moisture	61.6		

Table Notes:

Sample from the stockpile collected after conditioning the stockpile with Lime Kiln Dust (LKD) to reduce VOCs.

² This VOC TCLP result is from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results of samples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 3-3 001-1 & D9 3-3 001-2 (collected on 09/08/2010). --- = Sample not analyzed for this constituent.

Data Notes:

Data tabulated by R. McLoughlin of WESTON on 09/14/2010.

Data tabulation QA'd by J. Savage of WESTON on 09/15/2010. Analytical data provided in Pace Analytical Services data package #10135995 & #10137533.

ZA3m-oottage grove/D9_Construction/CCRMppendices/Appendix D (Sample Results)/CGMN_D9_Extravation_Soll_Btock_Data - 3-3_001_PC (W)



Table 19: Soil Block D9 3-3 Stockpiles 002-1 and 002-2 Sampling Results

Cottage Grove Site

	Stockpile 002	Stockpile 002-1 ¹	Stockpile 002-2 ⁶
Stockpile Manifest ID:	D9 3-3 002-1 & D9 3-3 002-2	D9 3-3 002-1	D9 3-3 002-2
Sample Type:	Composite	Composite	Composite
Block ID:	D9 3-3	D9 3-3	D9 3-3
Sample ID:	CGMN-ESC-D9303002A-0-100817	CGMN-ESC-D9303002A-0-100817 CGMN-ESC-D9303002D-0-100908 CGMN-ESC-D9303002E-0-100908	CGMN-ESC-D9303002E-0-100908
Laboratory ID:	10135995005	10137533008	10137533009
Sample Date & Time:	08/17/2010 16:30	09/08/2010 11:30	09/08/2010 11-28
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	< 0.697		
PCB-1221 (Aroclor 1221)	< 0.697		
PCB-1232 (Arocior 1232)	< 0.697		
PCB-1242 (Aroclor 1242)	< 0.697		
PCB-1248 (Arocior 1248)	< 0.697		
PCB-1254 (Arocior 1254)	40.8		
PCB-1260 (Araclar 1260)	4.35		
PCB-1262 (Aroclor 1262)	< 0.697		
PCB-1268 (Aroclor 1268)	< 0.697		
Total PCBs	45.2	4	
Volatile Organic Compounds, TCLP (mg/L, ppm)			
Benzene, TCLP	See Note 2	< 0.050	< 0.050
Percent Moisture (%)			
Percent Moisture	52.7		

Table Notes:

¹ Sample from the stockpile collected after conditioning the stockpile with Lime Kiln Dust (LKD) to reduce VOCs.

² This VOC TCLP result is from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results of samples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 3-3 002-1 & D9 3-3 002-2 (collected on 09/08/2010).

--- = Sample not analyzed for this constituent.

Data Notes:

Data tabulated by R. McLoughlin of WESTON on 09/14/2010. Data tabulation QA'd by J. Savage of WESTON on 09/15/2010. Analytical data provided in Pace Analytical Services data package #10135995 & #10137533.



Table 20: Soil Block D9 3-3 Stockpiles 004-1 and 004-2 Sampling Results

Cottage Grove Site

	Stockpile 004	Stockpile 004-1 ¹	Stockpile 004-2 ¹
Stockpile Manifest ID:	D9 3-3 004-1 & D9 3-3 004-2	D9 3-3 004-1	D9 3-3 004-2
Sample Type:	Composite	Composite	Composite
Block ID:	D9 3-3	D9 3-3	D9 3-3
Sample ID:	CGMN-ESC-D9303004A-0-100819 CGMN-ESC-D9303004D-0-100908 CGMN-FSC-D9303004E-0-100908	CGMN-ESC-D9303004D-0-100908	CGMN-FSC-D9303004E-0-100908
Laboratory ID:	10136152003	10137533010	10137533011
Sample Date & Time:	08/19/2010 11:42	09/08/2010 09:44	09/08/2010 09:38
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	< 0.793		
PCB-1221 (Aroclor 1221)	< 0.793		
PCB-1232 (Aroclor 1232)	< 0.793		
PCB-1242 (Arocior 1242)	< 0.793		
PCB-1248 (Arocior 1248)	< 0.793		
PCB-1254 (Aroclor 1254)	93.8		
PCB-1260 (Aroclor 1260)	9.16		
PCB-1262 (Aroclor 1262)	< 0.793		
PCB-1268 (Aroclor 1268)	< 0.793		
Total PCBs	103		
Volatile Organic Compounds, TCLP (mg/L, ppm)	(m		
Benzene, TCLP	See Note 2	< 0.050	< 0.050
Percent Moisture (%)			
Percent Moisture	58.4		

Fable Notes:

¹ Sample from the stockpile collected after conditioning the stockpile with Lime Kiln Dust (LKD) to reduce VOCs.

² This VOC TCLP result is from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results of samples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 3-3 004-1 & D9 3-3 004-2 (collected on 09/08/2010).

--- = Sample not analyzed for this constituent.

Data Notes:

Data tabulated by R. McLoughlin of WESTON on 09/14/2010. Data tabulation QA'd by J. Savage of WESTON on 09/15/2010.

Analytical data provided in Pace Analytical Services data package #10136152 & #10137533.



Table 21: Soil Block D9 3-3 Stockpiles 005-1 and 005-2 Sampling Results

Cottage Grove Site

	Stockpile 005	Stockpile 005-1 ¹	Stockpile 005-2 ¹
Stockpile Manifest ID:	D9 3-3 005-1 & D9 3-3 005-2	D9 3-3 005-1	DQ 3-3 005-9
Sample Type:	Composite	Composite	Z-000 C-0 C
Block ID:	D9 3-3	D0 3.3	
Sample ID:	CGMN-FSC-D9303005A-0-400840	CEMN ESC DO202020ED & 100000	0011100
	COMPTENDED COMPTENDED COMIN-ESC-D330300000 CGMN-ESC-D3303005E-0-100908	806001-0-0000000000-00-NIMEDO	CGMN-ESC-D9303005E-0-100908
	10136152004	10137533012	10137533013
Sample Date & Time:	08/19/2010 11:48	09/08/2010 11:25	09/08/2010 11:23
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	< 0.763		
PCB-1221 (Aroclor 1221)	< 0.763		
PCB-1232 (Aroclor 1232)	< 0.763		
PCB-1242 (Arocior 1242)	< 0.763		
PCB-1248 (Aroclor 1248)	< 0.763		
PCB-1254 (Aroclor 1254)	70.4		
PCB-1260 (Aroclor 1260)	6.87		
PCB-1262 (Arocior 1262)	< 0.763		
PCB-1268 (Aroclor 1268)	< 0.763		
Total PCBs	77.3		
Volatile Organic Compounds, TCLP (mg/L, ppm)	(1		
Benzene, TCLP	See Note 2	< 0.050	< 0.050
Percent Moisture (%)			
Percent Moisture	56.7		

Table Notes:

¹ Sample from the stockpile collected after conditioning the stockpile with Lime Kiln Dust (LKD) to reduce VOCs.

² This VOC TCLP result is from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results of samples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 3-3 005-1 & D9 3-3 005-2 (collected on 09/08/2010).

--- = Sample not analyzed for this constituent.

Data Notes:

Data tabulation QA'd by J. Savage of WESTON on 09/15/2010. Analytical data provided in Pace Analytical Services data package #10136152 & #10137533. Data tabulated by R. McLoughlin of WESTON on 09/14/2010.

Z13th-cottage grove/D9_Construction/CCRNAppendicles/Appendix D (Sample Results)/CGMN_D9_Excavation_S01_Block_Data - 3-3_005_PC (W)



Table 22: Soil Block D9 3-6 Stockpiles 001-1 and 001-2 Sampling Results Cottage Grove Site Cottage Grove Site

	Stockpile 001	Stockp	Stockpile 001-1 ¹	Stockpile 001-2 ¹
Stockpile Manifest ID:	D9 3-6 001-1 & D9 3-6 001-2	D9 3-6 001-1	D9 3-6 001-1	119 3.6 001-2
Sample Type:	Composite	Composite	Composite - Duplicate	Composite
Block ID:	D9 3-6	D9 3-6	D9 3-6	Dia 3.6
Sample ID:	CGMN-ESC-D9306001A-0-100817	CGMN-ESC-D9306001D-0-100908	CGMN-ESC-D9306001D-0-100908 CGMN-ESC-D9306001D-DB-100908 CGMN-ESC-D9306001E-0-100908	CGMN-FSC-D9306001E-0-100908
Laboratory ID:	10135995001	10137533014	10137533015	10137533016
Sample Date & Time:	08/17/2010 16:22	09/08/2010 09:32	09/08/2010 09:32	70-00 UNI/2010
Polychlorinated Biphenyls (mg/kg, ppm)				
PCB-1016 (Aroclor 1016)	< 0.629			
PCB-1221 (Arodor 1221)	< 0.629			
PCB-1232 (Aradior 1232)	< 0.629			
PCB-1242 (Aroclor 1242)	< 0.629			
PCB-1248 (Araclar 1248)	< 0.629			
PCB-1254 (Araclar 1254)	47.0			
PCB-1260 (Aructor 1260)	5.36			
PCB-1262 (Arador 1262)	< 0.629			
PCB-1268 (Aractor 1268)	< 0.629			
Total PCBs	52.4			
Volatile Organic Compounds, TCLP (mg/L, ppm)				
	See Note 2	< 0.050	< 0.050	< 0.050
Metals, TCLP (mg/L, ppm)				
Lead, TCLP	< 0.015			
Mercury, TCLP	< 0.0008			
Percent Moisture (%)				
Percent Moisture	47.6			7460

Table Notes: 'Sample from the stockpile collected after conditioning the stockpile with Lime Kiin Dust (LKD) to reduce VOCs. 'This VOC TCLP results from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results amples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 3-6 001-1 & D9 3-6 001-2 (collected on 09/08/2010). --- = Sample on tanalyzed for this constituent.

Data Notes: Data tabulated by R. McLoughlin of WESTON on 09/14/2010. Data tabulation QA'd by J. Savage of WESTDN on 09/15/2010. Analytical data provided in Pace Analytical Services data package #10135995 & #10137533.

2.0m cortage grove/D9_Construction/CCRVependiclesVepencix D (Sample Results)/CCRVIN_D9_Excesvation_S0IL_Block_Data - 36_001 PC (W)



Table 23: Soil Block D9 3-6 Stockpiles 002-1 and 002-2 Sampling Results

Cottage Grove Site

	Stockpile 002	Stockpile 002-1 ¹	Stockpile 002-2 ¹
Stockpile Manifest ID:	D9 3-6 002-1 & D9 3-6 002-2	D9 3-6 002-1	D9 3-6 002-2
Sample Type:	Composite	Composite	Composite
Block ID:	D9 3-6	D9 3-6	Dia 2.6
Sample ID:	CGMN-ESC-D9306002A-0-100817	CGMN-ESC-D9306002A-0-100817 CGMN-ESC-D9306002D-0-100908 CGMN-ESC-D9306007E-0-100808	CGMN-FSC-D9306007E-0-100908
Laboratory ID:	10135995002	10137533017	10137533018
Sample Date & Time:	08/17/2010 16:14	09/08/2010 09:23	09/08/2010 09:18
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	< 0.751		
PCB-1221 (Aroclor 1221)	< 0.751		
PCB-1232 (Aroclor 1232)	< 0.751		
PCB-1242 (Aroclor 1242)	< 0.751		
PCB-1248 (Aroclor 1248)	< 0.751		
PCB-1254 (Aroclor 1254)	166		
PCB-1260 (Aroclor 1260)	16.1		
PCB-1262 (Aroclor 1262)	< 0.751		
PCB-1268 (Aroclor 1268)	< 0.751		
Total PCBs	182		
Volatile Organic Compounds, TCLP (mg/L, ppm)			
Benzene, TCLP	See Note 2	< 0.050	< 0.050
Metals, TCLP (mg/L, ppm)			
Lead, TCLP	< 0.015		
Mercury, TCLP	< 0.0008		
Percent Moisture (%)			
Percent Moisture	56.2		

Table Notes:

¹ Sample from the stockpile collected after conditioning the stockpile with Lime Kiln Dust (LKD) to reduce VOCs.

² This VOC TCLP result is from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results of samples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 3-6 002-1 & D9 3-6 002-2 (collected on 09/08/2010). --- = Sample not analyzed for this constituent.

Data Notes:

Data tabulated by R. McLoughlin of WESTON on 09/14/2010. Data tabulation QA'd by J. Savage of WESTON on 09/15/2010. Analytical data provided in Pace Analytical Services data package #10135995 & #10137533.

2:0m-cottage groveID9_ConstructionICCRN4ppendiciesN4ppendix D (Sample Results)ICGMN_D9_Excavation_Soil_Block_Data - 3-6_002 PC (W)



Table 24: Soil Block D9 3-6 Stockpiles 003-1 and 003-2 Sampling Results

Site	
rove	
age G	
Cot	

	Stockpile 003	Stockpile 003-1 ¹	Stocknile 003-2 ⁶
Stockpile Manifest ID:	D9 3-6 003-1 & D9 3-6 003-2	D9 3-6 003-1	D9 3-6 003-2
Sample Type:	Composite	Composite	Composite
Block ID:	D9 3-6	D9 3-6	D9.3-6
Sample ID:	CGMN-ESC-D9306003A-0-100817	CGMN-ESC-D9306003A-0-100817 CGMN-ESC-D9306003D-0-100908 CGMN-ESC-D9306003A-0-100817	CGMN-ESC-D9306003E-0-100908
Laboratory ID:	10135995003	10137533019	10137533020
Sample Date & Time:	08/17/2010 16:15	09/08/2010 09:12	09/08/2010 09:07
Polychlorinated Biphenyls (mg/kg, ppm)			
PCB-1016 (Aroclor 1016)	< 0.835		
PCB-1221 (Arocior 1221)	< 0.835		
PCB-1232 (Araclor 1232)	< 0.835		
PCB-1242 (Arocior 1242)	< 0.835		
PCB-1248 (Araclar 1248)	< 0.835		
PCB-1254 (Araciar 1254)	60.5		
PCB-1260 (Aroclor 1260)	6.98		
PCB-1262 (Araclar 1262)	< 0.835		
PCB-1268 (Araciar 1268)	< 0.835		
Total PCBs	67.5		
Volatile Organic Compounds, TCLP (mg/L, ppm)			
Benzene, TCLP	See Note 2	< 0.050	< 0.050
Metals, TCLP (mg/L, ppm)			
Lead, TCLP	< 0.015		
Mercury, TCLP	< 0.0008		
Percent Moisture (%)			
Percent Moisture	60.5		

Table Notes:

¹ Sample from the stockpile collected after conditioning the stockpile with Lime Kiln Dust (LKD) to reduce VOCs.

² This VOC TCLP result is from a sample collected prior to conditioning the stockpiles to reduce VOCs. It has been superseded by the VOC TCLP results of samples collected after conditioning the stockpiles to reduce VOCs. See results for Stockpiles D9 3-6 003-1 & D9 3-6 003-2 (collected on 09/08/2010).

--- = Sample not analyzed for this constituent.

Data Notes:

Data tabulated by R. McLoughlin of WESTON on 09/14/2010. Data tabulation QA'd by J. Savage of WESTON on 09/15/2010.

Analytical data provided in Pace Analytical Services data package #10135995 & #10137533.

213m-cottage grove\D9_Construction\CCRVAppendicies\Appendix D (Sample Results)\CGMN_D9_Excavation_Soil_Block_Data - 3-5_003 PC (W)

BACKFILL SAMPLING RESULTS

	Z
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Table 1: SKB Clean Fill Soils Analytical Data July 2009

Sample ID:	OKMN-SS-SKB01-0-090723	OKMN-SS-SKEN2-0-000723	OKMN SS SKBA3 0 000722		
Laboratroy ID:	1099973001	1099973002	100073003	UNMIN-55-5KHU3-UB-U90/23	UKMN-SS-SKB04-0-090723
Sample Date:	23-Jul-09	23-Jul-09	23-10-09	72 1-1 00	10999/3005
Volatile Organic Compounds (mg/kg, ppm)	ng/kg, ppm)			60-100-07	50-1N-52
1,1-Dichloroethene	< 0.202	< 0.205	C 0.206		
1,2-Dichloroethane	< 0.202	< 0.205	800 0 2	907.0 \$	< 0.21
1,4-Dichlorobenzene	< 0.202	< 0.205	0.0 0 V	907.0 \	< 0.21
2-Butanone (MEK)	< 0.505	< 0.513	0.544	0.200	< 0.21
Benzene	< 0.0505	< 0.0513	< 0.0544	410.0 2	< 0.525
Carbon tetrachloride	< 0.202	< 0.005	5000 V	4100.0 ×	< 0.0525
Chlorobenzene	202 U >	202.0	007.0 2	< 0.206	< 0.21
Tetrachloroethene		202.0 <	< 0.206	< 0.206	< 0.21
Trichloroethene	202.0 ×	< 0.205	< 0.206	< 0.206	< 0.21
Vind chorido	20.202	< 0.205	< 0.206	< 0.206	< 0.21
Virilyi Gritoride	< 0.0505	< 0.0513	< 0.0514	< 0.0514	< 0.0525
Polychlorinated Biphenyls (PCBs) (mg/kg, ppm	Bs) (mg/kg, ppm)				02000
PCB-1016 (Araclar 1016)	< 0.034	< 0.0339	< 0.0339	< 0.0339	< 0.0346
PCB-1221 (Aroclor 1221)	< 0.034	< 0.0339	< 0.0339	0.000	0460.0 /
PCB-1232 (Aroclor 1232)	< 0.034	< 0.0339	< 0.0330	00000	0.0340
PCB-1242 (Arocior 1242)	< 0.034	< 0.0330		8000.0 ×	< U.U346
PCB-1248 (Arocior 1248)	1750 U >	00000	00000	0.033	< 0.0346
PCR-1254 (Anncier 1254)		6000.0 /	> U.0338	< 0.0339	< 0.0346
DCB. 1760 (Aroclor 1760)		COUCH 2 10000 C 100000 C 1000000 C 100000 C 10000000 C 10000000 C 1000000 C 1000000 C 100000000	< 0.0339	< 0.0339	< 0.0346
	< U.U34	< 0.0339	< 0.0339	< 0.0339	< 0.0346
PUB-1262 (Arocior 1262)	< 0.034	< 0.0339	< 0.0339	< 0.0339	< 0.0346
PUB-1268 (Arocior 1268)	< 0.034	< 0.0339	< 0.0339	< 0.0339	< 0.0346
Pesticides and Herbicides (mg/kg, ppm)					
1,4-Dichlarobenzene	< 0.34	< 0.339	< 0.339	< 0.339	< 0.346
2,4,5-Trichlorophenol	< 1.75	< 1.74	< 1.75	< 1 75	< 1 78
2,4,6-Trichlorophenol	< 0.34	< 0.339	< 0.339	< 0.339	2.0 246
2,4-Dinitrotoluene	< 0.34	< 0.339	< 0.339	0.330	20.010
2-Methylphenol(o-Cresol)	< 0.34	< 0.339	< 0.330	0.230	
3&4-Methylphenol	< 0.68	< 0.677	A 0 678	0.000	040.0 <
Hexachloro-1 3-hutadiene	VE U >	 0.230 2.0.230 		0.10.0 <	280.0 >
Hexachlorohenzene		800 D /	0.038	 0.339 	< 0.346
Heverhinnoethane		800.0 V	 0.339 0.000 	< 0.339	< 0.346
Nitrohanzana		0.000	0.3390.000	< 0.339	< 0.346
Pentachloronhenol		C.339	C.339	< 0.339	< 0.346
Dividing		4/.1 <	IC/.1 >	< 1./5	< 1.78
Matale (mailer nom)	071 ~	< 1.74 <	c/.1 >	< 1.75	< 1.78
Arconio	2 5				
	0.0	0.5	3.3	2.9	2.3
Darrum	14.5	13.4	13.2	10.2	14.2
Cadmium	0.061	0.051	0.22	< 0.041	< 0.046
Chromium	6.7	4.9	6.5	4.0	3.5
Lead	2.0	1.8	2.0	1.5	1.8
Selenium	< 0.72	< 0.65	< 0.64	< 0.61	< 0.68
Silver	< 0.48	< 0.43	< 0.43	< 0.41	< 0.46
Mercury	< 0.021	< 0.018	< 0.018	< 0.02	< 0.019
Percent Moisture (%)					
Percent Moisture	2.9	2.5	2.7	2.7	4.7
		-			

Z:13M-Woodbury/Construction_MDA/Imported MaterianSKB_Soils_Data_Jul09_(FINAL)

3M_MN00717028

2318.0157



Table 2:SKB Topsoil Analytical DataSeptember 2009

Sample ID:	WBMN-ESC-SKB001A 0 090914	WBMN-ESC-SKB002A 0 090914
Laboratory ID:	10112422001	10112422002
Sample Date & Time:	09/14/2009 16:05	09/14/2009 16:40
Volatile Organic Compounds (mg/k	g, ppm)	
1,1-Dichloroethene	< 0.0395	< 0.0427
1,2-Dichloroethane	< 0.0395	< 0.0427
1,4-Dichlorobenzene	< 0.0395	< 0.0427
2-Butanone (MEK)	< 0.197	< 0.213
Benzene	< 0.0395	< 0.0427
Carbon tetrachloride	< 0.0395	< 0.0427
Chlorobenzene	< 0.0395	< 0.0427
Tetrachloroethene	< 0.0395	< 0.0427
Trichloroethene	< 0.0395	< 0.0427
Vinyl chloride	< 0.0395	< 0.0427
Polychlorinated Biphenyls (PCBs) (mg/kg, ppm)	
PCB-1016 (Aroclor 1016)	< 0.211	< 0.207
PCB-1221 (Aroclor 1221)	< 0.211	< 0.207
PCB-1232 (Aroclor 1232)	< 0.211	< 0.207
PCB-1242 (Aroclor 1242)	< 0.211	< 0.207
PCB-1248 (Aroclor 1248)	< 0.211	< 0.207
PCB-1254 (Aroclor 1254)	< 0.211	< 0.207
PCB-1260 (Aroclor 1260)	< 0.211	< 0.207
PCB-1262 (Aroclor 1262)	< 0.211	< 0.207
PCB-1268 (Aroclor 1268)	< 0.211	< 0.207
Total PCBs	< 0.211	< 0.207
Pesticides and Herbicides (mg/kg, p	opm)	
Chlordane (Technical)	< 0.0355	< 0.0348
Endrin	< 0.0036	< 0.0035
gamma-BHC (Lindane)	< 0.0018	< 0.0017
Heptachlor	< 0.0018	< 0.0017
Methoxychlor	< 0.0178	< 0.0174
Toxaphene	< 0.107	< 0.104
Metals (mg/kg, ppm)		
Arsenic	5.0	5.7
Barium	67.5	77.8
Cadmium	0.79	0.97
Chromium	12.3	11.5
Lead	9.9	10.5
Selenium	2.5	2.7
Silver	< 0.49	< 0.42
Mercury	0.022	0.036
Percent Moisture (%)		
Percent Moisture	6.2	4.3

Z\3M-Woodbury\Construction_MDA\Imported Material\SK8_Soils_Data_Oct10_(FINAL)

PAINT FILTER TEST SAMPLING RESULTS



D9 Area Excavation Paint Filter Free Liquids Test and pH Results Cottage Grove Site

Sample ID	Sample Date	Sample Time	Sample No.	LKD Added (Y/N)	Paint Filter Free Liquids (mL/5 min)	рH
		oil Block: D9				
CGMN-ESC-D9101PF1A-0-100701	01-Jul-10	9:49	1A	N	ND	7.7
		oil Block: D9				
CGMN-ESC-D9102PF1A-0-100701	01-Jul-10	9:46	1A	N	ND	7.4
CGMN-ESC-D9103PF1A-0-100701	01-Jul-10	10:05	1-3 1A	N	ND	8.4
CGMIN-ESC-D3103F11A-0-100701		Soil Block: D9			ND	0.4
CGMN-ESC-D9104PF1A-0-100701	01-Jul-10	9:42	1A	N	ND	7.4
		ioil Block: D9				
CGMN-ESC-D9105PF1A-0-100701	01-Jul-10	10:12	1 A	N	ND .	7.6
· · · · · · · · · · · · · · · · · · ·	S	ioil Block: D9	1-6			
CGMN-ESC-D9106PF1A-0-100701	01-Jul-10	10:08	1A	N	ND	7.4
		oil Block: D9				
CGMN-ESC-D9107PF1A-0-100701	01-Jul-10	10:15	· 1 A	Ν	ND	7.2
00101 500 501005514 0 100701		oil Block: D9		N	ND	
CGMN-ESC-D9108PF1A-0-100701	01-Jul-10	9:51	1A	N	ND	7.4
CGMN-ESC-D9109PF1A-0-100701	01-Jul-10	oil Block: D9 ' 9:59	1A	N	ND	7.0
		oil Block: D9 1				7.0
CGMN-ESC-D9110PF1A-0-100701	01-Jul-10	10:18	1A	N	ND	6.5
CGMN-ESC-D9110PF1A-DB-100701	01-Jul-10	10:18	1A (DB)	N	ND	6.8
	S	oil Block: D9	2-1			
CGMN-ESC-D9201PF1A-0-100721	21-Jul-10	8:35	1A	N	ND	8.0
		oil Block: D9				
CGMN-ESC-D9202PF1A-0-100721	21-Jul-10	8:40	1A	N	ND	7.2
CGMN-ESC-D9203PF1A-0-100721		oil Block: D9 2 8:45	2-3 1A	N	ND	
CGMIN-ESC-D9203PFTA-0-100721	21-Jul-10	oil Block: D9 2		N	ND	8.0
CGMN-ESC-D9204PF1A-0-100721	21-Jul-10	8:48	<u>-4</u> 1A	N	ND	8.0
		oil Block: D9 2				0.0
CGMN-ESC-D9205PF1A-0-100721	21-Jul-10	8:52	1A]	N	ND	7.4
CGMN-ESC-D9205PF1A-DB-100721	21-Jul-10	8:52	1A (DB)	N	ND	7.4
	S	oil Block: D9 2	2-6			
CGMN-ESC-D9206PF1A-0-100721	21-Jul-10	8:56	1A	N	ND	8.0
		oil Block: D9 2		·		
CGMN-ESC-D9207PF1A-0-100721	21-Jul-10	9:00	1A	N	ND	7.1
CGMN-ESC-D9208PF1A-0-100721	21-Jul-10	oil Block: D9 2 9:04	2-8 1A	N		
CGM/N-E3C-D9200FF1A-0-100721		9:04 oil Block: D9 2		IN	ND	7.6
CGMN-ESC-D9209PF1A-0-100721	21-Jui-10	9:09	1A	N	ND	6.9
		oil Block: D9 3				0.5
CGMN-ESC-D9301PF1A-0-100805	05-Aug-10	11:36	1A	N	ND	6.9
.		oil Block: D9 3	1.2			
		UII DIUGK. D9 C	-2			

2318.0160



D9 Area Excavation Paint Filter Free Liquids Test and pH Results Cottage Grove Site

Sample ID	Sample Date	Sample Time	Sample No.	LKD Added (Y/N)	Paint Filter Free Liquids (mL/5 min)	р Н				
	S	ioil Block: D9	3-3							
CGMN-ESC-D9303PF1A-0-100805	05-Aug-10	11:15	1A	N	ND	6.7				
CGMN-ESC-D9303PF1A-DB-100805	05-Aug-10	11:15	1A (DB)	N	ND	6.8				
Soil Block: D9 3-4										
CGMN-ESC-D9304PF1A-0-100805	05-Aug-10	11:31	1A	N	ND	7.2				
	S	oil Block: D9	3-5							
CGMN-ESC-D9305PF1A-0-100805	05-Aug-10	11:18	· 1A	N	ND	7.8				
	s	ioil Block: D9	3-6							
CGMN-ESC-D9306PF1A-0-100805	05-Aug-10	11:27	1A	N	ND	7.6				
	s	oll Block: D9	3-7							
CGMN-ESC-D9307PF1A-0-100805	05-Aug-10	11:24	1A	N	ND	6.7				

Notes:

"A" samples collected prior to addition of Lime Kiln Dust to soils. "B" samples collected after the addition of Lime Kiln Dust to soils.

ND = Not detected at or above the reporting limit (RL) of 1 mL.

LKD = Lime Kiln Dust.

DB = Field duplicate sample.

3M_MN00717032

Appendix E

F

3M_MN00717033

APPENDIX E CONSTRUCTION DOCUMENTATION

APPENDIX E-1 LANDFILL LOAD ACCEPTANCE SUMMARIES



Approval: F104077WDI Receipt Status: All Trans Mode (Inbound/Outbound): Both Bulk Mode (Bulk/Non-Bulk): Both



Wayne Disposal, Inc. 1 Wayne Disposal, Inc.

Manifest/BOL / Customer Receipt ID Comminuted	Generator	Approval / Product	-		Fpr. Status /	
noifiiliinino		TSDF Approval	Code Bill Unit	Quantity Rec.Status	Outbound	Date
		F104077WDI	PCB1 TONS	23.77 Accepted	Accepted	8/24/2010
1188624-1 007755455JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.14 Accepted	Accented	8/25/2010
1188629-1 007755452JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS		Accepted	8/25/2010
1188656-1 007755454JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.60 Accepted	Accepted	8/26/2010
1188657-1 007755451JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.49 Accepted	Accepted	8/26/2010
		F104077WDI	PCB1 TONS	23.67 Accepted	Accepted	8/26/2010
1188662-1 007755453JJK 3260	_	F104077WDI	PCB1 TONS	23.50 Accepted	Accepted	8/26/2010
1188753-1 007755457JJK 3260	I MND006172969	F104077WDI	PCB1 TONS	23.28 Accepted	Accepted	8/30/2010
		F104077WDI	PCB1 TONS	20.90 Accepted	Accepted	9/2/2010
		F104077WDI	PCB1 TONS	22.59 Accepted	Accepted	9/2/2010
		F104077WDI	PCB1 TONS	22.28 Accepted	Accepted	9/2/2010
	MND006172969	F104077WDI	PCB1 TONS	22.55 Accepted	Accepted	9/3/2010
	MND006172969	F104077WDI	PCB1 TONS	22.76 Accepted	Accepted	9/3/2010
1188975-1 007755465JJK 3260	MND006172969	F104077WDI	PCB1 TONS	22.41 Accepted	Accepted	9/7/2010
1189033-1 007755462JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.52 Accepted	Accepted	9/7/2010
1189116-1 007755469JJK 3260		F104077WDI	PCB1 TONS	24.20 Accepted	Accepted	9/9/2010
	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	21.42 Accepted	Accepted	9/9/2010
	MND006172969	F104077WDI	PCB1 TONS	23.37 Accepted	Accepted	9/9/2010
		F104077WDI	PCB1 TONS	22.62 Accepted	Accepted	9/9/2010
		F104077WDI	PCB1 TONS	23.39 Accepted	Accepted	9/13/2010
	MND006172969	F104077WDI	PCB1 TONS	22.30 Accepted	Accepted	9/13/2010
	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.56 Accepted	Accepted	9/22/2010
1189688-1 007755476JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.02 Accepted	Accepted	9/22/2010
1189727-1 007755478JJK 3260		F104077WDI	PCB1 TONS	23.30 Accepted	Accepted	9/23/2010
1189752-1 007755480JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.26 Accepted	Accepted	9/23/2010
1189754-1 007755477JJK 3260	MND006172969	F104077WDI	PCB1 TONS	22.23 Accepted	Accepted	9/23/2010
1189791-1 007755481JJK 3260	MND006172969	F104077WDI	PCB1 TONS	23.19 Accepted	Accepted	9/24/2010
1189811-1 007755474JJK 3260		F104077WDI	PCB1 TONS	23.51 Accepted	Accepted	9/24/2010
1189854-1 007755484JJK 3260		F104077WDI	PCB1 TONS	22.63 Accepted	Accepted	9/27/2010
	MND006172969	F104077WDI	PCB1 TONS	22.34 Accepted	Accepted	9/27/2010
	MND006172969	F104077WDI	PCB1 TONS	22.93 Accepted	Accepted	9/27/2010
11898/0-1 00//55483JJK 3260	MND006172969	F104077WDI	PCB1 TONS	23.34 Accepted	Accepted	9/27/2010
1189901-1 007755486JJK 3260	MND006172969	F104077WDI	PCB1 TONS	24.10 Accepted	Accepted	9/28/2010
1189940-1 00//554/3JJK 3260	MND006172969	F104077WDI		23.69 Accepted	Accepted	9/28/2010
1130010-1 000/030432300 3200	3M - COLLAGE GROVI MINDUUG1/2969 3M COLLAGE GROVE	F104077WDI	PCB1 TONS	23.34 Accepted	Accepted	9/29/2010
10/13/2010	Page 1 of 2					3:45 PM

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Approval: F104077WDI Receipt Status: All Trans Mode (Inbound/Outbound): Both Bulk Mode (BulkNon-Bulk): Both

Receipt List

1 Wayne Disposal, Inc. Wayne Disposal, Inc.

Manifest/BOL / Customer	r Generator	Approval / Product	Waste		Fpr. Status /	
Receipt ID Commingled	Waste Stream	TSDF Approval	Code Bill Unit	Quantity Rec.Status	Outbound	Date
1190041-1 007755488JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.74 Accepted	Accepted	9/29/2010
1190042-1 007755489JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	21.92 Accepted	Accepted	9/29/2010
1190043-1 007755482JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.49 Accepted	Accepted	9/29/2010
1190102-1 007755490JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.88 Accepted	Accepted	9/30/2010
1190131-1 007755496JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.63 Accepted	Accepted	9/30/2010
1190134-1 007755498JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.52 Accepted	Accepted	9/30/2010
1190144-1 007755494JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDi	PCB1 TONS	23.47 Accepted	Accepted	9/30/2010
1190146-1 007755475JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.09 Accepted	Accepted	9/30/2010
1190359-1 007796734JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	24.47 Accepted	Accepted	10/4/2010
1190401-1 007755500JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.89 Accepted	Accepted	10/4/2010
1190404-1 007755497JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.24 Accepted	Accepted	10/4/2010
1190405-1 007755495JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.41 Accepted	Accepted	10/4/2010
1190488-1 007796731JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	21.82 Accepted	Accepted	10/5/2010
1190653-1 007755491JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.23 Accepted	Accepted	10/7/2010
1190660-1 007755493JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDi	PCB1 TONS	23.56 Accepted	Accepted	10/7/2010
1190667-1 007755499JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.06 Accepted	Accepted	10/7/2010
1190792-1 007796730JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.78 Accepted	Accepted	10/11/2010
1190794-1 007796733JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.59 Accepted	Accepted	10/11/2010
1190795-1 007796732JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	22.87 Accepted	Accepted	10/11/2010
1190803-1 007755487JJK 3260	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	F104077WDI	PCB1 TONS	23.40 Accepted	Accepted	10/11/2010
	Total q	Total quantity for bill unit TONS:	NS:	1,262.88		

10/13/2010

Page 2 of 2

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Approval: F104077WDI Receipt Date: 10/13/10 Receipt Status: All Trans Mode (Inbound/Outbound): Both Bulk Mode (Bulk/Non-Bulk): Both



Wayne Disposal, Inc. 1 Wayne Disposal, Inc.

	Date	10/13/2010	10/13/2010	
Fpr. Status /	Outbound	Accented	Accepted	
	Rec.Status	Accepted	21.79 Accepted	
	Quantity	22.47	21.79	44.26
t Waste	Code Bill Unit Quantity Rec.Status Outbound	PCB1 TONS 22.47 Accepted Accepted	PCB1 TONS	ONS:
Approval / Product	ISDF Approval	F104077WDI	F104077WDI	Fotal quantity for bill unit TONS:
Generator	Waste Stream	3M - COTTAGE GROVI MND006172969 3M COTTAGE GROVE	3M - Cottage Grovi Mnd006172969 3M Cottage Grove	Total
Manifest/BOL / Customer	Receipt ID Commingled		1190964-1 007796728JJK 3260	

10/15/2010

SKB LOAD ACCEPTANCE SUMMARIES

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE):

Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 07/08/2010 to 07/08/2010 Tuesday, July 20, 2010



3M Company Innovation Rd & Rt 61

3MC35

Cottage Grove MN 55016

	MANIFEST	ARRIVED	WASTE STREAM	I WASTE NAME	CELL	SPOT.	LIFT	TON
16366 (A)	739700	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y3	855	23.4
16367 (A)	739701	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	855	23.4.
16369 (A)	739702	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y3	855	24.2
16371 (A)	739703	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z3	855	27.76
1637 8 (A)	739704	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z3	855	24.62
163 83 (A)	739705	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z3	855	24.36
16391 (A)	739706	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y4	855	24.30
16392 (A)	739707	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y4	855	20.40
16404 (A)	739708	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y4	855	23.59
16405 (A)	739709	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z4	855	23.59
1642 3 (A)	739710	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	855	24.33
16427 (A)	739711	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z4	855	23.43
16430 (A)	739712	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	¥5	855	23.43
16434 (A)	739713	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	¥5	855	24.94
16443 (A)	739714	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	¥5	855	21.85
16444 (A)	739715	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z5	855	21.65
16455 (A)	739716	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z5	855	24.66
16457 (A)	739717	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z5	855	23.68
16459 (A)	739718	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y6	855	23.08
16468 (A)	739719	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y6	855	24.07
16476 (A)	7 397 20	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y6	855	24.53
16485 (A)	739721	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z6	855	24.33
6486 (A)	739722	7/8/2010	MI10-0093	Cottage Grove Soll - D9 Area	ЗМ	Z6	855	25.04
6492 (A)	739723	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z6	855	26.72
6502 (A)	739724	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	855	23.98
6507 (A)	739725	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z3	855	23.98
6515 (A)	739726	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	855	26.31
6517 (A)	739727	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3 ·	855	23.77
6522 (A)	739728	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	855	24.43
6528 (A)	739729	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	855	24.45
6530 (A)	739730	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	855	25.53
6544 (A)	739731	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	855	25.53 25.01
65 50 (A)	739732	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y5	855	28.01
6556 (A)	739733	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y5	855	22.19
6559 (A)	739734	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z5	855	22.17
6564 (A)	739735	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z5	855	23.12
5571 (A)	739736	7/8/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	¥6	855	23.87
				Total # of Loads: 37			000	∠0,58

Grand Total (Tons): 890.15 Grand Total (Loads): 37

Page 1 of 1

ROSEMOUNT INDUSTRIAL

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 07/12/2010 to 07/12/2010 Tuesday, July 20, 2010

3MC35

3M Company Innovation Rd & Rt 61

Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME				
16915 (A)	739738	7/12/2010			CELL	SPOT.	LIFT	TONS
16918 (A)	739739	7/12/2010		Cottage Grove Soil - D9 Area	ЗМ	Y3	855	23.46
16920 (A)		7/12/2010		Cottage Grove Soil - D9 Area	ЗМ	Y3	855	24.55
16926 (A)		7/12/2010		Cottage Grove Soil - D9 Area	ЗM	Y3	855	21.60
16928 (A)		7/12/2010		Cottage Grove Soil - D9 Area	3M	Y3	855	25.61
16930 (A)		7/12/2010		Cottage Grove Soil - D9 Area	3M	Y3	855	22.81
16931 (A)		7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	855	22.59
16936 (A)	739746	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	855	21.12
16940 (A)	739747	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z3	855	24.51
16943 (A)	739743	7/12/2010	MI10-0093	Cottage Grove Soll - D9 Area	ЗМ	Z3	855	23.05
16964 (A)	739748	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z3	855	21.69
16977 (A)	739749	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	855	24.42
16979 (A)	739750	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y4	855	25.03
16982 (A)	739751	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	855	21.17
16985 (A)	739752	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	855	25.31
16986 (A)	739753	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	855	23.59
16989 (A)	739754	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	3 M	Z4	855	23.15
16992 (A)	739755	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	3 M	Z4	855	24.88
16997 (A)	739756	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	3 M	Z4	855	22.62
16998 (A)	739757	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	855	26.02
17011 (A)	739758	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	855	23.38
17024 (A)	739759	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y5	855	24.13
17029 (A)	739760	7/12/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y5	855	25.59
17035 (A)	739761	7/12/2010		Cottage Grove Soil - D9 Area	ЗM	Y5	855	23.73
17037 (A)	739762	7/12/2010		Cottage Grove Soil - D9 Area	ЗМ	Y5	855	24.57
17043 (A)	739763	7/12/2010		Cottage Grove Soil - D9 Area	ЗМ	Y5	855	23.83
17046 (A)	739764	7/12/2010		Cottage Grove Soil - D9 Area	ЗМ	Z5	855	22.80
17051 (A)	739765			Cottage Grove Soil - D9 Area	ЗМ	Z5	855	25.34
17056 (A)	739766			Cottage Grove Soil - D9 Area	ЗМ	Z5	855	23.68
17058 (A)	739767			Cottage Grove Soil - D9 Area	ЗМ	Z5	855	23.32
17064 (A)	739768			Cottage Grove Soil - D9 Area	ЗМ	Z5	855	22.36
17082 (A)	739769			Cottage Grove Soil - D9 Area	зм	Y6	855	24.58
17088 (A)	739770			Cottage Grove Soil - D9 Area	3M	Y6	855	23.79
17092 (A)	739771			Cottage Grove Soil - D9 Area	зм	Y6	855	23.64
17096 (A)	739772			Cottage Grove Soil - D9 Area	3M	Y6	855	24.85
17104 (A)	739773	-		Cottage Grove Soil - D9 Area	ЗМ	Z6	855	21.26
17106 (A)	739774			Cottage Grove Soil - D9 Area	зм	Z6	855	23.83
		112/2010	MI10-0093 C	Cottage Grove Soil - D9 Area	ЗM	Z6	855	21.46
			~					

Total # of Loads: 37

Total Tons: 873.32

Grand Total (Tons): Grand Total (Loads):

873.32 37



Page 1 of 1

3M_MN00717042

2318.0171

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE):

Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 07/14/2010 to 07/14/2010 Tuesday, July 20, 2010

3MC35

3M Company Innovation Rd & Rt 61 Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	¥ 11-4-	
17366 (A)	739776	7/14/2010		Cottage Grove Soil - D9 Area	3M	 Y3	LIFT	TON
173 68 (A)	739777	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3 Y3	855	24.8
17371 (A)	739778	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	855	26.3
17 3 73 (A)	739779	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M		855	23.9
17375(A)	739780	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3 Z3	855	22.8
17376 (A)	739781	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	23 23	855	24.2
17379 (A)	739782	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	23 Z3	855	24.6
17384 (A)	7 397 83	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M 3M		855	22.90
1 7387 (A)	739784	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	855	22.72
17392 (A)	739785	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4 Y4	855	25.63
17404 (A)	739786	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M		855	21,74
17406 (A)	739787	7/14/2010	MI10-0093	Cottage Grove Soll - D9 Area	3M 3M	Y4	855	24.26
17407 (A)	739788	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M 3M	Y4	855	22.59
17409 (A)	739789	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	855	24.23
17418 (A)	739791	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area		Z4	855	25.13
17420 (A)	739790	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	855	25.17
17425 (A)	7397 9 2	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	855	27.61
17428 (A)	739793	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y5	855	26.18
17431 (A)	739795	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y5	855	25.09
17432 (A)	739794	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y5	855	21.93
17443 (A)	739796	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y5	855	25.9 9
7445 (A)	73 9797	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z5	855	21.5 9
7447 (A)	739798	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z5	855	23.01
7449 (A)	739799	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z5	855	24.48
7459 (A)	739800	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z5	855	23.71
7463 (A)	739801	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y6	855	21.73
7465 (A)	739802	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y6	855	25.77
7467 (A)	739803	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y6	85 5	24.60
7468 (A)	739804	7/14/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y6	855	23.31
7472 (A)	739805	7/14/2010	MI10-0093	Cottage Grove Soll - D9 Area	3M	Z6	855	23.95
7474 (A)	739806		MI10-0093	Cottage Grove Soil - D9 Area	3M	Z6	855	24.27
7475 (A)	739807		MI10-0093	Cottage Grove Soil - D9 Area	3M	Z6	855	24.11
7481 (A)	739808			Cottage Grove Soil - D9 Area	3M	Z6	855	24.60
7482 (A)	739809			Cottage Grove Soil - D9 Area	ЗM	Z6	855	25.65
	739810			Cottage Grove Soil - D9 Area	ЗM	Z3	855	24.51
'497 (A)	739811			Cottage Grove Soil - D9 Area	ЗM	Y6	855	22.22
					3M	Y3	855	22.43
				Total # of Loads: 36		T-+-	l Tons:	867.97

Grand Total (Tons): 867.97 Grand Total (Loads): 36

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SHIB ROSEMOUNT INDUSTRIAL

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 07/19/2010 to 07/19/2010 Tuesday, July 20, 2010

3MC35

3M Company Innovation Rd & Rt 61 Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	1 WASTE NAME	CELL	SPOT.	LIFT	TONO
17838 (A)	739813	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X4	855	
17852 (A)	739816	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y4	855	
17854 (A)	739814	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y4	855	23.65
17860 (A)	739817	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z4	855	23.30
17866 (A)	739818	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	W3	855	24.90
17869 (A)	739819	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W3	855	21.45
17870 (A)	739820	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	W3	855	26.00
17872 (A)	739815	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	W3	855	24.95
17888 (A)	73 9821	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W3	855	27.36
17905 (A)	739822	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X3		23.84
17908 (A)	739823	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X3	855	23.77
17915 (A)	739824	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X3	855	23.66
17928 (A)	739825	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X3	855	24.69
17936 (A)	739826	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X3	855	23.28
17938 (A)	739 827	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W4	855	24.65
17943 (A)	739828	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W4	855	24.34
17960 (A)	739829	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W4	855	24.21
17971 (A)	739830	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W4	855	24.78
17974 (A)	739831	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W4	855	25.94
17985 (A)	739832	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X4	855	23.88
17990 (A)	739833	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M 3M	×4 X4	855	26.07
17998 (A)	739834	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	×4 X4	855	25.37
(A) 8006	739835	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X4 X4	855	25.41
8013 (A)	739836	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	×4 X4	855	24.72
8017 (A)	739837	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	~4 W5	855	21.45
8028 (A)	739838	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W5 W5	855	21.13
8035 (A)	739839	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W5	855	23.83
8036 (A)	739840	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M		855	21.17
8040 (A)	739841	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M 3M	W5	855	22.39
8047 (A)	739842	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W5	855	24.21
8056 (A)	739843	7/19/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X5 X5	855	23.92
8060 (A)	739844		MI10-0093	Cottage Grove Soil - D9 Area		X5	855	23.46
8071 (A)	739845		MI10-0093	Cottage Grove Soil - D9 Area	ЗМ ЗМ	X5	855	23.11
8077 (A)	739846			Cottage Grove Soil - D9 Area	3M 3M	X5	855	22.53
						X5	855	23.67
				Total # of Loads: 34		Tote	Tone	013 14

Total # of Loads: 34

Total Tons: 812.17

Grand Total (Tons): 812.17 Grand Total (Loads): 34

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2318.0173

ROSEMOUNT INDUSTRIAL

REPORTNAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 07/27/2010 to 07/27/2010 Thursday, July 29, 2010

3MC35

3M Company Innovation Rd & Rt 61 Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	
19370 (A)		7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W3	855	TONS
19375 (A)		7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W3	855	22.86
19378 (A)	739848	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W3 W3	855	23.99
19381 (A)		7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W3 W3		22.58
19386 (A)	739851	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X3	855	20.12
19390 (A)	739852	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area			855	22.24
19394 (A)	739853	7/27/2010	MI10-0093	-	3M	X3	855	23.63
19397 (A)	739854	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X3	855	22.11
19430 (A)	739855	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X3	855	23.40
19432 (A)	739856	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W4	855	23.76
19443 (A)	739857	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W4	855	22.59
19446 (A)	739858	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	W4	855	24.30
• •	739859			Cottage Grove Soil - D9 Area	ЗM	W4	855	22.54
19455 (A)		7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X4	855	25.85
19456 (A)	739860	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X4	855	24.30
19457 (A)	739861	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X4	855	24.34
19458 (A)	739862	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M ·	X4	855	24.40
19481 (A)	739863	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	W5	855	24.01
19486 (A)	739864	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	W5	855	25.05
19499 (A)	739865	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	W5	855	23.38
19500 (A)	739866	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	W5	855	23.17
19503 (A)	739867	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X5	855	22.13
19506 (A)	739868	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X5	855	24.52
19508 (A)	739869	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X5	855	23.64
19510 (A)	739870	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	× X5	855	22.81
19528 (A)	739871	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	W6	855	24.19
19530 (A)	739872	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	W6	855	24.79
19549 (A)	739873	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	W6	855	23.25
19554 (A)	739874	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W6	855	20.88
19559 (A)	739875	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X6	855	23.17
19569 (A)	739877	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗA	JJ3	925	24.15
19572 (A)	739876	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X6	855	23.13
19578 (A)	739878	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X6	855	24.20
19591 (A)	739879	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X6	855	25.0 9
19594 (A)	739880	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W6	855	24.81
19608 (A)	739881	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X5	855	23.16
19613 (A)	739882	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	W5	855	25.72
19614 (A)	739883	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X4	855	22.68
19620 (A)	739884	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	W4	855	22.48
19621 (A)	739885	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	ХЗ	855	23.45
19622 (A)	739886	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	3 M	W3	85 5	23.91
19631 (A)	739887	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	W3	855	23.05
19641 (A)	739888	7/27/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	ХЗ	855	25.59
19653 (A)	739889	7/27/2010		Cottage Grove Soil - D9 Area	ЗМ	W4	855	24.28
				Total # of Loads: 43		T-4	al Tons.	1 013 70
				LOWIN OI LOUID, TJ		LOU	ar FORS!	1 111 4 711

Total # of Loads: 43

Total Tons: 1,013.70

Grand Total (Tons): 1,013.70 Grand Total (Loads): 43

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2318.0174

ROSEMOUNT INDUSTRIAL

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 07/29/2010 to 07/29/2010 Wednesday, August 04, 2010

3MC35

3M Company Innovation Rd & Rt 61 Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	TONS
19872 (A)	739890	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y3	870	21.87
19875 (A)	739891	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	23.67
19879 (A)	739892	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	21.78
19881 (A)	739893	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	22.25
19 884 (A)	739894	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	22.95
19 886 (A)	739895	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3М	Z3	870	24.44
19888 (A)	739896	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3 ·	870	24.11
19889 (A)	739 897	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	25.77
19890 (A)	739898	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z3	870	23.49
19 911 (A)	7398 99	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z3	870	23.05
19912 (A)	739900	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	870	26.12
19917 (A)	739901	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y4	870	23.18
19925 (A)	739902	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y4	870	22.60
19927 (A)	739903	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	870	24.53
19929 (A)	739904	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3 M	Y4	870	23.06
19930 (A)	739905	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3 M	Z4	870	24.22
19931 (A)	739906	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	870	23.33
19935 (A)	739907	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z4	870	23.84
19 949 (A)	739908	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z4	870	24.55
19950 (A)	739909	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	23.95
19952 (A)	739910	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	870	22.75
19961 (A)	739911	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	870	23.13
19968 (A)	739913		MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z4	870	24.58
19974 (A)	739912	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	24.47
19978 (A)	739914	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	25.95
19980 (A)	739915	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	¥4	870	25.72
19982 (A)	739916	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	870	22.44
19993 (A)	739917	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	¥4	870	22.75
19996 (A)	739918	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	¥4	870	22.23
19999 (A)	739919	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	¥4	870	23.92
20009 (A)	739921	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z3	870	23.43
20011 (A)	739920	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z3	870	21.84
20016 (A)	739922		MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z3	870	22.34
20018 (A)	739923 739924		MI10-0093	Cottage Grove Soil - D9 Area	MC	Z3	870	23.68
20021 (A)	739925		MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	26.40
20023 (A) 20029 (A)	739926		MI10-0093 MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	25.75
20029 (A) 20038 (A)	739927		MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	23.23
20038 (A) 20040 (A)	739928		MI10-0093	Cottage Grove Soil - D9 Area Cottage Grove Soil - D9 Area	3M 3M	Y3 Y3	870 870	24.05
20040 (A) 20056 (A)	739929		MI10-0093	Cottage Grove Soil - D9 Area	3M			23.76
20059 (A) 20059 (A)	739930		MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3 Y3	870 870	22.10
20059 (A) 20062 (A)	739931			Cottage Grove Soil - D9 Area	3M	Y3	870 870	23.97
20062 (A) 20066 (A)	739932			Cottage Grove Soil - D9 Area	3M	Z3	870	23.82
20060 (A) 20067 (A)	739933			Cottage Grove Soil - D9 Area	3M 3M	Z3 Z3	870	24.92
20067 (A) 20069 (A)	739934			Cottage Grove Soil - D9 Area	3M	23 Y4	870	24.16
20089 (A) 20072 (A)	739935			Cottage Grove Soil - D9 Area	3M 3M	Υ4 Υ4	870 870	22.95
20072 (A) 20075 (A)	739936			Cottage Grove Soil - D9 Area	3M 3M	¥4 Z4	870	21.35
20075 (A) 20077 (A)	739937			Cottage Grove Soil - D9 Area	3M	Z4 Z4	870	22.04
20077 (A) 20082 (A)	739938			Cottage Grove Soil - D9 Area	3M 3M	24 Y3	870 870	24.15
20082 (A) 20087 (A)	739939			Cottage Grove Soil - D9 Area	3M	Z3	870	23.83
20001 (A)	100000	112012010		Contage Citore Coll - De Aled	OIN	20	0/0	23.46

Page 1 of 2

				Total # of Loads: 53		10	tal Tons:	1,252.14
				T-4-14-813 52	_ 		4.1.70	
20 09-4 (A)	739 942	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Υ4	870	22.08
20093 (A)	739941	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z4	870	23,86
20092 (A)	739940	7/29/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y4	870	24.27

Grand Total (Tons): 1,252.14 Grand Total (Loads): 53

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3M_MN00717047

2318.0176

ROSEMOUNT INDUSTRIAL

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 08/04/2010 to 08/04/2010 Thursday, August 05, 2010

3MC35

3M Company Innovation Rd & Rt 61 Cottage Grove MN 55016.

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	1 WASTE NAME	CELL	SPOT.	LIFT	TON
20784 (A)	739943	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X2	870	23.4
20788 (A)	739944	8/4/2010		Cottage Grove Soil - D9 Area	3M	X2	870	24.4
20790 (A)	739945	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X2	870	23.9
20795 (A)	739946	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X2	870	25.5
20798 (A)	739947	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	3 M	X2	870	23.6
20799 (A)	739948	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	21.5
20800 (A)	739949	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	23.5
20803 (A)	739950	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y2	870	24.2
20 8 10 (A)	739951	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	23.3
20825 (A)	739952	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	21.9
208 28 (A)	739953	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	23.2
20833 (A)	739954	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	23.0
20840 (A)	739955	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	21.9
20842 (A)	739956	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	зM	Z2	870	21.9
20844 (A)	739957	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	25.6
20846 (A)	739958	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	ХЗ	870	23.6
20 847 (A)	739959	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	ХЗ	870	24,4
20 850 (A)	739960	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	ХЗ	870	23.1
20866 (A)	739961	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	хз	870	23.0
20870 (A)	739962	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	хз	870	23.8
20875 (A)	739964	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	23.0
20877 (A)	739965	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	24.69
0880 (A)	739966	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y3	870	23.8
0883 (A)	739968	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	23.28
08 8 4 (A)	739969	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	23.73
0887 (A)	739967	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	25.88
0899 (A)	739970	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	23.72
0903 (A)	739971	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X4	870	23.87
0906 (A)	739972	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z4	870	22.76
0 914 (A)	739973	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	870	19.18
0915 (A)	739974	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	¥4	870	22.57
0917 (A)	739975	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	870	22.14
0919 (A)	739976	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z3	870	24.73
0920 (A)	739977	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y3	870	23.60
0923 (A)	739978	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	870	23.13
)930 (A)	739979	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X4	870	25.31
)933 (A)	739980	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X4	870	23.90
936 (A)	739981	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X4	870	23.03
939 (A)	739982	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X4	870	23.10
940 (A)	739983	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y4	870	22.18
947 (A)	739984	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	¥4	870	24.40
949 (A)	739985	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	24.40
952 (A)	739986	8/4/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	24.38
956 (A)	739987	8/4/2010	MI10-0093	Cottage Grove Soll - D9 Area	ЗМ	Z4	870	23.83
960 (A)	739988		MI10-0093				0,0	44.00

Total # of Loads: 45

Total Tons: 1,054.86

Grand Total (Tons): Grand Total (Loads):

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1,054.86

45

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE):

Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 08/10/2010 to 08/10/2010 Wednesday, August 11, 2010



3MC35 **3M Company**

Innovation Rd & Rt 61 MN 55016 Cottage Grove

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	TONS
21629 (A)	739989	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X4	870	25.82
21631 (A)	739990	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X4	870	20.25
21634 (A)	739991	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зМ	X4	870	23.05
21636 (A)	739992	8/10/2010	MI10-0093	Cottage Grove Soll - D9 Area	ЗМ	Y4	870	24.61
21640 (A)	739993	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y4	870	24.09
21645 (A)	739 99 4	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	¥4	870	23.38
21650 (A)	739995	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z4	870	24.02
21651 (A)	739996	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	24.61
21659 (A)	739997	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z4	870	24.95
21692 (A)	739998	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	ХЗ	870	25. 98
21694 (A)	739999	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	XЗ	870	22.73
21696 (A)	740000	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	ХЗ	870	26.47
21698 (A)	740001	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	24.48
21702 (A)	740002	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	YЗ	870	24.01
21703 (A)	740003	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	23.77
21705 (A)	740004	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	26.12
21713 (A)	740006	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	24.66
21716 (A)	740005	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	24.14
21728 (A)	740007	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X4	870	23.13
21731 (A)	740008	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X4	870	22.57
21739 (A)	740012	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y4	870	24.63
21744 (A)	740009	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y4	870	21.02
21 747 (A)	740010	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	22.05
21750 (A)	740011	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z4	870	24.60
21754 (A)	740014	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	XЗ	870	24.36
21755 (A)	740013	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зМ	ХЗ	870	22.74
21756 (A)	740015	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	зМ	Y3	870	22.81
21758 (A)	740016	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	23.90
21760 (A)	740017	8/10/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	21.81
				Total # of Loads: 29		To	al Tons:	690.76

Total Tons: 690.76

Grand Total (Tons): 690.76 Grand Total (Loads): 29

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ROSEMOUNT INDUSTRIAL

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 08/16/2010 to 08/16/2010 Friday, August 20, 2010

3MC35 3M Company Innovation Rd & Rt 61 Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	TONS
22395 (A)	740019	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X4	870	23.16
22398 (A)	740018	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X4	870	22.68
22399 (A)	740020	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X4	870	23.83
22401 (A)	740021	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X4	870	21.65
22404 (A)	740022	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X4	870	23.18
22408 (A)	740023	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зМ	Y4	870	23.94
22411 (A)	740024	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y4	870	24.26
22426 (A)	740025	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зМ	Y4	870	23.80
22427 (A)	740026	8/16/2010	MI10-0093	Cottage Grove Soll - D9 Area	3M	Y4	870	25.48
22451 (A)	740027	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y4	870	23.96
22453 (A)	740028	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	870	30.90
22458 (A)	740029	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z 4	870	22.82
22467 (A)	740030	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z 4	870	23.42
22473 (A)	740031	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z4	870	25.59
22478 (A)	740032	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z4	870	25.99
22482 (A)	740033	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	ХЗ	870	23.67
22495 (A)	740035	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	ХЗ	870	25.27
22498 (A)	740034	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	ХЗ	870	24.50
22500 (A)	740036	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	ХЗ	870	24.63
22504 (A)	740037	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	ХЗ	870	23.28
22510 (A)	740038	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	23.29
225 28 (A)	740039	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	3 M	YЗ	870	26.55
22535 (A)	740040	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	24.35
22538 (A)	740041	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	23.98
22543 (A)	740042	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	YЗ	870	24.17
22565 (A)	740044	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	23.75
22567 (A)	740045	8/16/2010	MI10-0093	Cottage Grove Soll - D9 Area	ЗM	Z3	870	24.80
2569 (A)	740043	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z3	870	23.44
2572 (A)	740046	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	23.77
2574 (A)	740047	8/16/2010	MI10-0093	Cottage Grove Soll - D9 Area	ЗМ	X2	870	26.45
2583 (A)	740048	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X2	870	21.04
2589 (A)	740049	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X2	870	25.40
2595 (A)	736886	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X2	870	23.25
2598 (A)	736885	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y2	870	24.86
2617 (A)	736884	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y2	870	25.65
2618 (A)	736883	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y2	870	22.51
2624 (A)	736882	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y2	870	25.45
2628 (A)	736881	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z2	870	26.48
2630 (A)	736880	8/16/2010	MI10-0093	Cottage Grove Soil - D9 Area	зМ	Z2	870	26.39
				Total # of Loads: 39			al Tons:	951.59

Grand Total (Tons): 951.59 Grand Total (Loads): 39



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SHID ROSEMOUNT INDUSTRIAL

REPORTNAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE):

3MC35

Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 08/20/2010 to 08/20/2010 Monday, August 23, 2010



3M Company Innovation Rd & Rt 61

Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	TONS
23265 (A)	7368 79	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X2	870	26.26
23269 (A)	736878	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X2	870	27.91
2327 2 (A)	736876	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X2	870	22.65
23274 (A)	736877	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X2	870	26.3 8
23275 (A)	736875	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X2	870	25.00
23280 (A)	736874	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y2	870	22.51
23282 (A)	736787	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	23.78
23285 (A)	736788	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	25.77
23287 (A)	736789	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y2	870	25.12
23307 (A)	736790	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z2	870	21.90
23314 (A)	736791	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z2	870	21.34
23317 (A)	736792	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	24.42
23321 (A)	736793	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	24.01
23326 (A)	73 6794	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	24.32
23329 (A)	736795	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	26.18
23334 (A)	73 6796	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	ХЗ	870	23.46
23336 (A)	736797	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	ХЗ	870	23.39
23339 (A)	736798	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	XЗ	870	23.10
23355 (A)	73 6799	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	ХЗ	870	24.55
23359 (A)	736800	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	ХЗ	870	20.89
23362 (A)	736801	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	24.11
23368 (A)	736802	8/20/2010	MI10-0093	Cottage Grove Soll - D9 Area	ЗМ	Y3	870	24.43
23369 (A)	736804	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	23.05
23371 (A)	736805	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	24.93
23382 (A)	736806	8/20/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	25.27
				Total # of Loads: 25		Tot	al Tons	604 73

Total # of Loads: 25

Total Tons: 604.73

Grand Total (Tons): 604.73 Grand Total (Loads): 25

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REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 08/24/2010 to 08/24/2010 Wednesday, September 08, 2010

3MC35

3M Company Innovation Rd & Rt 61 Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	TONS
23739 (A)	736815	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X2	870	23.32
23744 (A)	736816	8/24/2010	MI10-0093	Cottage Grove Soll - D9 Area	ЗM	X2	870	26.23
23749 (A)	736817	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X2	870	25.23
23753 (A)	736819	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зМ	X2	870	26.99
23754 (A)	736818	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X2	870	25.15
23756 (A)	736820	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	23.98
23763 (A)	736821	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	24.08
23782 (A)	736822	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y2	870	24.45
23788 (A)	736823	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	26.38
23795 (A)	736824	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	25.66
23801 (A)	736825	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	26.78
23805 (A)	736826	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	23.61
23807 (A)	736827	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	23.92
23812 (A)	7368 28	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	27.20
23819 (A)	736829	8/24/2010	M[10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	22.86
23821 (A)	736830	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	23.45
23843 (A)	736 831	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	24.27
23845 (A)	736 832	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	24.87
23848 (A)	736833	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X2	870	23.76
23856 (A)	736834	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X2	870	22.11
23863 (A)	736835	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X2	870	24.27
23866 (A)	736836	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X2	870	25.15
23868 (A)	736838	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	X2	870	24.48
23873 (A)	736839	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	24.06
23875 (A)	736840	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	23.16
23891 (A)	736841	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Х3	870	24.37
23895 (A)	736842	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X3	870	22.87
23904 (A)	736843	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X3	870	23.33
23911 (A)	736844	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X3	870	22.16
23922 (A)	736845	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X3	870	23.14
23926 (A)	736846	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	ХЗ	870	24.73
23931 (A)	736847	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z3	870	25. 69
23936 (A)	736848	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z3	870	24.30
23938 (A)	736849	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z3	870	25.12
23941 (A)	736850	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Z3	870	23.67
23945 (A)	736851	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y2	870	23.73
23953 (A)	736852	8/24/2010	MI10-0093	Cottage Grove Soll - D9 Area	ЗM	Y2	870	24.79
23957 (A)	736853	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	24.49
23974 (A)	736854	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	X3	870	24.54
23980 (A)	736855	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y3	870	24.56
23984 (A)	736856	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	ХЗ	870	23.12
23985 (A)	736857	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y3	870	23.21
23988 (A)	736858	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	24.14
23992 (A)	736859	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z2	870	22.50
23997 (A)	736860	8/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	20.92
								-0.02

Total # of Loads: 45

Total Tons: 1,090.80

Grand Total (Tons): Grand Total (Loads):

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1,090.80

45

ROSEMOUNT INDUSTRIAL

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 09/01/2010 to 09/01/2010 Wednesday, September 08, 2010



3M Company Innovation Rd & Rt 61 Cottage Grove MN 55016

				Total # of Loads: 17		To	al Tons:	403.58
25709 (A)	743853	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	24.60
25679 (A)	743852	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	24.10
25678 (A)	743851	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y2	870	23.25
25673 (A)	743850	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЭМ	X2	870	22.62
25667 (A)	73 6873	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗA	FF4	925	24.37
25 626 (A)	73 6872	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	24.06
25619 (A)	736871	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	22.81
25613 (A)	736870	9/1/2010	MI10-0093	Cottage Grove Soll - D9 Area	зм	Z2	870	23.26
25607 (A)	736869	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z2	870	24.81
255 63 (A)	736868	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y2	870	23.69
25560 (A)	736867	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	21.32
25553 (A)	736866	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	зМ	Y2	870	20.85
25548 (A)	736865	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	23.93
25500 (A)	736864	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	24.35
25497 (A)	736863	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	X2	870	25.05
25495 (A)	736862	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X2	870	26.39
25491 (A)	736861	9/1/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	X2	870	24.12
LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	TONS

403.58

17

Grand Total (Tons):

Grand Total (Loads):

Page 1 of 1

ROSEMOUNT INDUSTRIAL

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE):

ME:Tons Each Load By WSIDN:Tonnage for EACH LOAD, grouped by customerE:09/24/2010 to 09/24/2010(DATE):Tuesday, September 28, 2010

3MC35

3M Company Innovation Rd & Rt 61 Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	TONS
20133 (A)	743854		- MI10-0093-	- Cottage Grove Soil - D9 Area-		¥4	870	28.20
29434 (A) -	743856			Cottage Greve-Seil - D9 Area		— ¥4	870	
-29435 (A) -	743855		- MH0 0093	- Cottage Grove Soil D9 Area		<u> </u>		
29437 (A)	743857		MH0-0093	Gottage Grove Soil - D9 Area			870	24.97
29440 (A)	743858			Cottage Grove Soil - D9 Area		γ 4	870	
29444 (A)	740059	9/24/2010		- Cottage Grove Soil - D9 Area		<u> </u>	870	
29447 (A)	743860		MI10 0098			<u> </u>		
29461 (A) -	743861		MI10-0098	Gottage Grove Seil- D0 Area		<u></u> Z4	870	
29462 (A) -	743862		MI10-0093	-Cottage Grove-Soil - D9 Area-	<u>3M</u>	<u> </u>	870	-25.49
20463 (A) -			- MI10-0093	- Cottage Grove Soil - D9 Area	3M	<u>Z4</u>		
29466 (A)	743864	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y5	870	25.14
29469 (A)	743866	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y5	870	22.92
29471 (A)	743867	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y5	870	24.63
29472 (A)	743865	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y5	870	23.23
29473 (A)	743868	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y5	870	25.28
29484 (A)	743869	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z5	870	24.09
29486 (A)	743870	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	_~ Z5	870	20.77
29487 (A)	743871	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z5	870	23.60
9494 (A)	743872	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z5	870	24.46
9496 (A)	743873	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z5	870	24.85
9497 (A)	743874	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z5	870	23.21
9499 (A)	743875	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	25	870	23.57
9501 (A)	743876	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗA	¥6	870	24,46
9506 (A)	743877	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y6	870	23.49
9511 (A)	743878	9/24/2010	MI10-0093	Cottage Grove Soll - D9 Area	3M	Y6	870	23.49
9513 (A)	743879	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y6	870	24.99
9514 (A)	743881	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y6	870	24.59
9515 (A)	743880	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z6	870	23.33
9516 (A)	743883	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z6	870	23.66
9517 (A)	743882	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z6	870	23.37
9520 (A)	743884	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z6	870	25.03
9522 (A)	743885	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z6	870	23.03
9523 (A)	743886	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	¥4	870	24.05 23.54
9524 (A)	743887	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	870	
9528 (A) —	743888		-MI10-0003	Cottago Grove Soil-D0 Area				21.95
9533 (A)	-743889		-Mi10-0093	Cottage Grove Soil - D9 Area		Z6		
9536 (A)	743090		-MI10-0093 -	Cottage Grove Soll - DS Area				
9540 (A)	-743801		-MI10-0093	Cottage Grove Soil - D9 Area				
)542 (A)	743892		-MI10-0093	Cottage Grove Soil D9 Area			<u> </u>	
)540 (A)	743893	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area				24.06
3540 (A) 3547 (A)	-743894			Collage Grove Soil - D9 Area		- <u>Z5</u>		23.21
	7 1000-1	JIL+1/2010	MITO-0090	Collage Glove Soll - De Alea		- Y8 -	- 870 -	24.37

Total # of Loads: -41-

Total Tons: -988.51

Grand Total (Tons):	-988.51
Grand Total (Loads):	- 41

.



SHO ROSEMOUNT INDUSTRIAL

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 09/24/2010 to 09/24/2010 Tuesday, September 28, 2010



3M Company Innovation Rd & Rt 61

3MC35

Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	TONS
29433 (A)	743854	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	870	28.20
29434 (A)	743856	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y4	870	
29435 (A)	743855	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Y4	870	22.99 23.62
29437 (A)	743857	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y4	870	23.62
29440 (A)	743858	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y4	870	24.97 24.67
29444 (A)	743859	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z4	870	
29447 (A)	743860	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	25. 84 25.69
29461 (A)	743861	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	25.69
29462 (A)	743862	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Z4	870	-
29463 (A)	743863	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗM	Z4	870	25.49
29466 (A)-			MI10-0093	- Cottage Grove Soil - D9 Area		<u> </u>		23.36
29469 (A)	743866		-MI10-0003				- 870	
29471 (A)	- 743967	0/24/2010-	MI10-0093	Cottage Grove Seil - D9 Area	3M	¥6	870-	
29472 (A)			- MI10-0098	- Cottage Grove Soil - D9 Area				
20473-(A)	743868		-Mi10 0008	Cottage Grove Soil - D9 Area				28.29
20484 (A)	743860		- MI10-0003	-Cottage Grove Seil - D9 Area				25,28
29486-(A)	- 743870	9/24/2010-		Cottage Grove Soil - D9 Area				
29487 (A)			- MI10-0093	- Cottage Grove Soil - D9 Area			870	20.77
20494 (A)	743872			- Cottage Grove Soil - D9 Area		<u>Z5</u>	870	
29496-(A)	743873		-MI10-0093	Cottage Grove Soil - D9 Area				24.46
29497 (A)		9/24/2010	-MI10-0093	-Cottage Grove Soil - D9 Area				24.85
29499 (A)			- MI10-0093	-Cottage Grove Soil - D9 Area		<u> </u>		
29501 (A)			MH0-0093	Cottage Grove Soil - D9 Area		<u></u>		23.57
29506-(A)			- MH10-0093	- Cottage Grove Soil - D9 Area				24,46
29511 (A)			-MI10-0093	-Cettage Grove Seil - D9 Area	3M			
9513 (A)	743879	9/24/2010-	MI10-0093	-Cottage Grove Soil - D9 Arca		¥8 ¥6		
9514-(A)			- MI10-0093	- Cottage Grove Soil - D9 Area		¥6		- 24.99
:0514 (A) :0515 (A)	-743880		-MI10-0003	- Cottage Grove Seil - D9 Area			<u> </u>	
19516 (A)			-MI10-0093	*		<u>Z6</u>		
.0070 (A) .9517 (A)			MH0-0093	Cottage Grove Soil D9 Area		<u>– Z6</u> – –	870	
9520 (A)	743884		-MI10-0003	-Cottage Grove Soil- D9 Area		<u>Z8</u>	870	23.37
9520 (A) 9522 (A)			-MI10-0093	Cottage Grove Soil D9 Area		<u>Z6</u>		-25.03
19523 (A) 19523 (A)			-MI10-0093	Cottage Grove Soll - D9 Area		26	- 870	
19520 (A)	-743897	-0/24/2010	-MI+0-0093	Cottage Grove Soll - D9 Area	<u>3M</u>	Y4	870	23.54
9528 (A)	743888	9/24/2010		-Cottage Grove Soll - D9 Area		<u>- Z4</u>	- 870	21.95
9533 (A)	743889	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y5	870	25.38
9535 (A) 9536 (A)	743890		MI10-0093	Cottage Grove Soil - D9 Area	3M	Z6	870	24.63
• •	743891	9/24/2010		Cottage Grove Soil - D9 Area	3M	Y4	870	24.22
9540 (A)	743891 743892	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	3 M	Z4	870	25.22
9542 (A)		9/24/2010		Cottage Grove Soil - D9 Area	ЗМ	Y5	870	24.06
9546 (A)	743893	9/24/2010		Cottage Grove Soil - D9 Area	ЗМ	Z5	870	23.21
9547 (A)	743894	9/24/2010	MI10-0093	Cottage Grove Soil - D9 Area	зм	Y6	870	24.37
				Total # of Loads: -41		Tat	Tone	000 21

Total # of Loads: 41

Total Tons: 988.51

Grand Total (Tons): -988.51 Grand Total (Loads): -41



SHID ROSEMOUNT INDUSTRIAL

REPORT NAME: DESCRIPTION: DATE RANGE: PRINTED ON (DATE): Tons Each Load By WSID Tonnage for EACH LOAD, grouped by customer 10/05/2010 to 10/05/2010 Wednesday, October 06, 2010

3MC35

3M Company Innovation Rd & Rt 61

Cottage Grove MN 55016

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT.	LIFT	TONS
31274 (A)	743895	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	22.52
-31280 (A)	743896	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	24.34
31289 (A)	743898	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	24.40
31203 (A) 31291 (A)	743899	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	24.40
31293 (A)	743900	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	24.65
31295 (A) 31296 (A)	743900	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	26.10
31230 (A) 31302 (A)	743902	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	24.62
31302 (A) 31310 (A)	743905	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	25.34
31321 (A)	743903	10/5/2010	MI10-0093	Cottage Grove Soll - D9 Area	3M	Z2	870	24.76
31334 (A)	743906	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	24.90
• •	743900	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	25.79
31345 (A)	743904	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	23 .79 24 .43
31348 (A)	743904	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	24.94
31353 (A)	743908	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M 3M	Y3	870	24.94
31357 (A)	743909	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	24.00 24.15
31365 (A)	743910	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M 3M	Z3	870	24.15
31366 (A)			MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	25.69
31374 (A)	743912	10/5/2010		•	3M 3M	Z3	870	
31375 (A)	743913	10/5/2010	MI10-0093 MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	25.53
31386 (A)	743914	10/5/2010		Cottage Grove Soil - D9 Area	3M 3M	Z3	870	24.84
31402 (A)	743915	10/5/2010	MI10-0093	Cottage Grove Spil - D9 Area		23 Y2	870	24.26
31406 (A)	743916	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2 Y2		25.80
31408 (A)	743917	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M		870	24.57
31413 (A)	743918	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2 Y2	870	22.35
31414 (A)	743919	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M		870	23.70
31428 (A)	743920	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y2	870	24.06
31435 (A)	743921	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	24.97
31440 (A)	743922	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	25.17
31443 (A)	743923	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	24.75
31449 (A)	743924	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	24.91
31473 (A)	743925	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z2	870	24.11
31476 (A)	743926	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	24.44
31477 (A)	743927	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	24.33
31478 (A)	743928	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	23.82
31483 (A)	743929	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	ЗМ	Y3	870	23.94
31490 (A)	743930	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	23.48
31494 (A)	743931	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	24.96
31495 (A)	743932	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	20.94
31499 (A)	743933	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	25.89
31507 (A)	743934	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	24.50
31559 (A)	743936	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	20.47
31561 (A)	743935	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Z3	870	25.81
31565 (A)	743937	10/5/2010	MI10-0093	Cottage Grove Soil - D9 Area	3M	Y3	870	24.71

.

Total # of Loads: 42

Total Tons: 1,026.73

Grand Total (Tons): 1,026.73 Grand Total (Loads): 42



Page 1 of 1

APPENDIX E-2 UNIFORM HAZARDOUS WASTE MANIFESTS (EQ MANIFESTS)

(provided on disk at the end of the report)

3M_MN00717057

APPENDIX E-3 SKB WASTE MANIFESTS

(provided on disk at the end of the report)

APPENDIX E-4 SKB MANIFESTS - INCIDENTAL MATERIAL

(provided on disk at the end of the report)

3M_MN00717059

Appendix F

3M_MN00717060

4

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Appendix F

APPENDIX F FIELD SAMPLING SHEETS

Weather: Stockpile I (X) Sc (X) C8 () Mf () St 1. Sketch Stc 2. Screen Stc 3. Provide a	Description bil &D Debris (Co g. Debris aining pockpile, Establish	ncrete, Asp) Rain/Si ^{oly)} S halt, etc)	DCK PARAMETERS: Paint Filter Test; now () Windy () TEMP.: 61 °F soil Moisture: () Dry Moist () Wet	<u>/ pH</u>
Stockpile E (X) So (X) C& () Mf () St 1. Sketch Sto 2. Screen Sto 3. Provide a	Description bil &D Debris (Co g. Debris aining pockpile, Establish	Check all that app	halt, etc)	ioil Molsture: () Dry	
2. Screen Sto 3. Provide a St		Dimensione		Ddor: Strong () Mild (X) None ()
. Collect Sal	Sketch of the Sto mples, Record A	and Record Gl ockpile, indicat LL Data, Prepi	PS Coordinat e north, and s are COC, Co	, and Locate Sample Locations. es for selected sample locations. show PID readings and Sample Stations;	
) 1-1		1A	SAMPLE DATA CGMN-ESC-D9101PF1A-0-100701	
				Sample Time: 9:49 Sample Parameters: Paint Filter / pH Sampled By: W. Westley **In-Place Sample Before Lime Kiln Dust was Ac Sample Time: Sample Parameters: Sample Parameters: Sample Parameters: Sample Before Lime Kiln Dust was Ac	ided*
X Com	posite Location f		e	Sample Time: Sampled By: Sampled By: Sample Time: Sample Parameters: Sample By:	

ene); X (Total Xylenes); T (Toluene); P (PCBs)

BLOCK NO:	D9 1-2	SAMPLE DATE: 7/1/2010		
STOCKPILE NO:	N/ABLC	OCK PARAMETERS: Paint Filter Test / pH		
() Mfg. Debris () Staining	(Check all that apply) Soncrete, Asphalt, etc)	now () Windy () TEMP.: 61 °F Soil Moisture: () Dry (X) Moist () Wet Odor: Strong () Mild (X) None ()		
Screen Stockpile with PID Provide a Sketch of the St Collect Samples, Record A	and Record GPS Coordinat ockpile, indicate north, and ALL Data, Prepare COC, Co	es for selected sample locations. show PID readings and Sample Stations. unt Bottles.		
Desi	gnate Sample Locations o	n the Sketch with Reference Letter. SAMPLE DATA		
D9 1-2	<u>1A</u>	CGMN-ESC-D9102PF1A-0-100701		
		Sample Time: 9:46 Sample Parameters: Paint Filter / pH Sampled By: W. Westley **In-Place Sample Before Lime Kiln Dust was Added** Sample Time: 9:46 Sample Time: 9:3' Sample Parameters: 9:3' Sample By: 9:3' Sample Time: 9:3' Sample By: 9:3'		
X Composite Location	for "1A" Sample	Sample Time: Sample Parameters: Sampled By:		
NSATE SAMPLE:		from		

BLOCK NO:		D9 1-3	SAMPLE DATE: 7/1/201			
S	TOCKPILE NO:	<u>N/A</u>	BLOC	K PARAMETERS:	Paint Filter Test / pH	
(X (X ((1. Sketcl 2. Scree	ile Description) Soil) C&D Debris (Co) Mfg. Debris) Staining. h Stockpile, Establish n Stockpile with PID	(Check all that apply) oncrete, Asphalt, h Dimensions, Desc and Record GPS C	Sc etc) ribe Soil, a cordinates	bw () Windy () TEM bil Moisture: () D m ⁽⁽⁾ (⁽⁾) N (⁽⁾) N	Pry Toist Vet Nild (X) None () s. s.	
	t Samples, Record A	LL Data, Prepare C	OC, Cour	nt Bottles.		
	Desi	gnate Sample Loca	itions on	the Sketch with Reference SAMPLE DAT		
	D9 1-3		1 A	CGMN-ESC-D9103PF		
ĨN					<u>ID:05</u> Paint Filter / pH W. Westley ELime Kiln Dust was Added ^{**} EN © 2-3' DEE	
				Sample Time: Sample Parameters: Sampled By:		
×	Composite Location	for "1A" Sample		Sample Time: Sample Parameters: Sampled By:		
	SAMPLE:			from		

	D9 1-4	SAMPLE DATE: 7/1/2010
STOCKPILE NO:	<u> </u>	OCK PARAMETERS: Paint Filter Test / pH
Stockpile Description (X) Soil (X) Soil (Z) C&D Debris (Co (Mfg. Debris (O) Mfg. Debris (Staining Staining Sketch Stockpile, Establish Screen Stockpile with PID a Provide a Sketch of the Sto Collect Samples, Record Al	(Check all that apply) oncrete, Asphalt, etc) n Dimensions, Describe So and Record GPS Coordina ockpile, indicate north, and LL Data, Prepare COC, C	
Desig	inate Sample Locations	on the Sketch with Reference Letter. SAMPLE DATA
N D9 1-4	1A *	CGMN-ESC-D9104PF1A-0-100701 Sample Time: Sampled By: **In-Place Sample Before Lime Kiln Dust was Added** SAMPLE TAKEN Sample Time: Sample Parameters: Sample Time: Sample Parameters: Sample Time: Sample Parameters: Sample Time: Sample Parameters: Sample Barameters:
		Sample Time: Sample Parameters: Sampled By:
X Composite Location f		Sample Parameters:

	BLOCK NO:		D9	1-5		SAMPLE DATE:	7/1/2010
S	STOCKPILE NO: N/A		BLC	CK PARAMETERS:	Paint Filter Test / pH		
(X (((1. Sketc 2. Scree	ile Descripti) Soil)C&D Debris)Mfg. Debris)Staining h Stockpile, Est en Stockpile with	on (ch s (Cond s tablish D n PID an	imension d Record	sphalt sphalt	S (, etc) Cribe Soli Coordinat	idor: Strong () N and Locate Sample Locations as for selected sample location	Pry foist Vet fild (X) None () s.
	de a Sketch of t ot Samples, Rec					how PID readings and Sample int Bottles	e Stations.
						n the Sketch with Reference	
	D9 1-5	*****			1 A	SAMPLE DAT CGMN-ESC-D9105PF	
T N			****		·	Sample Time: Sample Parameters: Sampled By: **In-Place Sample Before SAMPLE TAK Sample Time: Sample Parameters: Sampled By:	 Paint Filter / pH W. Westley e Lime Kiln Dust was Added* ≥ Q Q-3' DEEP
					aride un	Sample Time: Sample Parameters: Sampled By:	
×	Composite Loc	ation for	"1A" Sa	mple		Sample Time: Sample Parameters: Sampled By:	
	SAMPLE:					from	

	E	BLC	C	¢N	0:				D9	1-7	7		SAMPLE DATE: 7/1/2010
	S	TO	ск	PIL	.E	NO	:		N	I/A		BL	OCK PARAMETERS: Paint Filter Test / pH
St.	((Sketc) Scree	le [) Sc) C() Mi) St n Sto	Des bil &D ig. ain bckp	cri De Del ing vile, pile	bris bris Est	on s (C s ablin n PII	(Ci Con sh [D an	cre Dime	te, / ensic	at ap Asp ons, rd G	ply) halt Desc PS (cribe So Coordina	inow () Windy () TEMP.: <u>61</u> °F Soil Moisture: () Dry (X) Moist () Wet Odor: Strong () Mild (X) None () il, and Locate Sample Locations. ites for selected sample locations. show PID readings and Sample Stations.
4.	Collec	t Sa	mpl	es,									bunt Bottles.
						Des	lign	ate	San	nple	Loc	ations	on the Sketch with Reference Letter. SAMPLE DATA
		DS) 1-	7	1				l			1 A	CGMN-ESC-D9107PF1A-0-100701
1	Ν												Sample Time: 10:15 Sample Parameters: Paint Filter / pH Sampled By: W. Westley **In-Place Sample Before Lime Kiln Dust was Added** SAM&LE TAKEN © P-3' De Sample Time: Sample Parameters: Sample By:
			•••••	••••••									Sample Time: Sample Parameters: Sampled By:
	X	Com	pos	ite	Loc	atior	n foi	• "1/	\" S	amp	le		Sample Time: Sample Parameters: Sampled By:
	SATE	SAN	IPL	E:									from

	D9 1-8	SAMPLE DATE: 7/1/2010
STOCKPILE NO:	<u> N/A </u>	LOCK PARAMETERS: Paint Filter Test / pH
Stockpile Description) Cloudy () Rain (Check all that apply) oncrete, Asphalt, etc)	/Snow () Windy () TEMP.: <u>61</u> °F Soil Moisture: () Dry (X) Moist () Wet Odor: Strong () Mild (X) None ()
 Sketch Stockpile, Establish Screen Stockpile with PID Provide a Sketch of the Sto Collect Samples, Record A 	and Record GPS Coordi ockpile, indicate north, ar LL Data, Prepare COC,	Soil, and Locate Sample Locations. nates for selected sample locations. nd show PID readings and Sample Stations. Count Bottles.
Desig	gnate Sample Location	s on the Sketch with Reference Letter. SAMPLE DATA
N		A CGMN-ESC-D9108PF1A-0-100701 Sample Time: 9:51 Sample Parameters: Paint Filter / pH Sampled By: W. Westley **In-Place Sample Before Lime Kiln Dust was Added** SAMPLE TAKGN Sample Time: Sample Parameters: Sample Time: Sample Parameters: Sample Before Lime Kiln Dust was Added**
		Sample Time: Sampled By: Sampled By: Sample Time: Sample Parameters:
X Composite Location f	for "1A" Sample	Sampled By:

		BLC	C	K N	O :				DS) 1-	9	-		SAMPLE DATE:7/1/2010
	S	то	ск	PIL	.E M	10:	•		١	\ /A		•	BLC	OCK PARAMETERS: Paint Filter Test / pH
	Scree	ile I) S) C) M) S h St en St	Des oil &D fg. tain ockj	De Del ing oile, pile	ptic bris bris Esta with	on s (C ablie PIC	(cr con sh E) an	Cre	te, ensid	Asp ons,	Des	t, et cribe	c) C) Soil	now () Windy () TEMP.: 61 °F Soil Moisture: () Dry (X) Moist () Wet Odor: Strong () Mild (X) None () , and Locate Sample Locations. es for selected sample locations. show PID readings and Sample Stations.
,. 1.														unt Bottles.
	<u> </u>													n the Sketch with Reference Letter.
		n	91.	0		1			·:····				4 A	
↑	N		y 'l•	. 3							*****	-	1 <u>A</u>	CGMN-ESC-D9109PF1A-0-100701
														Sample Time: 9:59 Sample Parameters: Paint Filter / pH Sampled By: W. Westley **in-Place Sample Before Lime Kiln Dust was Added* Sample: 74424 Sample Time: Sample Parameters: Sample Time: Sample Parameters: Sample Before Lime Kiln Dust was Added*
		 777927733 		******		***************************************		64						Sample Time: Sample Parameters: Sampled By:
	X	Corr												Sample Time: Sample Parameters: Sampled By:
INS	SATE	SAN	IPL	E:										from

BLOCK NO:	D9 1-10	SAMPLE DATE: 7/1/2010
STOCKPILE NO:	N/A	BLOCK PARAMETERS: Paint Filter Test / pH
tockpile Description ((X) Soil) Cloudy () Ra ^{Check} all that apply) Increte, Asphalt, e	ain/Snow () Windy () TEMP.: <u>61</u> °F Soil Moisture: () Dry (X) Moist etc) () Wet Odor: Strong () Mild (X) None ()
Screen Stockpile with PID a Provide a Sketch of the Sto Collect Samples, Record A	and Record GPS Coo ockpile, indicate north, LL Data, Prepare CO	be Soil, and Locate Sample Locations. ordinates for selected sample locations. n, and show PID readings and Sample Stations. DC, Count Bottles. ilons on the Sketch with Reference Letter.
- 4 - 24	***********	SAMPLE DATA
N D9 1-10		1A CGMN-ESC-D9110PF1A-0-100701 Sample Time: /0:/8 Sample Parameters: Paint Filter / pH Sampled By: W. Westley **In-Place Sample Before Lime Kiln Dust was Added* Sample Time: Sample Time: Sample Time: Sample Time: Sample Before Lime Kiln Dust was Added*
		Sample Time:
X Composite Location for	or "1A" Sample	Sample Parameters:Sampled By:
NSATE SAMPLE:	· ·	from

Ş			
	STOCKPILE NO:	<u> </u>	OCK PARAMETERS:TCLP Metals
Stockp	bile Description) Soil	(Check all that apply)	Snow () Windy () TEMP.: 73 °F Soil Moisture: () Dry (X) Moist () Wet
I. Sketo			Odor: Strong () Mild () None (X) il, and Locate Sample Locations.
2. Scree	en Stockpile with PID	and Record GPS Coordina	ites for selected sample locations.
S. Proví	de a Sketch of the St	ockpile, indicate north, and	show PID readings and Sample Stations.
. Collec		LL Data, Prepare COC, Co	
	Desi	gnate Sample Locations (on the Sketch with Reference Letter. SAMPLE DATA
	D9 2-1	A	CGMN-ESC-D9201TCLPA-0-100713
î N	anna ann an a	······	CGMN-ESC-D9201TCLPA-DB-100713
1		······	CGMN-ESC-D9201TCLPA-MS-100713
	· · · · · · · · · · · · · · · · · · ·		CGMN-ESC-D9201TCLPA-MSD-100713
	······	4) 1 47 -	Sample Time: 8:36
		×	Sample Parameters: TCLP Metals
			Sampled By: W. Westley
			S
		10341 June 1	DAMPLES TAKEN @ 2-3' DEPATHS @
			LOCATION
		*****	Sample Time:
	· · · · · · · · · · · · · · · · · · ·		Sample Parameters:
		*****	Sampled By:
	-		
	······································	*** * * * * * * * * * * * * * * * * * *	
		***************************************	Sample Time:
			Sample Parameters:
		****	Sampled By:

	·····		
	1	<u>ii</u>	
			Sample Time:
× -		ti e la com	Sample Parameters:
~ C	Composite Location fo	r "A" Sample	Sampled By:
	SAMPLE:		from

	BLOCK NO:	D9 1-3	SAMPLE DATE:	7/16/2010
ŝ	STOCKPILE NO:	<u> 002 </u>	OCK PARAMETERS:	P, TCLP METALS (Pb Onl
(X (X (X (X 1. Sketo 2. Scree 3. Provi	ile Description (c) Soil) C&D Debris (Con) Mfg. Debris) Staining ch Stockpile, Establish I en Stockpile with PID an de a Sketch of the Stoc	heck all that apply) Icrete, Asphalt, etc) Dimensions, Describe S nd Record GPS Coordir kpile, indicate north, an	Odor: Strong () I oil, and Locate Sample Location nates for selected sample locatio d show PID readings and Sample	Dry Noist Vet Aild () None (_X) s. ns.
4. Colle		L Data, Prepare COC, (ate Sample Locations	s on the Sketch with Reference	Letter.
			SAMPLE DA	ΓA
	D9 1-3 002-1	<u> </u>		and the second
ÎN			CGMN-ESC-D910300	
			Sample Time:	<u>11:54</u>
			Sample Parameters:	P&TCLPPb
			Sampled By:	R. McLoughlin, W. Westle
	-			
	N X		······································	······································
			Sample Time:	
			Sample Parameters:	
	D9 1-3 002-2		Sampled By:	······································
	X			
	· · · · · · · · · · · · · · · · · · ·		Sample Time:	
			Sample Parameters: Sampled By:	
			Gampied by.	· · · · · · · · · · · · · · · · · · ·
			· ·····	
			Sample Time:	
			Sample Parameters:	· · · · · · · · · · · · · · · · · · ·
V .	Composite Location for	"A" Samnle	Sampled By:	
~ `		A Campio		<u></u>
	<u></u>	······		
	E SAMPLE:		from	

BLOCK NO:	D9 1-3	SAMPLE DATE: 7/16/2010
STOCKPILE NO:	003	BLOCK PARAMETERS: P, TCLP METALS (Pb Only
Screen Stockpile with PID ar Provide a Sketch of the Stoc Collect Samples, Record ALI	heck all that apply) crete, Asphalt, o Dimensions, Descri nd Record GPS Co kpile, indicate north L Data, Prepare CO	Odor: Strong () Mild () None (X) ribe Soil, and Locate Sample Locations. cordinates for selected sample locations. th, and show PID readings and Sample Stations.
D9 1-3 003-2		
		Sample Time: Sample Parameters: Sampled By:
Composite Location for	"A" Sample	Sample Time: Sample Parameters: Sampled By:
INSATE SAMPLE:	······	from); P (PCBs); PCE (Tetrachloroethylene); Pb (Lead)

 Weather: Clear (X) Cloudy (Stockpile Description (Check all the (X) Soil (X) C&D Debris (Concrete, A (X) Mfg. Debris (X) Mfg. Debris (X) Staining Sketch Stockpile, Establish Dimensio Screen Stockpile with PID and Record Provide a Sketch of the Stockpile, ind Collect Samples, Record ALL Data, F) Rain/Sno at apply) Asphalt, etc) ns, Describe Soi d GPS Coordina licate north, and Prepare COC, Co	Dw () Windy () TEMP Soil Moisture: (X) Dry () Mo () We Odor: Strong () Mile il, and Locate Sample Locations. tes for selected sample locations. show PID readings and Sample S bunt Bottles. Don the Sketch with Reference Loc SAMPLE DATA CGMN-ESC-D9103004A Sample Time: Sample Parameters:	y ist et d () None (X) Stations. etter. -0-100716 11:45 P & TCLP Pb
Stockpile Description (Check all the (X) Soil (X) C&D Debris (Concrete, A (X) Mfg. Debris (X) Mfg. Debris (X) Staining 1. Sketch Stockpile, Establish Dimensio 2. Screen Stockpile with PID and Record 3. Provide a Sketch of the Stockpile, ind 4. Collect Samples, Record ALL Data, P Designate Sam	Asphalt, etc) Asphalt, etc) Ins, Describe Soi d GPS Coordina licate north, and Prepare COC, Co ple Locations of	Soil Moisture: (X) Dry () Mo () We Odor: Strong () Mile il, and Locate Sample Locations. tes for selected sample locations. show PID readings and Sample Sount Bottles. on the Sketch with Reference Lo SAMPLE DATA CGMN-ESC-D9103004A Sample Time: Sample Parameters:	/ ist of () None (X) Stations. etter. -0-100716 11:45 P & TCLP Pb
 Sketch Stockpile, Establish Dimensio Screen Stockpile with PID and Record Provide a Sketch of the Stockpile, ind <u>Collect Samples, Record ALL Data, P</u> Designate Sam 	ns, Describe Soi d GPS Coordina licate north, and Prepare COC, Co ple Locations o	ii, and Locate Sample Locations. tes for selected sample locations. show PID readings and Sample S <u>bunt Bottles.</u> on the Sketch with Reference Lo SAMPLE DATA CGMN-ESC-D9103004A Sample Time: Sample Parameters:	Stations. etter. - 0-100716 11:45 P & TCLP Pb
 Screen Stockpile with PID and Record. Provide a Sketch of the Stockpile, ind <u>Collect Samples, Record ALL Data, P</u> Designate Sam D9 1-3 004 	d GPS Coordina licate north, and Prepare COC, Co ple Locations o	tes for selected sample locations. show PID readings and Sample Sount Bottles. on the Sketch with Reference Lo SAMPLE DATA CGMN-ESC-D9103004A Sample Time: Sample Parameters:	Stations. etter. -0-100716 11:45 P & TCLP Pb
Designate Sam	ple Locations of	on the Sketch with Reference Lo SAMPLE DATA CGMN-ESC-D9103004A Sample Time: Sample Parameters:	-0-100716 11:45 P & TCLP Pb
Î N		CGMN-ESC-D9103004A Sample Time: Sample Parameters:	-0-100716 11:45 P & TCLP Pb
Î N		Sample Time: Sample Parameters:	11:45 P & TCLP Pb
	/ –	Sample Time: Sample Parameters: Sampled By:	R. McLoughlin, W. Westley
Composite Location for "A" Samp		Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:	

rameters: B (Benzene); X (Total Xylenes); T (Toluene); P (PCBs); PCE (Tetrachloroethylene); Pb (Lead)

BLOCK NO: D9 1-2	SAMPLE DATE: 7/20/2010
	BLOCK PARAMETERS: PFCs
tockpile Description (Check all that apply (X) Soil () () C&D Debris (Concrete, Asphane) () Mfg. Debris () Staining Sketch Stockpile, Establish Dimensions, Descreen Stockpile with PID and Record GPS	() Moist () Wet Odor: Strong () Mild () None (X) escribe Soil, and Locate Sample Locations. S Coordinates for selected sample locations. north, and show PID readings and Sample Stations.
	ocations on the Sketch with Reference Letter.
D9 1-2	SAMPLE DATA AECOM Requested PFC Sample
	Sample Time: 10:50 Sample Parameters: PFCs Sampled By: W. Westley Notes: - - Samples double bagged in 4 quart Ziploc bags and not in plastic (nalgene) containers as per usual. Use of bags approved by C. Young (WESTON) & T. Coryell (AECOM). T. Coryell also informed AECOM the samples would arrive in Ziplocs. - Sample collected from D9 1-2 (staged on EW-3) - All samples labeled "D9 Area Excavation Soil Material - 7/20/10 @ 1050" - Duplicate material retrieved and held onsite - Sample collected per M. Gaetz instruction and approval Sample Time: Sample Darameters: Sample By:
Grab sample locations for individual AEC Samples and for composite sample	Sample Time: Sample Parameters: Sampled By:
ISATE SAMPLE:	from

I	BLOCK NO:	D9 2-1		SAMPLE DATE:	7/21/2010
s	TOCKPILE N	0:	BLO	CK PARAMETERS:	Paint Filter Test, pH
(X (ile Descriptio) Soil	() Cloudy () R n (Check all that apply) (Concrete, Asphalf	S t, etc)	(×) v	Dry Noist
1. Sketc 2. Scree 3. Provid	ch Stockpile, Esta en Stockpile with de a Sketch of th ct Samples, Recc	PID and Record GPS (e Stockpile, indicate no ord ALL Data, Prepare	cribe Soil Coordinate orth, and s COC, Col	, and Locate Sample Location es for selected sample location show PID readings and Sampl unt Bottles.	s. ns. e Stations.
	C	Designate Sample Loo	cations o	n the Sketch with Reference SAMPLE DA1	ι Letter. ΓΑ
	D9 2-1		<u>A</u>	CGMN-ESC-D9201PF	
N	/			Sample Time: Sample Parameters: Sampled By:	8:35 Paint Filter / pH R. McLoughlin, W. Westle
				Sample Time: Sample Parameters: Sampled By:	
				Sample Time: Sample Parameters: Sampled By:	
				Sample Time:	
	Composite Locati	on for "A" Sample		Sample Parameters: Sampled By: 	

Paramuters: B (Benzene); X (Total Xylenes); T (Toluene); P (PCBs); PCE (Tetrachloroethylene);

BLOCK NO:	D9 2-2	SAMPLE DATE:7/21/2010				
STOCKPILE NO:	<u> </u>	OCK PARAMETERS: Paint Filter Test, pH				
Screen Stockpile with PID an Provide a Sketch of the Stock Collect Samples, Record ALL	eck all that apply) crete, Asphalt, etc) imensions, Describe Si d Record GPS Coordin cpile, indicate north, and . Data, Prepare COC, C	() V Odor: Strong () M oil, and Locate Sample Locations nates for selected sample location d show PID readings and Sample	Dry Noist Vet Aild () None (X) s. s. s. e Stations.			
		SAMPLE DAT	A			
D9 2-2	<u>A</u>	CGMN-ESC-D9202PF	1 <u>A-0-100721</u>			
N		Sample Time: Sampled By: Sampled By: Sample Time: Sample Parameters: Sampled By:	8:40 Paint Filter / pH R. McLoughlin, W. Westley			
X Composite Location for "		Sample Time Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:				

BLOCK NO	: <u>D9 2-3</u>	SAMPLE DATE: 7/21/2010
STOCKPILE	NO:	BLOCK PARAMETERS: Paint Filter Test, pH
Stockpile Descript (X) Soil	tion (Check all that apply) ris (Concrete, Asphalt,	ain/Snow () Windy () TEMP.: 72 °F Soil Moisture: () Dry (X) Moist etc) () Wet Odor: Strong () Mild () None (X)
 Sketch Stockpile, E Screen Stockpile with Provide a Sketch of 	ith PID and Record GPS Control of the Stockpile, indicate nor	ribe Soil, and Locate Sample Locations. coordinates for selected sample locations. rth, and show PID readings and Sample Stations.
. Collect Samples, R	ecord ALL Data, Prepare C Designate Sample Loca	ations on the Sketch with Reference Letter.
0022		SAMPLE DATA A CGMN-ESC-D9203PF1A-0-100721
D9 2-3		A CGMN-ESC-D9203PF1A-0-100721
		Sample Time: 8:45 Sample Parameters: Paint Filter / pH Sampled By: R McLoughlin, W. Westle Sample Time: Sample Parameters: Sampled By Sample Parameters: Sampled By Sample Parameters: Sample Time: Sample Parameters: Sample Parameters: Sample Parameters: Sample Parameters: Sample Parameters:
	ation for "A" Sample	Sampled By: Sample Time: Sample Parameters: Sampled By
RINSATE SAMPLE:	- <u></u>	from

,

BLOCK N	D:	D9 2-4	_	SAMPLE DATE:	7/21/2010
STOCKPIL	E NO:	- 	BLC	CK PARAMETERS:	Paint Filter Test, pH
	bris (Con		S	w()Windy() TEN foil Moisture: () D () N (X)V)ry Noist
() Mfg. Deb (X) Staining	115		c	Odor: Strong () N	Aild () None (X)
Sketch Stockpile, Screen Stockpile	with PID ar of the Stoc Record AL	nd Record GPS kpile, indicate n L Data, Prepare	Coordinat orth, and s COC, Co	, and Locate Sample, Locations es for selected sample location show PID readings and Sample unt Bottles.	ns. e Stations.
	Desigr	nate Sample Lo	cations o	n the Sketch with Reference SAMPLE DA1	A A A A A A A A A A A A A A A A A A A
D9 2-4			<u>A</u>	CGMN-ESC-D9204PF	1A-0-100721
N				Sample Time: Sample Parameters: Sampled By:	8:48 Paint Filter / pH R. McLoughlin, W. Westley
			•	Sample Time:	
	X X X X		••	Sample Parameters: Sampled By:	
				Sample Time: Sample Parameters:	
	, , , , , , , , , , , , , , , , , , ,			Sampled By:	ـــــــــــــــــــــــــــــــــــــ
🗙 Composite Lo	ocation for	"A" Sample		Sample ⊺ime: Sample Parameters. Sampled By:	
INSATE SAMPLE:				from	

Paramotors: B (Benzene); X (Total Xylenes); T (Toluene); P (PCBs); PCE (Tetrachloroethylene):

BLOCK NO: D9 2-5	SAMPLE DATE: 7/21/2010
STOCKPILE NO: BL	OCK PARAMETERS: Paint Filter Test, pH
Stockpile Description (Check all that apply) (X) Soil () C&D Debris (Concrete, Asphalt, etc) () Mfg. Debris	now () Windy (; TEMP.: 72 °F Soil Moisture: () Dry () Moist (X) Wet
(X) Staining	Odor: Strong () Mild () None (X)
 Sketch Stockpile, Establish Dimensions, Describe S Screen Stockpile with PID and Record GPS Coordin 	
 Provide a Sketch of the Stockpile, indicate north, and 	
4. Collect Samples, Record ALL Data, Prepare COC, C	
Designate Sample Locations	on the Sketch with Reference Letter. SAMPLE DATA
D9 2-5	
1 N 232-3	CGMN-ESC-D9205PF1A-DB-100721
*	Sample Time: 8:52
	Sample Parameters: Paint Filter / pH
XX	Sampled By: R. McLoughlin, W. Westle
······	
······································	4221-1224-12-14-14-14-14-14-14-14-14-14-14-14-14-14-
	Sample Time:
	Sample Parameters:
	Sampled By:
	Sample Timer
	Sample Parameters:Sampled By:
····· • • • • • • • • • • • • • • • • •	
	Sample Time:
	Sample Parameters:
X Composite Location for "A" Sample	Sampled By:
	fram
RINSATE SAMPLE: arameters: B (Benzene); X (Total Xylenes); T (Toluene): P (PC	from

	TOCKPILE N			DCK PARAMETERS:	Paint Filter Test, pH
(X (X	il <mark>e Descriptio</mark> r) Soil) Cloudy () F n (Check all that apply) (Concrete, Asphal	Ş	ow()Windy() TEM Soil Moisture: ()D (X)M ()V	hoist
<u>(X</u>) Staining			and a second	fild () None (X)
I. Scree	n Stock <mark>pile with</mark> F le a Sketch of the	PID and Record GPS	Coordina orth, and	I, and Locate Sample Locations tes for selected sample location show PID readings and Sample	IS .
				on the Sketch with Reference	
	D9 2-6		А	SAMPLE DAT CGMN-ESC-D9206PF1	
i N				Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:	8:56 Paint Filter / pH R. McLoughlin, W. Westley
X C	omposite Location	n for "A" Sample		Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:	
X 0		n for "A" Sample			
NSATE	SAMPLE:			from	

BLOCK NO:	D9 2-7	SAMPLE DATE:	7/21/2010
STOCKPILE NO:	BL(DCK PARAMETERS:	Paint Filter Test, pH
Weather: Clear (X) Cloud Stockpile Description (Check (X) Soil (X) C&D Debris (Concre (X) Mfg. Debris (X) Staining 1. Sketch Stockpile. Establish Dime	all that apply) te, Asphalt, etc)		ry loist /et lild () None (_X)
2. Screen Stockpile with PID and R	ecord GPS Coordina	tes for selected sample location	Ş.
 Provide a Sketch of the Stockpile Collect Samples, Record ALL Data 			Stations.
		on the Sketch with Reference SAMPLE DAT	
D9 2-7	Α	CGMN-ESC-D9207PF1	
		Sample Time: Sample Parameters: Sampled By: Sample Time Sample Parameters. Sampled By:	9:00 Paint Filter / pH R. McLoughlin, W. Westle
X Composite Location for "A"		Sample Time: Sample Parameters: Sampled By: Sample Time. Sample Parameters. Sampled By:	
RINSATE SAMPLE:	n na an haranna dale na degan a sua ana da da da da da	from	

B (Benzene); X (Total Xylenes); T (Toluene); P (PCBs); () erachioroetnyii ers: ¢}.

STOCKPILE NO: Neather: Clear (X) Cloudy (Stockpile Description (Check all that (X) Soil () C&D Debris (Concrete, A () Mfg. Debris (X) Staining Sketch Stockpile, Establish Dimensio Screen Stockpile with PID and Record Provide a Sketch of the Stockpile, ind Collect Samples, Record ALL Data, F) Rain/Sno at apply) S Asphalt, etc) (ns, Describe Soil	DCK PARAMETERS: Paint Filter Test, pH Dw () Windy () TEMP.: 72 °F Soil Moisture: () Dry (X) Moist () Wet Odor: Strong () Mild () None (X) II, and Locate Sample Locations. Output Output
Stockpile Description (Check all that (X) Soil (Check all that () C&D Debris (Concrete, All (Check all that () C&D Debris (Concrete, All (Check all that () Mfg. Debris (Check all that () Mfg. Debris (Check all that () Mfg. Debris (Check all that () Staining (Check all that Sketch Stockpile, Establish Dimension Screen Stockpile with PID and Record Provide a Sketch of the Stockpile, indicated that the Stockpile, indited that the Stockpile, indicated that the Sto	at apply) 5 Asphalt, etc) ns, Describe Soil	Soil Moisture: () Dry (X) Moist () Wet Odor: Strong () Mild () None (X)
 Sketch Stockpile, Establish Dimensio Screen Stockpile with PID and Record Provide a Sketch of the Stockpile, inc 	ns, Describe Soi	
3. Provide a Sketch of the Stockpile, inc	d GPS Coordinal	
	licate north, and Prepare COC, Co	show PID readings and Sample Stations.
		SAMPLE DATA
D9 2-8	<u>A</u>	CGMN-ESC-D9208PF1A-0-100721
		Sample Time: 9:04 Sample Parameters: Puint Filter / pH Sampled By: R. McLoughlin, W. Westle Sample Time:
		Sample Time: Sample Parameters: Sampled By.
Composite Location for "A" Sam	ple	Sample Time: Sample Parameters: Sampled By:
INSATE SAMPLE:		from

	BLOCK NO:	D	9 2-9		SAMPLE DATE:	7/21/2010
S	TOCKPILE N	0:	-	BLO	CK PARAMETERS:	Paint Filter Test, pH
Stockp (X ((X I. Sketo		n (Check all th (Concrete, blish Dimensi	nat apply) Asphalt, e	Setc) Ope Soil,	dor: Strong () N and Locate Sample Location	Dry Moist Vet Mild () None (_X) s.
					es for selected sample location how PID readings and Sampl	
	ct Samples, Reco	ord ALL Data,	Prepare CO	C, Cou	int Bottles.	
	D9 2-9	esignate Sa	nple Locati	ions or A	the Sketch with Reference SAMPLE DAT CGMN-ESC D9209PF	Γ A
Î N					Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:	9:09 Paint Filter / pH R. McLoughlin, W. Westle
					Sample Time: Sample Parameters. Sampled By:	
X	Composite Locati				Sample Time: Sample Parameters: Sampled By:	
INSATE	SAMPLE:				from	

BLOCK NO: D9 2-	2	SAMPLE DATE:	7/26/2010
STOCKPILE NO: 001	BLO	CK PARAMETERS:	PCBs
Weather: Clear (✗) Cloudy (Stockpile Description (Check all that and (Check all that and (X)) Soil () C&D Debris (Concrete, Asp. () Mfg. Debris (Concrete, Asp. () Mfg. Debris () Staining I. Sketch Stockpile, Establish Dimensions,	ohalt, etc) O	oil Moisture: (🗙) E () N () V dor: Strong () N	Λoist Vet Λild())None(★)
2. Screen Stockpile with PID and Record G	PS Coordinate	es for selected sample location	ns.
 Provide a Sketch of the Stockpile, indica Collect Samples, Record ALL Data, Prej 			e Stations.
		the Sketch with Reference SAMPLE DA	
D9 2-2 001-1	A	CGMN-ESC-D920200	
	N 2 –	Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sample By:	11:39 PCBs D. Armstrong/W. Westley
N D9 2-2 001-2		Sample Time: Sample Parameters: Sampled By:	
Headspace Readings (ppm) ه ۲ Composite Location for PCBs	▲	Sample Time: Sample Parameters: Sampled By:	······
INSATE SAMPLE:		from	

	BLOCK NO:	D9 2-2	SAMPLE DATE:	7/26/2010
ŝ	STOCKPILE NO:	002 BL	OCK PARAMETERS: _	PCBs
Stockp (X ((L. Sketo S. Provid) Mfg. Debris) Staining ch Stockpile, Establish I en Stockpile with PID ar de a Sketch of the Stoc	heck all that apply) Icrete, Asphalt, etc) Dimensions, Describe So Ind Record GPS Coordina	Soll Moisture: (X) E () N () V Odor: Strong () N il, and Locate Sample Location ates for selected sample location show PID readings and Sample	Noist Vet Aild () None (X) s. ns.
- <u></u>			on the Sketch with Reference	
	D9 2-2 002	A	SAMPLE DAT CGMN-ESC-D9202002	
ĨN			Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:	11:33 PCBs D. Armstrong/W. Westley
-H4 X C4	eadspace Readinge		Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sample By:	
NSAIE	SAMPLE: : B (Benzene); X (Total	Xylenes); T (Toluene); P (PCI	from	

BLOCK NO:	D9 2-7		SAMPLE DATE:	7/30/2010
STOCKPILE NO	001	BLO	CK PARAMETERS: _	PCB/TCLP Benzene/pH
() Mfg. Debris) Cloudy (X) R (Check all that apply) Concrete, Asphalt,	Setc)	bil Moisture: ()E (X) N ()V	Dry Aoist Vet
Screen Stockpile with PI	D and Record GPS C Stockpile, indicate nor	ribe Soil, oordinate th, and st	and Locate Sample Location s for selected sample location now PID readings and Sampl	ns.
De	signate Sample Loca	ations on	the Sketch with Reference SAMPLE DAT	
N D9 2-7 001-1		<u> </u>	CGMN-ESC-D920700 CGMN-ESC-D920700 Sample Time: Sampled By: Sampled By: Sample Time: Sample Parameters: Sample Parameters:	
Composite Location	on for TCLP /PCS		Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters:	



	BLOCK NO:	D9 2-7	SAMPLE DATE: 7/30/2010	
S	STOCKPILE NO:	002 E	BLOCK PARAMETERS: PCB/TCLP Benzene/	'pH
(X ((ile Description (C)) Soil) C&D Debris (Cor) Mfg. Debris) Staining	heck all that apply)	/Snow () Windy () TEMP.: 72.2 °F Soil Moisture: () Dry (X) Moist) () Wet Odor: Strong (X) Mild () None (Soil, and Locate Sample Locations.)
			inates for selected sample locations. nd show PID readings and Sample Stations.	
	ct Samples, Record AL	L Data, Prepare COC,	Count Bottles.	
	Desigi	nate Sample Location	is on the Sketch with Reference Letter. SAMPLE DATA	
	D9 2-7 002-1		CGMN-ESC-D9207002A-0-100730	
ÎN		*)-	Sample Time: 12:21 Sample Parameters: PCB/TCLP Benzene/p Sampled By: D. Armstrong	H
∱ N	D9 2-7 002-2		Sample Time: Sample Parameters: Sampled By:	
			Sample Time: Sample Parameters: Sampled By:	
* c	omposite Location	for TCLP / PCBs	Sample Time: Sample Parameters: Sampled By:	
	SAMPLE:		from	

BLOCK NO: D9 2-9	SAMPLE DATE: 7/30/2010
STOCKPILE NO: 001 E	BLOCK PARAMETERS: PCB/TCLP Benzene
Weather: Clear () Cloudy (X) Rain. Stockpile Description (Check all that apply) (X) Soil (Check all that apply) () C&D Debris (Concrete, Asphalt, etc. () Mfg. Debris () Mfg. Debris () Staining Sketch Stockpile, Establish Dimensions, Describe Screen Stockpile with PID and Record GPS Coord Provide a Sketch of the Stockpile, indicate north, a Collect Samples, Record ALL Data, Prepare COC,	Soil Moisture: (X) Dry () Moist () Wet Odor: Strong (X) Mild () None () Soil, and Locate Sample Locations. inates for selected sample locations. ind show PID readings and Sample Stations. Count Bottles.
Designate Sample Location	is on the Sketch with Reference Letter. SAMPLE DATA
D9 2-9 001-1	CGMN-ESC-D9209001A-0-100730
	Sample Time:11:57Sample Parameters:PCB/TCLP BenzeneSampled By:D. Armstrong
D9 2-9 001-2	Sample Time: Sample Parameters: Sampled By:
	Sample Time: Sample Parameters: Sampled By:
Composite Location for TCLP/PCSs	Sample Time: Sample Parameters: Sampled By:
INSATE SAMPLE:	from

	BLOCK NO:	D9 2-9	SAMPLE DATE:	7/30/2010
\$	STOCKPILE NO:	B	LOCK PARAMETERS: _	PCB/TCLP Benzene
(X ((1. Sketc 2. Scree 3. Provi	bile Description (c)) Soil) C&D Debris (Cor) Mfg. Debris) Staining ch Stockpile, Establish en Stockpile with PID a ide a Sketch of the Stoc	nd Record GPS Coordi ckpile, indicate north, ar	Soil Moisture: (X) [()N ()V Odor: Strong (X) [Soil, and Locate Sample Location nates for selected sample location nates for selected sample location ad show PID readings and Sampl	Moist Wet Mild (<u>) None ()</u> s. ns.
I. Colle		L Data, Prepare COC,	Count Bottles. s on the Sketch with Reference	latter
			SAMPLE DAT	ΓA
↑ "ı	D9 2-9 002-1	<u> </u>	CGMN-ESC-D9209002	2A-0-100730
[`N		*	Sample Time: Sample Parameters: Sampled By:	12:04 PCB/TCLP Benzene D. Armstrong
	D9 2-9 002-2	*/-	Sample Time: Sample Parameters: Sampled By:	
Î N		*	Sample Time: Sample Parameters: Sampled By:	
<u></u>		for TCLP/PCBs	Sample Time: Sample Parameters: Sampled By:	
NSATE	SAMPLE:		from	

BLOCK NO:	D9 1-9	SAMPLE DATE: 8/2/2010	
STOCKPILE NO:	<u> 001 </u> E	BLOCK PARAMETERS: TCLP VOCs (Benzene & PC	CE)/pF
Stockpile Description ((X) Soil () C&D Debris (Con () Mfg. Debris () Staining Sketch Stockpile, Establish Screen Stockpile with PID a Provide a Sketch of the Stor Collect Samples, Record Al	Check all that apply) ncrete, Asphalt, etc Dimensions, Describe and Record GPS Coord ckpile, indicate north, a L Data, Prepare COC,	Odor: Strong (X) Mild () None (Soil, and Locate Sample Locations. inates for selected sample locations. nd show PID readings and Sample Stations. Count Bottles.)
Desig	nate Sample Location	s on the Sketch with Reference Letter. SAMPLE DATA	
D9 1-9 001-1			
N D9 1-9 001-2 N		Sample Time: 12:01 Sample Parameters: TCLP VOCS (Benzene & Sampled By: D. Armstrong E CGMN-ESC-D9109001E-0-100802 CGMN-ESC-D9109001E-DB-100802 Sample Time: 12:07 Sample Parameters: TCLP VOCS (Benzene & PC Sample By: D. Armstrong MS/MSD collected from sample location.	
		Sample Time: Sample Parameters: Sampled By:	
Composite Location for " Composite Location for "	•	Sample Time: Sample Parameters: Sampled By:	
	· · · · · · · · · · · · · · · · · · ·		

BLOCK NO:	D9 1-9	SAMPLE DATE:	8/2/2010
STOCKPILE NO:	<u> 002 BL</u>	OCK PARAMETERS: _	TCLP VOCs (Benzene & PCE)/ph
	crete, Asphalt, etc)	Soil Moisture: (X)E ()N ()V	
		il, and Locate Sample Location	
		ates for selected sample location	
		show PID readings and Sampl	e Stations.
4. Collect Samples, Record ALL			
Designa	ate Sample Locations	on the Sketch with Reference SAMPLE DAT	
D9 1-9 002-1	D	CGMN-ESC-D9109002	
1 N		30mm-200-23103001	
		Sample Time: Sample Parameters: Sampled By:	12:12 TCLP VOCS (Benzene & PCE)/pF D. Armstrong
		CGMN-ESC-D9109002	2E-0-100802
D9 1-9 002-2		Sample Time: Sample Parameters: Sampled By:	12:16 TCLP VOCS (Benzene & PCE D. Armstrong
		Sample Time: Sample Parameters: Sampled By:	
Composite Location for "D Composite Location for "E	-	Sample Time: Sample Parameters: Sampled By:	
INSATE SAMPLE:		from	

BLOCK NO: D9 2-4	SAMPLE DATE: 8/2/2010
STOCKPILE NO: 001 E	BLOCK PARAMETERS: PCBs
 Weather: Clear () Cloudy (X) Rain Stockpile Description (Check all that apply) (X) Soil () C&D Debris (Concrete, Asphalt, etc. () Mfg. Debris () Staining 1. Sketch Stockpile, Establish Dimensions, Describe 2. Screen Stockpile with PID and Record GPS Coord 3. Provide a Sketch of the Stockpile, indicate north, a 4. Collect Samples, Record ALL Data, Prepare COC, 	Soil Moisture: (X) Dry () Moist () Wet Odor: Strong () Mild (X) None () Soil, and Locate Sample Locations. linates for selected sample locations. nd show PID readings and Sample Stations. Count Bottles.
Designate Sample Location	is on the Sketch with Reference Letter. SAMPLE DATA
↑ N D9 2-4 001-1	CGMN-ESC-D9204001A-0-100802
↑ N	Sample Time: 11:55 Sample Parameters: PCBs Sampled By: D. Armstrong Sample Time: Sample Parameters: Sampled By: Sample Parameters: Sampled By: Sample Parameters: Sample Time: Sample Parameters: Sample By: Sample Parameters: Sample By: Sample Parameters: Sample Time: Sample Parameters: Sample Time: Sample Parameters: Sample Parameters: Sample Parameters: Sample By: Sample Parameters:
Composite Location for PCBs.	Sample Time: Sample Parameters: Sampled By:
INSATE SAMPLE:	from

BLOC	K NO:	D924 2.7	SAMPLE DATE:	8/2/2010
STOCK	(PILE NO:	BLO	CK PARAMETERS: _	TCLP VOC (Benzene)/PCB
Stockpile De (X)Soil ()C&D ()Mfg.	scription (c Debris (Con Debris	crete, Asphalt, etc)	oil Moisture: (X) [()N ()V	
() Stair				Mild () None ()
 Screen Stock Provide a Ski 	pile with PID ar etch of the Stoc les, Record ALI	nd Record GPS Coordinate kpile, indicate north, and s - Data, Prepare COC, Cou		ns. e Stations.
	Design	ate Sample Locations or	the Sketch with Reference	
D9 2	-7 003	A	SAMPLE DAT CGMN-ESC-D9207003	
	*	*	Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters:	<u>11:46</u> TCLP VOCs (Benzene)/PCBs D. Armstrong
			Sampled By:	
			Sample Time. Sample Parameters: Sampled By:	
*Composite	Eccation for TC	LP VOCs & PCBs.	Sample Time: Sample Parameters: Sampled By:	
NSATE SAMPL	E: [`]		from	

BLOCK NO: D9 2-4	SAMPLE DATE: 8/4/2010
STOCKPILE NO: 002 BL	OCK PARAMETERS: PCBs
Weather: Clear () Cloudy (X) Rain/Si Stockpile Description (Check all that apply) (X) Soil (X) C&D Debris (Concrete, Asphalt, etc) () Mfg. Debris () Staining	now () Windy () TEMP.: 71.0 ^o F Soil Moisture: (X) Dry () Moist () Wet Odor: Strong () Mild () None (X)
 Sketch Stockpile, Establish Dimensions, Describe Sc Screen Stockpile with PID and Record GPS Coordina Provide a Sketch of the Stockpile, indicate north, and Collect Samples, Record ALL Data, Prepare COC, C 	bil, and Locate Sample Locations. ates for selected sample locations. I show PID readings and Sample Stations. ount Bottles.
	on the Sketch with Reference Letter. SAMPLE DATA
↑ N D9 2-4 002-1 ★ D9 2-4 002-2 D9 2-4 002-2	CGMN-ESC-D9204002A-0-100804 Sample Time: 8:00 Sample Parameters: PCBs Sampled By: D. Armstrong Sample Time: Sample Parameters: Sample Parameters: Sample Parameters: Sample By:
Composite Location for PCB	Sample Time: Sampled By: Sample Time: Sample Parameters: Sample By:
	¢
INSATE SAMPLE: rameters: B (Benzene): X (Total Xvienes): T (Toluene): P (PC)	from

4

BLOCK NO:	D9 2-4	SAMPLE DATE: 8/4/2010
STOCKPILE NO:	003E	BLOCK PARAMETERS: PCBs
Stockpile Description ((X) Soil () C&D Debris (Col () Mfg. Debris	Cloudy (X) Rain/ Check all that apply) Increte, Asphalt, etc	
() Staining Sketch Stockpile, Establish Screen Stockpile with PID a	Dimensions, Describe	Odor: Strong () Mild () None (X) Soil, and Locate Sample Locations. inates for selected sample locations.
Provide a Sketch of the Store Collect Samples, Record AL	ckpile, indicate north, a L Data, Prepare COC,	nd show PID readings and Sample Stations. Count Bottles.
Desig	nate Sample Location	is on the Sketch with Reference Letter. SAMPLE DATA
D9 2-4 003-1		CGMN-ESC-D9204003A-0-100804
		Sample Time: 8:07 Sample Parameters: PCBs Sampled By: D. Armstrong **MS/MSD collected at location**
D9 2-4 003-2	*/ -	Sample Time: Sample Parameters: Sampled By:
	*) -	Sample Time: Sample Parameters: Sampled By:
Composite Location	or PCB	Sample Time: Sample Parameters: Sampled By:
NSATE SAMPLE:	·····	from

	BLOCK NO: D9 3-1					1			SAMPLE DATE:8/5/2010							
	STOCKPILE NO: N/A BLO				_	BLC	OCK PARAMETERS: Paint Filter / pH									
Sto 1. 2. 3.	Weather: Clear (X) Cloudy () Rain/Snot Stockpile Description (Check all that apply) (X) Soil () C&D Debris (Concrete, Asphalt, etc) () Mfg. Debris () Staining () Staining C 1. Sketch Stockpile, Establish Dimensions, Describe Soil, Coordinate 2. Screen Stockpile with PID and Record GPS Coordinate 3. Provide a Sketch of the Stockpile, indicate north, and stockpile								all th te, , ensic ecol	Asp ons, rd G	Dec Dec PS	It, et scribe Coor orth,	Odor: Strong () Mild () None () Soil, and Locate Sample Locations. nates for selected sample locations. nd show PID readings and Sample Stations.			
														n the Sketch with Reference		
		D) 3.	-1	Ĩ	Ĩ	1		1				Α	SAMPLE DA CGMN-ESC-D9301PF		
									*					Sample Time: Sampled By: Sampled By: Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Time: Sample Parameters: Sample Parameters: Sample By:	Image: Paint Filter / pH D. Armstrong / W. Westley	
	X- Cor	nple	site									>\		Sample Time: Sample Parameters: Sampled By:		
INS	SATE S	SAM	PL	E:										from		

BLC	OCK NO:			8/5/2010
STO	CKPILE NO:	N/A BL	OCK PARAMETERS:	Paint Filter / pH
(★)So ()C8	Description (Chi		Soil Moisture: (×)D ()M	I P.: <u>73.9</u>° F Dry Moist Vet
()St	aining		and a second	1ild(🗙) None()
 Screen Sto Provide a 	ockpile with PID and Sketch of the Stock mples, Record ALL	d Record GPS Coordina pile, indicate north, and Data, Prepare COC, Co		ns. e Stations.
	Designa	te Sample Locations	on the Sketch with Reference SAMPLE DAT	Letter. A
D	9 3-2	<u>A</u>	CGMN-ESC-D9302PF	
			Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:	<u>)</u> Paint Filter / pH D. Armstrong / W. Westley
			Sample Time: Sample Parameters: Sampled By:	
	site Location for Pa	ading Location PA	Sample Time: Sample Parameters: Sampled By:	
RINSATE SAM			from	

		BLOC	K N	10:				D	9 3-	3			SAMPLE DATE:	8/5/2010
	S	тосі	KPIL	.E N	10:			1	N/A			BLC	DCK PARAMETERS:	Paint Filter / pH
St.	(X ((Sketc Scree Provid	ile De) Soil) C&E) Mfg.) Stair h Stock n Stock	De De ning pile, pile	bris bris Esta with of th Reco	ablis PID e Si ord /	(Ch OII) ih D I an tock	lime d R opile	all the, enside co e, in	AS ons ord (dica Pre	oha De PS ite n	lt, e scrit Coc orth	etc) (pe Soi prdina , and (), Co	Soil Moisture: (X) Di () M () W Ddor: Strong (X) M I, and Locate Sample Locations tes for selected sample locations show PID readings and Sample unt Bottles.	oist /et ild () None () s. Stations.
				Ι	Desi	igna	ate	Sar	npl	a Lo	cati	ons c	n the Sketch with Reference SAMPLE DAT	
↑	N	D9 3	-3		•••••							<u>A</u>	CGMN-ESC-D9303PF1 CGMN-ESC-D9303PF1	A-0-100805
•							*			•			Sample Time: Sample Parameters: Sampled By:	Paint Filter / pH D. Armstrong / W. Westley
											*****	*******		
								****	J		**********		Sample Time: Sample Parameters: Sampled By:	
								*******			******		••••••••••••••••••••••••••••••••••••••	
													Sample Time: Sample Parameters: Sampled By:	
	*co	nzene (mposite mple	-					-			5LA	•	Sample Time: Sample Parameters: Sampled By:	
INS	SATE	SAMPL	E:	-									from	

		BLOCK NO:		D9 3-4	4	SAMPLE DATE:	8/5/2010
	S	TOCKPILE	NO:	N/A	BL	OCK PARAMETERS:	Paint Filter / pH
(((× ×	Ile Descripti) Soil) C&D Debri) Mfg. Debris) Staining	on (Cond s (Cond s	eck all that ap rete, Asp	^{piy)} halt, etc)	Soll Moisture: (<i>解</i> ()) (メ)) ())	Moist Wet Mild () None ()
2. So	cree	n Stockpile with	PID and	Record G	PS Coordina	ates for selected sample locatio	ns.
3. Pr I. Co		t Samples, Rec	ord ALL	Data, Prep	are COC, C	I show PID readings and Sampl ount Bottles.	
			Designa	te Sample	Locations	on the Sketch with Reference SAMPLE DA	e Letter. ΓΔ
↑ N		D9 3-4			<u> </u>	CGMN-ESC-D9304PF	
						Sample Time: Sample Parameters: Sampled By:	1131 Paint Filter / pH D. Armstrong / W. Westley
						Sample Time: Sample Parameters: Sampled By:	
					······		
						Sample Time: Sample Parameters: Sampled By:	
	Ben	zone Dräger Tr				Sample Time:	
*		nposite Locatio		-		Sample Parameters: Sampled By:	
		AMPLE:	· · · · · ·				

____ __ __ __ __

	BLOCK NO:	D9 3-6	SAMPLE DATE : 8/5/2010
	STOCKPILE NO:	<u> </u>	OCK PARAMETERS: Paint Filter / pH
Stoc (((1. Sk 2. Sc	kpile Description) Soil) C&D Debris (Co) Mfg. Debris) Staining ketch Stockpile, Establis creen Stockpile with PID	oncrete, Asphalt, etc) h Dimensions, Describe Soi and Record GPS Coordina	Soil Moisture: () Dry (×) Moist () Wet Odor: Strong (×) Mild () None () il, and Locate Sample Locations. tes for selected sample locations.
3. Pro 4. Co	ollect Samples, Record /	ALL Data, Prepare COC, Co	show PID readings and Sample Stations. bunt Bottles.
			on the Sketch with Reference Letter.
			SAMPLE DATA
1 N	D9 3-6	<u> </u>	CGMN-ESC-D9306PF1A-0-100805
			Sample Time: 112.7 Sample Parameters: Paint Filter / pH Sampled By: D. Armstrong / W. Westley Sample Time: Sample Parameters: Sample By: Sample Parameters: Sample By: Sample Parameters: Sample By: Sample Parameters: Sample By: Sample Parameters:
			Sample Time: Sample Parameters: Sampled By:
	Benzene Dräger Tube i	Reading Eucation DLA	Sample Time:
*	Composite Location for Sample		Sample Parameters:Sampled By:
	TE SAMPLE:		from

BLOCK NO:	D9 3-7	SAMPLE DATE: 8/5/2010
STOCKPILE NO:	. <u>N/A</u> E	BLOCK PARAMETERS: Paint Filter / pH
 () Mfg. Debris () Staining 1. Sketch Stockpile, Establis 2. Screen Stockpile with PIE 	(Check all that apply) Concrete, Asphalt, etc sh Dimensions, Describe D and Record GPS Coord	Odor: Strong (X) Mild () None () Soil, and Locate Sample Locations. dinates for selected sample locations.
 Provide a Sketch of the S Collect Samples, Record . 		and show PID readings and Sample Stations. , Count Bottles.
Des	ignate Sample Location	ns on the Sketch with Reference Letter. SAMPLE DATA
D9 3-7		A CGMN-ESC-D9307PF1A-0-100805
		Sample Time: In24 Sample Parameters: Paint Filter / pH Sampled By: D. Armstrong / W. Westley Sample Time: Sample Parameters: Sample By: Sample Parameters:
		Sample Time: Sample Parameters: Sampled By:
Benzene Dräger Tube- ★ Composite Location for Sample	Reading Location- 714 r Paint Filer/pH	Sample Time: Sample Parameters: Sampled By:
RINSATE SAMPLE:		from

BLOCK NO:	D9 3-1	SAMPLE DATE: 8/10/2010
STOCKPILE NO:	001	BLOCK PARAMETERS: P, TCLP VOC (Benzene Only
Stockpile Description (Ch (X) Soil () C&D Debris (Cond () Mfg. Debris	eck all that apply)	
 Screen Stockpile with PID an Provide a Sketch of the Stock Collect Samples, Record ALL 	d Record GPS Coo opile, indicate north . Data, Prepare CC	be Soil, and Locate Sample Locations. Fordinates for selected sample locations. h, and show PID readings and Sample Stations.
Design		SAMPLE DATA A CGMN-ESC-D9301001A-0-100810
↑ N ×		Sample Time: 8:45 Sample Parameters: P, TCLP VOC (Benzene) Sampled By: R. McLoughlin
D9 3-1 001-2		Sample Time: Sample Parameters: Sampled By:
		Sample Time: Sample Parameters: Sampled By:
Composite Location	for A Sample	Sample Time: Sample Parameters: Sampled By:
RINSATE SAMPLE:		from

	D9 3-1		SAMPLE DATE:	8/10/2010
STOCKPILE NO:	002	BLO	CK PARAMETERS:	P, TCLP VOC (Benzene Only)
	Cloudy(X)Ra ^{Check all that apply)} ncrete, Asphalt,	S	oil Moisture: ()D (X)N)ry
(X) Staining Sketch Stockpile, Establish Screen Stockpile with PID a Provide a Sketch of the Sto Collect Samples, Record A	and Record GPS C ockpile, indicate nor LL Data, Prepare C	ribe Soil oordinat th, and s COC, Col	, and Locate Sample Location es for selected sample location show PID readings and Sampl unt Bottles.	ns. e Stations.
Desig	inate Sample Loca	ations o	n the Sketch with Reference SAMPLE DA	Γ Α
D9 3-1 002-1		Α	CGMN-ESC-D930100	2A-0-100810
N D9 3-1 002-2			Sample Time: Sampled By: Sampled By: Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sample Parameters: Sample By:	8:53 P, TCLP VOC (Benzene) R. McLoughlin
Composite Locati	lon for A Sample		Sample Time: Sample Parameters: Sampled By:	
INSATE SAMPLE:			from	

BLC	OCK NO:	D9 3-1	SAMPLE DATE: 8/10/20	10
STO	CKPILE NO:	003	BLOCK PARAMETERS: P, TCLP VOC (Ben	zene Or
(X)S ()C	Description (Ch	eck all that apply)	· · · · · ·	
(x)s	taining		Odor: Strong (X) Mild () None	()
 Sketch St Screen St 	ockpile, Establish D lockpile with PID an	imensions, Descr d Record GPS Co	be Soil, and Locate Sample Locations. ordinates for selected sample locations.	
3. Provide a	Sketch of the Stock	kpile, indicate nort	h, and show PID readings and Sample Stations.	
4. Collect Sa	amples, Record ALL	Data, Prepare C	DC, Count Bottles. tions on the Sketch with Reference Letter.	
	Design	ate Sample Loca	SAMPLE DATA	
, D	9 3-1 003-1		A CGMN-ESC-D9301003A-0-100810	
Ϋ́Ν	9 3-1 003-2		Sample Time: 9:02 Sample Parameters: P, TCLP VOC (E Sampled By: R. McLoughlin Sample Time: Sample Parameters: Sample Parameters: Sample Parameters: Sampled By: Sample Parameters:	enzene
×	Composite Location	n for A Sample	Sample Time:	
 	AMPLE:		from	

BLOCK NO: DS	1-9	SAMPLE DATE:	8/11/2010
	01 BLOCK F	ARAMETERS:	VOC (PCE Only)
ather: Clear () Cloudy (ockpile Description (Check all th () Soil () C&D Debris (Concrete, () Mfg. Debris (X) Staining Sketch Stockpile, Establish Dimens Screen Stockpile with PID and Rec Provide a Sketch of the Stockpile, i	Asphalt, etc) Odor: ions, Describe Soil, and ord GPS Coordinates for ndicate north, and show	Locate Sample Locations selected sample location PID readings and Sample	y oist /et ld () None () s. s.
Designate Sa	mple Locations on the	Sketch with Reference SAMPLE DAT	A
D9 1-9 001-1	B C	GMN-ES-D9109001B	
N	S	ample Time: ample Parameters: ampled By:	9:40 VOC (PCE Only) D. Armstrong / R. McLoughlin
		GMN-ES-D9109001(GMN-ES-D9109001(C-0-100811 C-DB-100811
	S	ample Time: ample Parameters:	9:46 VOC (PCE Only) D. Armstrong / R. McLoughlin
D9 1-9 001-2		ampled By:	D. Antistiong / R. Mozougran
D9 1-9 001-2 X 2D-1 ren		ampled By: Sample Time: Sample Parameters:	
X Headspace Reading	(ppm)	ampled By: Sample Time:	
X 20-1 rm 283 -	(ppm)	ampled By: Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters:	

Parameters:

BLOCK NO:	D9 1-9		SAMPLE DATE:	8/11/2010
STOCKPILE NO:	002	BLOC	K PARAMETERS:	VOC (PCE Only)
Stockpile Description (cl (X) Soil () C&D Debris (Con () Mfg. Debris	crete, Asphalt,	So etc)	il Moisture: ()D (X)N ()V	ry loist Vet lild () None ()
	ad Decord GPS (Coordinate	s for selected sample location now PID readings and Sample	
in i minut Al	I Doto Dranara (coc cou	the Sketch with Reference	Letter.
Desig	late ognibie roo		SAMELL PA	
D9 1-9 002-1		B	CGMN-ES-D91090028	5-0-100011
ÎN Box 12	5 97 m		Sample Time: Sample Parameters: Sampled By:	9:42 VOC (PCE Only) D. Armstrong / R. McLoughlin
	<u>7.4 sta</u>	C	CGMN-ES-D9109002	-
D9 1-9 002-2			Sample Time: Sample Parameters: Sampled By:	9:49 VOC (PCE Only) D. Armstrong / R. McLoughlin
	18.9.9.			
	K 21.102m		Sample Time: Sample Parameters: Sampled By:	
X Headspace R • Sample Loca			Sample Time: Sample Parameters: Sampled By:	
RINSATE SAMPLE:			from	

Parameters:

PCE (Tetrachloroethylene)

BLOCK NO:	D9 3-7		SAMPLE DATE:	8/11/2010
STOCKPILE NO:	001	BLO		TCLP VOC (Benzene), TCLP Metals (Pb)
tockpile Description (CH (X) Soil () C&D Debris (Con () Mfg. Debris	crete, Asphalt, e	s tc) C	oil Moisture: () Di (X) Moisture: () Wi () Wi Odor: Strong(X) Mi	y pist et Id () None ()
Sketch Stockpile, Establish I Screen Stockpile with PID a Provide a Sketch of the Stoc	nd Record GPS Co kpile, indicate north	ordination, and s		Stations.
Design	late Sample Look			
D9 3-7 001-1		<u>A</u>	CGMN-ESC-D9307001	A-0-100811
N			CGMN-ESC-D9307001	9:58
			Sample Time: Sample Parameters:	P, TCLP VOC (Benzene), TCLP Metals (Pb)
*			Sampled By:	D. Armstrong / R. McLoughlin
D9 3-7 001-2	* /		Sample Time: Sample Parameters: Sampled By:	
			Sample Time: Sample Parameters: Sampled By:	
Composite Local	ion for A Sample		Sample Time: Sample Parameters: Sampled By:	
			from	
RINSATE SAMPLE:	(Lead); P (PCBs)		110111	

1

BLOCK NO:	D9 3-7	SAMPLE DATE: 8/-	11/2010
STOCKPILE NO:	002	BLOCK PARAMETERS: P, TCLP VOC (Benz	eane), TCLP Metals (Pb
Weather: Clear () Clo Stockpile Description (Che (X) Soil () C&D Debris (Conc () Mfg. Debris		Soil Moisture: () Dry (X) Moist () Wet	°F
(X) Staining	·····	Ouor. Ouorig(///	None ()
 Screen Stockpile with PID and Provide a Sketch of the Stock Provide a Sketch of the Stock 	d Record GPS C pile, indicate nor Data, Prenare C	e Soil, and Locate Sample Locations. rdinates for selected sample locations. and show PID readings and Sample Stations. C, Count Bottles.	
Designa	ate Sample Loc	ons on the Sketch with Reference Letter. SAMPLE DATA	
D9 3-7 002-1		A CGMN-ESC-D9307002A-0-10081	1
↑ N		Sample Time: 10:05	
		P, TCLP VO Sample Parameters: TCLP Metals Sampled By: D. Armstrong	
	<u> </u>		
D9 3-7 002-2		Sample Time: Sample Parameters: Sampled By:	
		Sample Time: Sample Parameters: Sampled By:	
★ Composite Locatio	n for A Sample	Sample Time: Sample Parameters: Sampled By:	
RINSATE SAMPLE:		from	

B	BLOCK NO:	D9 3-5		SAMPLE DATE:	8/12/2010
S 1	TOCKPILE NO:	001	BLO	CK PARAMETERS:	PCBs
(X) () () ()	le Description (cr) Soil) C&D Debris (Con) Mfg. Debris) Staining	eck all that apply) crete, Asphalt,	etc)	()V	Dry Noist Vet Mild () None ()
2. Screer 3. Provide	n Stockpile with PID and ie a Sketch of the Stock t Samples, Record ALI	id Record GPS C kpile, indicate nor _ Data, Prepare C	oordinate th, and s COC, Cou	and Locate Sample Locations as for selected sample location how PID readings and Sampl int Bottles. In the Sketch with Reference	ns. e Stations.
	Design	ate Sample Loca		SAMPLE DAT	ΓΑ
•	D9 3-5 001-1		<u> </u>	CGMN-ESC-D930500	1A-0-100812
N				Sample Time: Sample Parameters: Sampled By: **MS/MSD sa	16:28 PCBs R. McLoughlin / D. Armstrong amples collected**
† м	× D9 3-5 001-2	<u> </u>		Sample Time: Sample Parameters: Sampled By:	·
N				Sample Time: Sample Parameters: Sampled By:	
⊁ Co	omposite Location	for PCBs		Sample Time: Sample Parameters: Sampled By:	·
RINSATE	SAMPLE:			from	

	BLOCK NO:	D9 3-5		SAMPLE DATE:	8/12/2010
S	TOCKPILE NO:	002	BLOCK	PARAMETERS:	PCBs
•	er: Clear (X)C ile Description (C)) Soil)C&D Debris (Cor)Mfg. Debris	heck all that apply)	Soil	• • •	
() Staining		Odo		Mild () None ()
2. Scree 3. Provi	en Stockpile with PID a de a Sketch of the Stoo ct Samples, Record AL	nd Record GPS Co kpile, indicate nor L Data, Prepare C	oordinates fo th, and show OC, Count E	Locate Sample Location r selected sample location PID readings and Samp Bottles.	ins. le Stations.
	Desig	nate Sample Loca	itions on th	e Sketch with Reference SAMPLE DA	e Letter. TA
	D9 3-5 002-1		<u>A</u> C	GMN-ESC-D930500	
↑ N			` s	ample Time: ample Parameters: ampled By:	16:32 PCBs R. McLoughlin / D. Armstron
↑	D9 3-5 002-2	*	S	ample Time: ample Parameters: ampled By:	
N	*		S	ample Time: ample Parameters: ampled By:	
*(Composite Location	for PCBs	9	Sample Time: Sample Parameters: Sampled By:	
				Eucus	
RINSAT	E SAMPLE:	al Xylenes); T (Toluen		from	

BLOCK NO:	D9 3-5		SAMPLE DATE:	8/12/2010
STOCKPILE NO:	003	BLO	CK PARAMETERS:	PCBs
Weather: Clear (X) C Stockpile Description (C (X) Soil () C&D Debris (Cor () Mfg. Debris	check all that apply)	S	w()Windy() TEM oil Moisture: ()D (X)N ()V	iry
() Staining Sketch Stockpile, Establish Screen Stockpile with PID a Provide a Sketch of the Stoc	nd Record GPS C ckpile, indicate no	ribe Soil, oordinate th, and s	and Locate Sample Locations es for selected sample location show PID readings and Sample	าร.
4. Collect Samples, Record AL Desig	nate Sample Loc	ations o	n the Sketch with Reference SAMPLE DAT	Letter.
D9 3-5 003-1		<u>A</u>	CGMN-ESC-D9305003	
T N *			Sample Time: Sample Parameters: Sampled By:	16:36 PCBs R. McLoughlin / D. Armstrong
↑ N	*/		Sample Time: Sample Parameters: Sampled By:	
*	*)		Sample Time: Sample Parameters: Sampled By:	
Composite Location	n for PCBs		Sample Time: Sample Parameters: Sampled By:	
RINSATE SAMPLE:	<u></u>		from	

BL	OCK NO:	D9 3-5	SAMPLE DATE:	8/12/201 0
STO	OCKPILE NO:	004 BL	OCK PARAMETERS:	PCBs
(X)S ()O ()N ()S 1. Sketch S 2. Screen S 3. Provide a	C&D Debris (Cor Mfg. Debris Staining Stockpile, Establish Stockpile with PID a a Sketch of the Stor	check all that apply) norrete, Asphalt, etc) Dimensions, Describe So nd Record GPS Coordin	(X) N () V Odor: Strong(X) N bil, and Locate Sample Location ates for selected sample location d show PID readings and Sampl	Dry Moist Wet Mild (<u>) None ()</u> s. ns.
	Desig	nate Sample Locations	on the Sketch with Reference SAMPLE DAT	
, E	09 3-5 004	A	CGMN-ESC-D9305004	
N			Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:	16:38 PCBs R. McLoughlin / D. Armstrong
			Sample Time: Sample Parameters: Sampled By:	
∦Com	posite Location		Sample Time: Sample Parameters: Sampled By:	
INSATE SA	MPLE:		from	

Ê	BLOCK NO:	D9 3-6		SAMPLE DATE:	8/17/2010
S	TOCKPILE NO:	001	BLO	CK PARAMETERS:	PCBs, TCLP VOC (Benzene), TCLP Metals (Lead and Mercury)
(X) (le Description	(Check all that apply)		oil Moisture: ()D (X)N	ry
(X) I. Sketch 2. Screen 3. Provid	Staining Stockpile, Establish Stockpile with PID	and Record GPS C ockpile, indicate not	ribe Soil coordinat	, and Locate Sample Locations es for selected sample locatior show PID readings and Sample	IS.
	Desi	gnate Sample Loc	ations o	n the Sketch with Reference SAMPLE DAT	Letter. A
	D9 3-6 001-1		<u>A</u>	CGMN-ESC-D9306001	
ÎΝ				Sample Time:	16:22
				Sample Parameters: Sampled By:	P, TCLP VOC (Benzene), TCLP Metals (Pb & Hg) D. Armstrong / R. McLoughlin
	D9 3-6 001-2			Sample Time: Sample Parameters: Sampled By:	
				Sample Time: Sample Parameters:	
				Sampled By:	
>	🕻 Composite Locat	tion for A Sample		Sample Time: Sample Parameters: Sampled By:	
<u></u>					, , , , , , , , , , , , , , , , , , ,
RINSATE	SAMPLE:			from	

Parameters: B (Benzene); Pb (Lead); Hg (Mercury); P (PCBs)

	BLOCK NO:	D9 3-6		SAMPLE DATE:	8/17/2010
S	STOCKPILE NO:	002	BLO	CK PARAMETERS:	PCBs, TCLP VOC (Benzene), TCLP Metals (Lead and Mercury)
(X (nile Description (c) Soil) C&D Debris (Con) Mfg. Debris	neck all that apply)	etc)	bil Moisture: () [(X)M ()V	Dry Aoist Vet
1. Sketo 2. Screo 3. Provi	en Stockpile with PID an ide a Sketch of the Stoc	nd Record GPS C kpile, indicate nor	ribe Soil, oordinate th, and sl	and Locate Sample Location s for selected sample locatio now PID readings and Sampl	ns.
4. Colle	ect Samples, Record AL Desigr	L Data, Prepare C ate Sample Loca	OC, Countions or	the Sketch with Reference	e Letter.
	D9 3-6 002-1		А	SAMPLE DAT CGMN-ESC-D930600	
↑ N				Sample Time: Sample Parameters: Sampled By:	16:14 P, TCLP VOC (Benzene), TCLP Metals (Pb & Hg) D, Armstrong / R. McLoughlin
	D9 3-6 002-2			Sample Time: Sample Parameters: Sampled By:	
				Sample Time: Sample Parameters: Sampled By:	
	Composite Locatio	n for A Sample		Sample Time: Sample Parameters: Sampled By:	
RINSAT	E SAMPLE:			from	

BLOCK NO:	D9 3-6		SAMPLE DATE:	8/17/2010
STOCKPILE NO:	003	BLO	CK PARAMETERS:	PCBs, TCLP VOC (Benzene). TCLP Metals (Lead and Mercury)
Weather: Clear(X)Cl Stockpile Description (Cl (X)Soil ()C&D Debris (Con ()Mfg. Debris	neck all that apply)	_	oil Moisture: ()D (X)M	iry
(X) Staining 1. Sketch Stockpile, Establish [ribe Soil,	dor: Strong (X) M and Locate Sample Locations as for selected sample location	
 Provide a Sketch of the Stoc Collect Samples, Record AL 	kpile, indicate nor Data, Prepare C	th, and s COC, Coเ	how PID readings and Sample	e Stations.
			SAMPLE DAT	A
D9 3-6 003-1		<u> </u>	CGMN-ESC-D9306003	A-0-100017
			Sample Time:	16:15
			Sample Parameters:	P, TCLP VOC (Benzene), TCLP Metals (Pb & Hg)
			Sampled By:	D. Armstrong / R. McLoughlin
			Sample Time: Sample Parameters:	
D9 3-6 003-2			Sampled By:	
			Sample ⊺ime: Sample Parameters: Sampled By:	
× Composite Location	n for A Sample		Sample Time: Sample Parameters: Sampled By:	
RINSATE SAMPLE:			from	

Parameters: B (Benzene); Pb (Lead); Hg (Mercury); P (PCBs)

	BLOCK NO:	D9 3-3	SAMPLE DATE: 8/17/2010
S	TOCKPILE NO:	001	BLOCK PARAMETERS: PCBs, TCLP VOC (Benzene)
(X ((X 1. Sketc	ile Description (Ch) Soil) C&D Debris (Cond) Mfg. Debris) Staining ch Stockpile, Establish D	eck all that apply) crete, Asphalt, imensions, Desc	Odor: Strong (X) Mild () None () cribe Soil, and Locate Sample Locations.
3. Provi	en Stockpile with PID an de a Sketch of the Stock ct Samples, Record ALL	pile, indicate nor	Coordinates for selected sample locations. rth, and show PID readings and Sample Stations. COC. Count Bottles
4. Colle	Design:	ate Sample Loca	ations on the Sketch with Reference Letter.
•	D9 3-3 001-1		A CGMN-ESC-D9303001A-0-100817
[] N			Sample Time: 16:26
			Sample Parameters: P, TCLP VOC (Benzend Sampled By: D. Armstrong / R. McLoughlin
		/	Sample Time: Sample Parameters:
	D9 3-3 001-2		Sampled By:
			Sample Time:
		-/-	Sample Parameters: Sampled By:
	X Composite Location	for A Sample	Sample Time: Sample Parameters: Sampled By:
	E SAMPLE:		from

BLO	OCK NO:	D9 3-3		SAMPLE DATE:	8/17/2010
STO	OCKPILE NO:	002	BLO	CK PARAMETERS:	PCBs, TCLP VOC (Benzene)
(X)S ()C ()N (X)S Sketch S Screen S Provide a	C&D Debris (Con Afg. Debris Staining Stockpile, Establish I Stockpile with PID ar a Sketch of the Stoc Samples, Record AL	eck all that apply) crete, Asphalt, Dimensions, Desci of Record GPS Ca kpile, indicate nor Data, Prepare C	etc) ibe Soil, cordinate th, and s OC, Cor	oil Moisture: ()D (X)N ()W Odor: Strong(X)M and Locate Sample Locations es for selected sample locations show PID readings and Sample	ry loist Vet ild (<u>)</u> None (<u>)</u> s. s. s. e Stations.
	Design	ate Sample Loca	itions o	SAMPLE DAT	A
Ë	09 3-3 002-1		<u>A</u>	CGMN-ESC-D9303002	A-0-100817
N				Sample Time:	16:30
	1			Sample Parameters: Sampled By:	P, TCLP VOC (Benzene), D. Armstrong / R. McLoughlin
				Sample Time: Sample Parameters:	
.	09 3-3 002-2			Sampled By:	
				Sample Time:	
		7		Sample Parameters: Sampled By:	
×	Composite Locatio	n for A Sample		Sample Time: Sample Parameters: Sampled By:	
RINSATE S	AMPLE: B (Benzene); P (PC			from	

Veather: itockpile (X)S ()C ()N (X)S Sketch S Screen S Provide a Collect S	Description (cr soil C&D Debris (Con fig. Debris taining tockpile, Establish D tockpile with PID ar Sketch of the Stock amples, Record ALI	crete, Asphalt, Dimensions, Desc nd Record GPS C kpile, indicate not L Data, Prepare C	in/Snov S , etc) cribe Soli coordinat rth, and s COC, Co	Soil Moisture: () Dry (X) Moist () Wet Ddor: Strong (X) Mild () Non I, and Locate Sample Locations. tes for selected sample tocations. show PID readings and Sample Stations.	PF ne () C (Benzene)
itockpile (X)S ()C ()M (X)S Sketch S Screen S Provide a Collect S	Description (ch soil &D Debris (Con fig. Debris (taining tockpile, Establish D tockpile with PID ar a Sketch of the Stock amples, Record ALI Design	heck all that apply) crete, Asphalt, Dimensions, Desc nd Record GPS C kpile, Indicate not L Data, Prepare C	s etc) cribe Soli coordinat rth, and s COC, Co ations o	Soil Moisture: () Dry (X) Moist () Wet Ddor: Strong (X) Mild () Non I, and Locate Sample Locations. tes for selected sample Locations. show PID readings and Sample Stations. but Bottles. on the Sketch with Reference Letter. SAMPLE DATA CGMN-ESC-D9303003A-0-100819 CGMN-ESC-D9303003A-0B-100819 Sample Time: <u>11:35</u> Sample Parameters: <u>P, TCLP VOC</u>	ne () C (Benzene)
N	tockpile, Establish (itockpile with PID ar Sketch of the Stock amples, Record ALI Design	nd Record GPS C kpile, indicate not L Data, Prepare C	cribe Soil coordinat tth, and s COC, Co ations o	I, and Locate Sample Locations. tes for selected sample locations. show PID readings and Sample Stations. ount Bottles. on the Sketch with Reference Letter. SAMPLE DATA CGMN-ESC-D9303003A-0-100819 CGMN-ESC-D9303003A-DB-100819 Sample Time: <u>11:35</u> Sample Parameters: <u>P, TCLP VOC</u>	C (Benzene)
N	tockpile with PID ar Sketch of the Stoci amples, Record ALI Design	nd Record GPS C kpile, indicate not L Data, Prepare C	coordinat rth, and : COC, Co ations o	tes for selected sample locations. show PID readings and Sample Stations. ount Bottles. on the Sketch with Reference Letter. SAMPLE DATA CGMN-ESC-D9303003A-0-100819 CGMN-ESC-D9303003A-DB-100819 Sample Time: <u>11:35</u> Sample Parameters: <u>P, TCLP VOC</u>	C (Benzene)
N			<u>A</u>	CGMN-ESC-D9303003A-0-100819 CGMN-ESC-D9303003A-DB-100819 Sample Time: 11:35 Sample Parameters: P, TCLP VOI	C (Benzene)
N			<u> </u>	CGMN-ESC-D9303003A-DB-100819 Sample Time: 11:35 Sample Parameters: P, TCLP VOC	C (Benzene)
L 3000				Sample Parameters: P, TCLP VO	
	9 3-3 003-2			Sample Time:Sample Parameters:Sampled By:	
×-	Composite Location	for A Sample		Sampled By: Sample Time: Sample Parameters: Sampled By:	

Screen Stockpile with PID and Record GPS Coordinates for selected sample locations.	E	BLOCK NO:	D9 3-3		SAMPLE DATE:	8/19/2010
Viewer: Order at that apply) Soil Moisture: () Dry (X) Soil (X) Moist (X) Moist (X) Soil (X) Moist () Wet (X) Soil (X) Moist () Wet (X) Soil (X) Moist () Wet (X) Soil (X) Moist () Wet (X) Soil Odor: Strong (X) Mild () None () Statining Odor: Strong (X) Mild () None () Statining Odor: Strong (X) Mild () None () Statining Odor: Strong (X) Mild () None () Statining Odor: Strong (X) Mild () None () Statining Odor: Strong (X) Mild () None () Statining Odor: Strong (X) Mild () None () Statining Odor: Strong (X) Mild () None () Statining Odor: Statining None () Statining Odor: Statining None () Designate Sample Locations on the Statio with Reference Letter. Sample Time: Sample Parameters: Sample Parameters: Sample Parameters: Sample Parameters: Sample Parameters:	S	TOCKPILE NO:	004	BLC	CK PARAMETERS:	PCBs, TCLP VOC (Benzene)
Collect Samples, Record ALL Data, Prepare COC, Count Bottles. Designate Sample Locations on the Sketch with Reference Letter. SAMPLE DATA D9 3-3 004-1 A CGMN-ESC-D9303004A-0-100819 Sample Time: Sample Parameters: P. TCLP.VOC (Benzene), Sample By: D9 3-3 004-2 Sample Time: Sample Parameters:	Stockpi (X) ((X) (X) Sketcl 2. Scree	ile Description (cr) Soil) C&D Debris (Con) Mfg. Debris) Staining h Stockpile, Establish E in Stockpile with PID ar	eck all that apply) crete, Asphalt, Dimensions, Desci ad Record GPS C	etc) (ibe Soil pordinat	ioil Moisture: () D (X) N () V Odor: Strong (X) N , and Locate Sample Location es for selected sample location	ilid () None () s.
SAMPLE DATA CGMN-ESC-D9303004A-0-100819 Sample Time: Sample Time: Sample By: D9 3-3 004-2 Sample Time: Sample By: D9 3-3 004-2 N Sample Time: Sample By: Sample By: Sample Parameters: Sample By: Sample Parameters: Sample By: Sample By: Sample By: Sample By: Sample By: Sample By: Sample Time: Sample By:		t Samples, Record ALI	Data, Prepare C	OC, Co	unt Bottles.	
N Sample Time: 11:42 Sample Parameters: P, TCLP VOC (Benzene), Sample By: D. Armstrong / R. McLoughlin Sample Time: Sample Parameters: Sample By: D. Armstrong / R. McLoughlin Sample Time: Sample Parameters: Sample Time: Sample Parameters: Sample By: Sample Parameters: Sample Parameters: Sample By: Sample Parameters: Sample Parameters:		Design	ate Sample Loca	lions o	SAMPLE DAT	ГА
Sample Time: 11:42 Sample Parameters: P, TCLP VOC (Benzene), Sampled By: D. Armstrong / R. McLoughlin Sample Time: Sample Time: Sample Time: Sample Time: Sample Time: Sample Time: Sample Time: Sample Time: Sample Time: Sample Parameters: Sample Time: Sample By: Sample Time: Sample By: Sample Time: Sample By: Sample By: Sample Time: Sample By: Sample By: Sample Time: Sample By: Sample By: Sample Time: Sample By: Sample By: Sample Time: Sample By: Sample Time: Sample Parameters: Sample Parameters: Sample Parameters:	.	D9 3-3 004-1		<u>A</u>	CGMN-ESC-D9303004	IA-0-100819
Sampled By: D. Armstrong / R. McLoughlin Sample By: Sample Time: Sampled By: Sampled By: Sample Time: Sampled By: Sample Parameters: Sample By: Sample Parameters: Sample Parameters: Sample Time: Sample Parameters: Sample Display Sample Time: Sample Display Sample Parameters:	N				Sample Time:	11:42
N Sample Parameters: D9 3-3 004-2 Sampled By: Sample Time: Sample Parameters: Sample By: Sample Parameters: Sample By: Sample Parameters: Sample Data Sample Time: Sample By: Sample Parameters: Sample Data Sample Parameters:			× }		-	
X Sample Time: Sample Parameters: Sampled By: Sample Darameters: Sampled By: Sample Darameters: Sampled By: Sample Darameters: Sample Darameters: Sample Darameters: Sample Darameters:	↑	D9 3-3 004-2			Sample Parameters:	
Sample Parameters: Sampled By: Sampled By: Sampled By: Sampled By: Sampled By: Sampled By: Sample Parameters: Sample Parameters: Sample Parameters:						
X Composite Location for A Sample Sample Parameters:					Sample Parameters:	
X Composite Location for A Sample Sample Parameters:						
		X Composite Location	i for A Sample		Sample Parameters:	
IINSATE SAMPLE: from					from	

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I	BLOCK NO:	D9 3-3		SAMPLE DATE:	8/19/2010
S	TOCKPILE NO:	005	BLOG	K PARAMETERS:	PCBs, TCLP VOC (Benzene)
(X (((X	ile Description (ch) Soil) C&D Debris (Cond) Mfg. Debris) Staining	crete, Asphalt,	Sc etc) Oc	bil Moisture: ()D (X)M ()V dor: Strong(X) M	ry Noist Vet IIId () None ()
2. Scree 3. Provie	en Stockpile with PID an de a Sketch of the Stock	d Record GPS Co pile, indicate nort	pordinate th, and sl	and Locate Sample Locations s for selected sample location now PID readings and Sample	18.
4. Collec	ct Samples, Record ALL Design	. Data, Prepare Co ate Sample Loca	OC, Cou itions on	the Sketch with Reference SAMPLE DAT	Letter. A
Λ	D9 3-3 005-1		<u>A</u>	CGMN-ESC-D9303005	5A-0-100819
ŢΝ				Sample Time:	11:48
				Sample Parameters: Sampled By:	P, TCLP VOC (Benzel D. Armstrong / R. McLoughlin
				Sample Time:	
-				Sample Parameters: Sampled By:	
ÎΝ.	D9 3-3 005-2				
				Sample Time: Sample Parameters: Sampled By:	
	X Composite Location	for A Sample		Sample Time: Sample Parameters: Sampled By:	
		u			

.

BI	LOCK NO:	D9 3-4		SAMPLE DATE:	8/19/2010
ST	OCKPILE NO:	001	BLO	CK PARAMETERS:	PCBs, TCLP VOC (Benzene), TCLP Matala (Lead)
(X) () () (X)	Description (c Soil C&D Debris (Cor Mfg. Debris Staining	ncrete, Asphalt,	s etc) C	oil Moisture: ()D (X)M ()V	ory 1oist Vet Iild () None ()
. Screen . Provide	Stockpile with PID a a Sketch of the Stor Samples, Record AL	nd Record GPS Co ckpile, indicate nort L Data, Prepare C(ordinate h, and s DC, Cou	es for selected sample location show PID readings and Sample	ns. e Stations.
	Desig	nate Sample Loca	1048 0	SAMPLE DAT	A
• [D9 3-4 001-1		Α	CGMN-ESC-D9304001	A-0-100819
N				Sample Time:	11:53 P, TCLP VOC (B Only),
				Sample Parameters: Sampled By:	TCLP Metals (Pb Only) D. Amstrong / R. McLoughilin
			.	· · · · · · · · · · · · · · · · · · ·	
				Sample Time: Sample Parameters: Sampled By:	
Î N	D9 3-4 001-2				
				Sample Time:	
40,7 40,7 40,7 40,7 40,7 40,7 40,7 40,7				Sample Parameters: Sampled By:	
، م				Sample Time: Sample Parameters:	
X	Composite Locatio	II IOT A SAMPLE		Sampled By:	
RINSATE S	AMPLE:			from	· · · · · · · · · · · · · · · · · · ·

	BLOCK NO:	D9 3-4		SAMPLE DATE:	8/20/2010
ę	STOCKPILE NO:	002	BLOCK	PARAMETERS:	PCBs, TCLP VOC (Benzene), TCLP Melais (I.Ba
(X ((er: Clear () Cl bile Description (c) Soil) C&D Debris (Con) Mfg. Debris) Staining		Soil N	(X) N	Dry Moist Wet
2. Scree 3. Provi	en Stockpile with PID an ide a Sketch of the Stoc ct Samples, Record AL	id Record GPS Coor kpile, indicate north, <u>Data, Prepare C</u> OC	dinates for and show f), Count Bo		ns. e Stations.
	Uesigr	ate Sample Locatio	ons on the	Sketch with Reference SAMPLE DAT	
Λ	D9 3-4 002-1		A CG	MN-ESC-D9304002	
N			Sa	nple Time:	8:41
				mple Parameters: npled By:	P, TCLP VOC (B Only), TCLP Metais (Pb Only) R. McLoughlin
				nple Time:	
	D9 3-4 002-2		Sar	nple Parameters: npled By:	
Î N					
			Sar	nple Time: nple Parameters: npled By:	
>	Composite Location	for A Sample	Sar	nple Time: nple Parameters: npled By:	
	SAMPLE:			from	

	BLOCK NO:	D9 3-4	SAMPLE DATE: 8/20/2010
5	STOCKPILE NO:	<u> 003 </u>	BLOCK PARAMETERS: PCes, TCLP VOC (Benzene), TCLP Metals (Lea
(X ((X I. Sketa	ile Description (c)) Soil)C&D Debris (Cor)Mfg. Debris) Staining ch Stockpile, Establish		Soil Moisture: ()Dry (X) Moist
. Provi	de a Sketch of the Stoc	kpile, indicate north, a	and show PID readings and Sample Stations.
. Colle	ct Samples, Record AL Desigr		, Count Bottles. ns on the Sketch with Reference Letter.
	D9 3-4 003-1		SAMPLE DATA
Îп	D9 3-4 003-1	······································	A CGMN-ESC-D9304003A-0-100820
• • •			Sample Time: 8:50
N	D9 3-4 003-2		Sample Parameters: P, TCLP VOC (B Only), TCLP Metals (Pb Only) Sampled By: R. McLoughlin Sample Time: Sampled By: Sampled By: Sampled By: Sample Time: Sampled By: Sample Time: Sampled By: Sample Time: Sample Parameters: Sample Time: Sample Parameters: Sample By: Sample Parameters: Sample By: Sample Parameters: Sample By: Sample Parameters:
>	Composite Location	for A Sample	Sample Time: Sample Parameters: Sampled By:
NSATE	SAMPLE:		from

BLOCK NO:	D9 3-4	SAMPLE DATE: 8/20/2010
STOCKPILE NO:	<u> 004 </u>	LOCK PARAMETERS: PCBs, TCLP VOC (Benzene), TCLP Metals
Stockpile Description (Ch (X) Soil () C&D Debris (Cond () Mfg. Debris (X) Staining 1. Sketch Stockpile, Establish D 2. Screen Stockpile with PID and 3. Provide a Sketch of the Stock	rrete, Asphalt, etc) imensions, Describe S d Record GPS Coordir pile, Indicate north, an	Soil Moisture: (X) Dry () Moist () Wet Odor: Strong (X) Mild () None (oil, and Locate Sample Locations. Mates for selected sample locations. d show PID readings and Sample Stations.
4. Collect Samples, Record ALL Designs		Count Bottles. on the Sketch with Reference Letter.
DearAllo		
↑ N		
Composite Location for		Sample Time: Sampled By: Sample Time: Sample Time: Sample Parameters: Sample Parameters: Sample By:
NSATE SAMPLE:		from

.

BLOCK NO: D9 2-7	_	SAMPLE DATE	E: <u>9/8/2010</u>
STOCKPILE NO: 001	BLOCK	PARAMETERS:	TCLP VOC (Benzene)
Weather: Clear (X) Cloudy () F Stockpile Description (Check all that appl (X) Soil () C&D Debris (Concrete, Asph () Mfg. Debris (X) Staining Sketch Stockpile, Establish Dimensions, D Screen Stockpile with PID and Record GP Provide a Sketch of the Stockpile, indicate Collect Samples, Record ALL Data, Prepar	Rain/Snow () Soil alt, etc) Coordinates for north, and show <u>alt</u> <u>D</u> <u>Cr</u> <u>Sa</u> <u>E</u> <u>Cr</u> Sa Sa Sa) Windy() TE Moisture: (X) () : Strong (X) Locate Sample Location relected sample location PID readings and Sam	EMP.: 60 °F Dry Moist Wet Mild () None () ons. ions. ple Stations. Ce Letter. ATA D1D-0-100908 <u>11:36</u> <u>TCLP VOC (Benzene Only)</u> R. McLoughlin / W. Westley
Composite Location for D Sample	Sa Sa Sa Sa	nple Time: nple Parameters: npled By: nple Time: nple Parameters: npled By:	
ISATE SAMPLE:		from	

BLOCK NO:	D9 2-7	SAMPLE DATE:	9/8/201 0
STOCKPILE NO:	003 B	LOCK PARAMETERS:	TCLP VOC (Benzene)
Weather: Clear (X) Clo Stockpile Description (Che (X) Soil () C&D Debris (Conc () Mfg. Debris (X) Staining Sketch Stockpile, Establish Di Screen Stockpile with PID and Provide a Sketch of the Stockp Collect Samples, Record ALL	oudy () Rain/Sn ack all that apply) rete, Asphalt, etc) mensions, Describe S I Record GPS Coordin olle, indicate north, an Data, Prepare COC, 1	ow () Windy() TEN Soil Moisture: (X) E () N () V Odor: Strong (X) N Soil, and Locate Sample Location nates for selected sample location of show PID readings and Sample Count Bottles. a on the Sketch with Reference SAMPLE DAT	MP.: 60 °F Dry Moist Net Mild () None () s. ns. e Stations.
Composite Location fo		Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:	

BLOCK NO:	D9 3-1	SAMPLE DATE: 9/8/2010
STOCKPILE NO:	<u> 003 BLC</u>	OCK PARAMETERS:TCLP VOC (Benzene)
 Mfg. Debris Mfg. Debris Staining Sketch Stockpile, Establish I Screen Stockpile with PID ar Provide a Sketch of the Stoc Collect Samples, Record AU 	heck all that apply)	Soil Moisture: (X) Dry () Moist () Wet Ddor: Strong (X) Mild () None () I, and Locate Sample Locations. tes for selected sample locations. show PID readings and Sample Stations. unt Bottles. In the Sketch with Reference Letter. SAMPLE DATA CGMN-ESC-D9301003D-0-100908
D9 3-1 003-2	E	Sample Time: 11:44 Sample Parameters: TCLP VOC (Benzene Only) Sampled By: R. McLoughlin / W. Westley CGMIN-ESC-D9301003E-0-100908 Sample Time: 11:47 Sample Parameters: TCLP VOC (Benzene Only) Sample Time: 11:47 Sample Parameters: TCLP VOC (Benzene Only) Sampled By: R. McLoughlin / W. Westley
		Sample Time: Sample Parameters: Sampled By:
Composite Location	-	Sample Time: Sample Parameters: Sampled By:
INSATE SAMPLE: Irameters: B (Benzene);		from

	BLOCK NO:	D9 3-3		SAMPLE DATE:	9/8/2010
S	STOCKPILE NO:	001	BLC	DCK PARAMETERS:	TCLP VOC (Benzene)
(X ((X 1. Sketc 2. Scree 3. Provid	ile Description (cho) Soil) C&D Debris (Conc) Mfg. Debris) Staining th Stockpile, Establish Di en Stockpile with PID and de a Sketch of the Stock of Samples, Record ALL	rete, Asphait, mensions, Descr I Record GPS Co bile, indicate nort Data, Prepare Co	etc) ibe Soi pordinal h, and DC, Co	Soil Moisture: (X) () () Ddor: Strong(X) M I, and Locate Sample Location ies for selected sample location show PID readings and Sample	Dry Moist Wet <u>/iild () None ()</u> Is. Is. Is. Is.
	D9 3-3 001-1		D	SAMPLE DAT CGMN-ESC-D930300	ΓΑ
] N				Sample Time: Sample Parameters: Sampled By:	9:50 TCLP VOC (Benzene Only R. McLoughlin / W. Westle
			E	CGMN-ESC-D9303001	IE-0-100908
	D9 3-3 001-2			Sample Time: Sample Parameters: Sampled By:	11:33 TCLP VOC (Benzene Only R. McLoughlin / W. Westle
				Sample Time: Sample Parameters: Sampled By:	
	Composite Location fo			Sample Time: Sample Parameters: Sampled By:	
	SAMPLE:	<u> </u>		from	

BLOCK NO:	D9 3-3	SAMPLE DATE:	9/8/2010
STOCKPILE NO:	002 BL	OCK PARAMETERS:	TCLP VOC (Benzene)
Veather: Clear (X) Clout tockpile Description (Check (X) Soil () C&D Debris (Concrit () Mfg. Debris (Debris (Concrit () Staining Sketch Stockpile, Establish Din Screen Stockpile with PID and Provide a Sketch of the Stockpil Collect Samples, Record ALL D	tdy () Rain/Snor k all that apply) ete, Asphalt, etc) nensions, Describe So Record GPS Coordina le, indicate north, and lata, Prepare COC, Co	w () Windy() TEN Soil Moisture: (X) I () N () N Odor: Strong (X) N il, and Locate Sample Location ites for selected sample location show PID readings and Sample	MP.: 60 °F Dry Moist Wet Mild () None () s. ns. le Stations. Letter. TA 2D-0-100908 <u>11:30</u> <u>TCLP VOC (Benzene Only)</u> R. MoLoughlin / W. Westley
D9 3-3 002-2	Ε	Sample Parameters: Sampled By:	TCLP VOC (Benzene Only) R. McLoughlin / W. Westley
		Sample Time: Sample Parameters: Sampled By:	
Composite Location for		Sample Time: Sample Parameters: Sampled By:	
SATE SAMPLE:		from	

BLOCK NO:	D9 3-3		SAMPLE DATE:	9/8/2010
STOCKPILE NO:	004	BLC	OCK PARAMETERS:	TCLP VOC (Benzene)
() Mfg. Debris (X) Staining	(Check all that apply) oncrete, Asphalt,	etc)	Soil Moisture: (X) (() (())	Dry Moist Wet Aild () None ()
 Screen Stockpile with PID Provide a Sketch of the Static Collect Samples, Record A 	and Record GPS Co ockpile, indicate nort LL Data, Prepare Co	ordinat h, and s DC, Co	es for selected sample locatio show PID readings and Sampl unt Bottles.	ns. le Stations.
Desi	gnate Sample Locat	tions o	n the Sketch with Reference SAMPLE DA	
D9 3-3 004-1		D	CGMN-ESC-D930300	
			Sample Time: Sample Parameters: Sampled By:	9:44 TCLP VOC (Benzene Only R. McLoughlin / W. Westle
		E	CGMN-ESC-D9303004	4E-0-100908
D9 3-3 004-2			Sample Time: Sample Parameters: Sampled By:	9:38 TCLP VOC (Benzene Only R. McLoughlin / W. Westler
			Sample Time: Sample Parameters: Sampled By:	
			Sample Time:	
Composite Locatio			Sample Parameters: Sampled By:	
NSATE SAMPLE:				

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BLOCK NO:	D9 3-3	SAMPLE DATE:	9/8/2010
STOCKPILE NO:	<u> 005 BL</u>	OCK PARAMETERS:	TCLP VOC (Benzene)
() Mfg. Debris		Soil Moisture: (X) ()	
Screen Stockpile with PID a Provide a Sketch of the Sto Collect Samples, Record A	and Record GPS Coordin ckpile, indicate north, and LL Data, Prepare COC, C		is. Ins. le Stations.
D9 3-3 005-1	D	on the Sketch with Reference SAMPLE DA CGMN-ESC-D930300	ТА
N D9 3-3 005-2		Sample Time: Sample Parameters: Sampled By: CGMN-ESC-D9303009 Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sample Parameters: Sample Parameters:	11:25 TCLP VOC (Benzene Only) R. McLoughlin / W. Westley 5E-0-100908 11:23 TCLP VOC (Benzene Only) R. McLoughlin / W. Westley
Composite Location		Sample Time: Sample Parameters: Sampled By:	

BLOCK NO:	D9 3-6	SAMPLE DATE: 9/8/2010	
STOCKPILE NO:	001	BLOCK PARAMETERS: TCLP VOC (Benzene	e)
 Screen Stockpile with PID : Provide a Sketch of the Stock Collect Samples, Record A 	Cloudy () Rain Check all that apply) ncrete, Asphalt, e Dimensions, Descri and Record GPS Co- ckpile, indicate north L Data, Prepare CC	/Snow () Windy() TEMP.: 60 °F Soil Moisture: (X) Dry () Moist etc) () Wet Odor: Strong (X) Mild () None (be Soil, and Locate Sample Locations. ordinates for selected sample locations. a, and show PID readings and Sample Stations.) () () () () () () () () () () () () ()
Composite Location		Sample By:	

BLOCK NO:	D9 3-6	SAMPLE DATE:	9/8/2010
STOCKPILE NO:	002 BL	OCK PARAMETERS:	TCLP VOC (Benzene)
Weather: Clear (X) C Stockpile Description (C (X) Soil () C&D Debris (Con () Mfg. Debris (X) Staining 1. Sketch Stockpile, Establish I 2. Screen Stockpile with PID ar 3. Provide a Sketch of the Stoc 4. Collect Samples, Record AL	loudy () Rain/Snow heck all that apply) icrete, Asphalt, etc) Dimensions, Describe Sol nd Record GPS Coordina kpile, indicate north, and L Data, Prepare COC, Co	W () Windy() TEN Soil Moisture: (X) [() N () N Odor: Strong (X) N il, and Locate Sample Location tes for selected sample location show PID readings and Sampl	AP.: 60 °F Dry Moist Wet Mild () None () s. ns. e Stations. • • Letter. FA 2D-0-100908 9:23 TCLP VOC (Benzene Only) R. McLoughlin / W. Westley
Composite Location	•	Sample Time: Sample Parameters: Sampled By: Sample Time: Sample Parameters: Sampled By:	
INSATE SAMPLE;		from	

BLOCK NO:	D9 3-6	SAMPLE DATE:	9/8/2010
STOCKPILE NO:	003B	LOCK PARAMETERS:	TCLP VOC (Benzene)
Stockpile Description (C (X) Soil	loudy () Rain/Sn heck all that apply) hcrete, Asphalt, etc)	Soil Moisture: (X) () ()	Dry Moist Wet
 Sketch Stockpile, Establish Screen Stockpile with PID a Provide a Sketch of the Stoc Collect Samples, Record AL 	nd Record GPS Coordir kpile, indicate north, an <u>L Data, Prep</u> are CO <u>C,</u> (Odor: Strong (X) No. oil, and Locate Sample Location lates for selected sample location d show PID readings and Samp Count Bottles.	is. Ins. le Stations.
Design	ate Sample Locations	on the Sketch with Reference SAMPLE DA	
D9 3-6 003-1		CGMN-ESC-D930600	
		Sample Time: Sample Parameters: Sampled By:	9:12 TCLP VOC (Benzene Only R. McLoughlin / W. Westle
	E	CGMN-ESC-D9306003 CGMN-ESC-D9306003 CGMN-ESC-D9306003	3E-MS-100908 3E-MSD-100908
D9 3-6 003-2		Sample Time: Sample Parameters: Sampled By:	9:07 TCLP VOC (Benzene Only R. McLoughlin / W. Westle
		Sample Time: Sample Parameters: Sampled By:	
Composite Location		Sample Time: Sample Parameters: Sampled By:	
NSATE SAMPLE:		from	

Appendix G

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Appendix G

APPENDIX G METEROLOGICAL DATA



Summary of Meterological Data May 2010 - October 2010 Cottage Grove Site

		Temperature	Ire			Wind	
						Average	
					Average	Wind	Average
Date	Minimum	Maximum	Ę	Precipitation	Wind Speed	Direction	Wind
(W/D/YYYY)	(-r)	(⁷ F)	Average ("F)	(inches)	(mph)	(Degrees)	Direction
5/26/2010	55.73	78.93	68.60	0.00	2.91	225 ± 148	SW
5/27/2010	50.03	82.90	66.67	0.00	2.55	131 ± 125	SE
5/28/2010	49.09	85.50	68.18	0.00	1.85	133 ± 116	SE
5/29/2010	55.52	91.60	74.91	0.00	1.95	102 ± 56	ш
5/30/2010	59.34	82.40	70.45	0.00	4.34	205 ± 111	SW
5/31/2010	50.72	79.89	65.52	0.00	2.17	171 ± 124	S
6/1/2010	54.18	80.40	65.91	0.19	2.07	166 ± 106	s
6/2/2010	53.53	72.74	62.25	0.04	2.74	173 ± 155	S
6/3/2010	49.23	79.13	64.84	0.00	2.14	156 ± 103	SE
6/4/2010	61.98	81.10	70.80	0.35	5.10	225±93	SW
6/5/2010	56.70	69.21	61.34	0.24	1.85	194 ± 133	S
6/6/2010	53.23	74.37	62.92	0.05	4.21	239 ± 126	SW
6/7/2010	49.67	77.86	64.74	0.00	2.31	148 ± 93	SE
6/8/2010	59.82	69.52	63.48	0.71	4.37	144 ± 89	SE
6/9/2010	56.41	72.30	65.52	0.00	8.43	288 ± 29	M
6/10/2010	51.41	65.80	59.95	00.00	3.88	119 ± 86	SE
6/11/2010	59.79	75.62	66.29	0.60	4.46	173 ± 122	S
6/12/2010	53.88	61.84	58.47	0.08	2.97	169 ± 152	S
6/13/2010	58.36	66.09	62.17	0.01	2.42	255 ± 127	×
6/14/2010	56.35	68.30	62.34	0.32	3.62	116 ± 107	SE
6/15/2010	59.72	78.37	67.62	0.05	3.84	165 ± 98	S
6/16/2010	59.40	83.10	68.43	0.01	2.82	206 ± 120	SW
6/17/2010	63.83	87.00	74.76	0.06	3.08	109 ± 46	ш
6/18/2010	62.67	83.10	72.90	0.00	3.10	208 ± 92	MS
6/19/2010	58.38	75.16	67.90	0.00	6.24	263 ± 95	M
6/20/2010	55.29	84.90	70.08	0.00	1.73	120 ± 94	SE
6/21/2010	65.18	84.10	72.12	0.00	1.59	151 ± 94	SE
6/22/2010	63.53	91.70	77.54	0.00	1.60	156 ± 86	SE
6/23/2010	64.84	79.40	71.29	0.60	5.28	247 ± 92	SW
6/24/2010	56.36	84.20	70.22	0.00	1.85	189 ± 119	S
6/25/2010	61.73	88.00	71.48	2.02	2.30	129 ± 95	SE

Z:\3m-cottage grove\D9_Construction\CCR\Appendicies\Appendix G (Met Data)\CGMN D9 Met Data

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Table 1

Summary of Meterological Data May 2010 - October 2010 Cottage Grove Site

Date Minimum Maximum Average			Temperature	Ire			Wind	
Minimum Maximum Feeting into in the set of the set o							Average	
The matrix Presentation Presentation </th <th>Ĺ</th> <th>Minimum</th> <th>Mavimum</th> <th></th> <th>: : !</th> <th>Average</th> <th>Wind</th> <th>Average</th>	Ĺ	Minimum	Mavimum		: : !	Average	Wind	Average
63.44 87.30 74.100 0.95 2.23 1.49 ± 103 57.06 73.40 74.10 0.03 6.04 241 ± 104 57.08 73.48 66.69 0.000 6.49 307 ± 42 57.08 73.40 66.59 0.000 2.67 158 ± 149 475.03 87.40 74.47 0.000 2.02 117 ± 97 61.53 87.40 74.47 0.000 2.02 116 ± 83 61.53 87.40 74.47 0.000 2.05 117 ± 97 61.53 87.40 73.67 1.046 177 ± 78 61.53 87.40 73.67 0.00 2.05 117 ± 93 62.52 87.00 73.67 1.046 1.37 1.98 ± 116 67.98 88.30 73.92 0.10 1.61 17 ± 179 67.20 88.30 73.367 1.86 1.37 1.98 ± 116 67.24 88.30 73.45 0.00 2.36 166 ± 126 67.26 88.10 73.45 0.00 2.36 17 ± 116 67.26 88.10 73.45 0.00 2.16 17 ± 116 67.28 88.40 73.45 0.00 2.02 17 ± 116 67.26 88.10 73.46 0.00 2.02 17 ± 116 67.28 88.40 73.45 0.00 2.02 17 ± 164 67.29 88.10 73.66 0.00 2.02 171 ± 196 57.84 79.87 73.67		(°F)	(⁰ F)	Average ([°] F)	(inches)	wina speea (mph)	Ulrection (Degrees)	Direction
65.05 83.40 74.10 0.03 6.04 241 ± 104 57.08 73.48 66.69 0.00 2.67 117 ± 97 57.08 73.48 66.69 0.00 2.67 117 ± 97 61.53 87.40 74.47 0.00 2.05 117 ± 78 61.53 87.40 74.47 0.00 2.05 117 ± 78 61.53 87.40 77.01 0.00 2.05 117 ± 78 65.82 91.30 77.01 0.00 2.05 117 ± 78 65.82 91.30 77.01 0.00 2.05 117 ± 78 65.82 91.30 73.52 0.00 2.05 117 ± 78 65.98 83.30 73.45 0.00 2.36 188 ± 111 64.16 85.10 73.45 0.00 2.36 174 ± 111 64.23 88.30 73.45 0.00 2.36 174 ± 111 64.24 <th>6/26/2010</th> <th>63.44</th> <th>87.30</th> <th>74.00</th> <th>0.95</th> <th>2.23</th> <th>149 ± 103</th> <th>SE</th>	6/26/2010	63.44	87.30	74.00	0.95	2.23	149 ± 103	SE
57.08 73.48 66.69 0.00 6.49 307 ± 42 52.39 73.40 66.33 0.00 2.67 158 ± 149 177 ± 97 51.73 81.160 76.60 0.00 2.05 117 ± 97 117 ± 97 61.73 81.10 75.60 0.00 2.05 117 ± 79 117 ± 79 62.52 91.20 80.32 0.00 2.05 117 ± 79 117 ± 79 62.82 91.20 80.32 0.00 2.05 193 ± 98 131 ± 79 65.86 85.70 77.01 0.16 2.56 193 ± 98 166 ± 116 65.86 83.70 73.57 1.86 1.37 148 ± 116 65.20 83.370 73.57 0.10 2.34 272 ± 90 65.20 83.70 73.45 0.00 4.34 272 ± 90 65.20 83.70 73.52 0.00 3.12 211 ± 117 64.24 88.90 73.52 0.00 3.12 211 ± 117 64.26 83.70 73.62 0.00 3.12 211 ± 117 64.25 86.00 73.62 0.00 3.12 211 ± 117 64.26 83.70 73.62 0.00 2.51 212 ± 106 65.26 83.70 73.62 0.00 2.14 216 ± 124 65.26 88.40 72.56 0.00 2.43 152 ± 444 62.05 86.00 73.66 0.51 2.43 126	6/27/2010	65.05	83.40	74.10	0.03	6.04	241 ± 104	SW
52.39 73.80 63.21 0.00 2.67 158 ± 149 47.96 81.50 66.38 0.00 1.86 117 ± 97 6.515 87.00 77.47 0.00 2.02 117 ± 79 6.515 81.50 75.60 0.00 2.03 131 ± 79 6.526 91.20 80.32 0.00 2.03 131 ± 79 6.982 91.20 80.32 0.00 2.03 131 ± 79 6.708 85.70 77.01 0.16 2.56 193 ± 98 772.93 89.30 73.45 0.00 2.34 174 ± 117 67.28 89.30 73.45 0.00 4.34 272 ± 94 67.29 85.10 73.45 0.00 3.10 2.14 ± 105 62.26 85.10 73.45 0.00 3.12 211 ± 117 64.82 85.10 73.45 0.00 3.312 211 ± 105 64.76 85.10 72.59 86.00 73.65 0.00 3.312 211 ± 105 64.82 88.40 72.51 0.00 1.86 126 ± 126 126 ± 105 64.16 92.60 73.66 0.00 0.35 202 ± 44 105 ± 105 64.60 73.66 0.00 1.66 1.74 268 ± 67 166 ± 216 66.29 86.60 73.26 0.00 1.82 102 214 ± 105 66.26 88.40 72.51 0.57 2.43 1126 66.26 <	6/28/2010	57.08	73.48	66.69	0.00	6.49	307 ± 42	MN
47.96 81.50 66.38 0.00 1.86 117 ± 97 6153 87.40 74.47 0.00 2.02 116 ± 83 6153 87.40 74.47 0.00 2.05 117 ± 78 62.52 87.20 77.50 0.00 2.05 113 ± 79 69.82 87.70 77.51 0.00 2.06 137 148 ± 116 67.98 89.30 77.01 0.10 2.56 193 ± 98 67.98 89.30 73.57 1.86 1.37 148 ± 116 67.98 89.30 73.45 0.00 4.34 272 ± 90 64.24 88.80 73.45 0.00 4.34 277 ± 90 64.26 88.30 73.46 0.00 4.34 277 ± 90 64.28 88.30 73.46 0.00 4.34 277 ± 90 64.20 88.40 71.51 0.51 3.10 2.17 ± 105 64.82 88.40 71.51 0.51 3.10 2.17 ± 105 64.82 88.40 73.10 0.51 3.40 156 ± 102 64.82 88.40 73.11 0.51 3.40 152 ± 94 65.05 88.40 73.11 0.51 3.40 152 ± 102 64.82 88.40 73.10 0.51 2.36 166 ± 50 62.28 88.40 73.10 0.51 2.36 171 ± 136 62.88 88.40 73.10 0.51 2.36 166 ± 50 <t< td=""><td>6/29/2010</td><td>52.39</td><td>73.80</td><td>63.21</td><td>0.00</td><td>2.67</td><td>158 ± 149</td><td>လ</td></t<>	6/29/2010	52.39	73.80	63.21	0.00	2.67	158 ± 149	လ
61.53 87.40 74.47 0.00 2.02 116 ± 83 161 ± 83 69.82 81.30 75.60 0.00 2.05 117 ± 78 131 ± 79 69.82 91.20 80.32 0.00 2.03 131 ± 79 174 ± 116 65.86 85.70 73.92 0.10 1.61 174 ± 116 174 ± 116 67.98 88.90 73.92 0.10 1.61 174 ± 116 174 ± 116 67.98 88.90 73.92 0.00 3.12 272 ± 90 86.102 67.98 88.90 73.92 0.00 3.12 211 ± 117 105 67.98 88.90 73.92 0.00 3.12 211 ± 117 105 64.24 88.90 73.45 0.00 3.12 211 ± 117 105 64.20 83.40 73.62 0.00 3.12 211 ± 117 105 62.05 85.10 73.66 0.00 2.36 156 ± 123 102 64.82 83.40 7151 0.51 3.40 152 ± 94 126 ± 13 64.16 92.90 73.66 0.00 3.59 202 ± 123 102 66.05 82.80 76.71 0.90 3.59 202 ± 124 126 ± 68 62.02 83.40 73.66 0.00 3.59 262 ± 44 268 ± 67 66.05 82.80 76.71 0.90 3.59 262 ± 44 268 ± 67 66.53 88.40 73.66 0	6/30/2010	47.96	81.50	66.38	0.00	1.86	117 ± 97	SE
62.52 87.00 75.60 0.00 2.05 117 ± 78 131 ± 79 69.82 91.20 80.32 0.00 2.03 131 ± 79 131 ± 79 131 ± 79 70.93 85.70 7.01 0.16 2.56 193 ± 98 131 ± 110 112 ± 110 65.86 85.70 73.45 0.10 1.61 11.41 ± 111 114 ± 110 67.98 89.30 73.32 0.10 2.36 166 ± 126 67.98 89.00 73.45 0.00 3.12 271 ± 105 64.24 88.00 73.52 0.00 3.12 211 ± 117 64.82 85.10 73.45 0.00 3.12 211 ± 117 64.82 85.10 73.45 0.00 3.12 211 ± 105 57.84 79.87 0.51 0.51 3.10 222 ± 94 57.84 79.87 0.51 0.51 3.10 155 ± 94 57.84 79.87 0.51 0.57 3.10 152 ± 94 57.84 79.87 0.51 0.57 3.10 152 ± 94 57.84 79.86 76.846 0.00 5.14 262 ± 44 57.84 79.86 76.846 76.846 156 ± 67 57.84 79.86 66.05 82.40 0.00 5.14 57.84 76.846 76.846 76.846 766.446 59.75 81.90 76.94 1.26 766.446 59.75 88.20 76.94 <td>7/1/2010</td> <td>61.53</td> <td>87.40</td> <td>74.47</td> <td>0.00</td> <td>2.02</td> <td>116 ± 83</td> <td>SE</td>	7/1/2010	61.53	87.40	74.47	0.00	2.02	116 ± 83	SE
69.82 91.20 80.32 0.00 2.03 131 ± 79 70.93 83.70 77.01 0.16 2.56 193 ± 98 65.86 85.70 73.67 1.86 1.37 148 ± 116 65.86 85.70 73.67 0.10 2.56 193 ± 98 64.24 88.30 73.45 0.010 2.36 156 ± 102 64.24 88.30 73.45 0.00 3.12 211 ± 117 62.20 85.10 73.45 0.00 3.12 217 ± 105 62.25 85.10 74.24 0.05 1.66 156 ± 102 64.82 83.40 71.51 0.51 3.10 217 ± 105 64.82 83.40 71.51 0.57 3.10 217 ± 105 64.82 83.40 71.51 0.51 3.10 217 ± 105 64.82 83.40 71.51 0.51 3.10 217 ± 105 72.59 86.60 73.56 0.00 1.34 217	7/2/2010	62.52	87.00	75.60	0.00	2.05	117 ± 78	SE
70.93 83.70 77.01 0.16 2.56 193 ± 98 163 ± 16 65.86 85.70 73.67 1.86 1.37 148 ± 116 174 ± 111 67.98 89.30 76.39 0.10 1.61 174 ± 111 174 ± 116 64.24 88.80 73.45 0.000 3.312 217 ± 190 272 ± 90 62.20 85.10 73.62 0.000 3.12 217 ± 105 217 ± 105 62.20 85.10 71.51 0.00 3.12 217 ± 105 217 ± 105 62.05 85.10 71.51 0.00 3.12 217 ± 105 217 ± 105 64.82 83.40 71.51 0.51 3.10 217 ± 105 217 ± 105 64.82 83.40 71.51 0.51 3.10 217 ± 105 217 ± 105 64.82 88.40 73.66 0.00 1.89 86 ± 23 217 ± 105 64.16 92.60 73.66 0.00 3.59 262 ± 44 268 ± 67 60.45 88.40 78.27 0.57 3.40 152 ± 94 202 ± 123 64.16 92.90 77.26 0.00 3.59 262 ± 44 268 ± 67 64.16 92.90 77.26 0.00 3.59 262 ± 44 268 ± 67 64.16 92.90 76.45 0.00 3.18 202 ± 123 64.16 92.90 75.74 1.268 ± 67 268 ± 67 64.16 92.90 77.26 0.00 3.18 202 ± 123 64.16 <	7/3/2010	69.82	91.20	80.32	0.00	2.03	131 ± 79	SE
65.86 85.70 73.67 1.86 1.37 148 ± 116 174 ± 111 67.98 89.30 76.39 0.10 1.61 174 ± 111 174 ± 111 64.24 88.80 73.92 0.19 2.36 166 ± 126 17 ± 117 64.24 88.80 73.45 0.00 3.12 211 ± 117 217 ± 100 62.20 83.70 73.45 0.00 3.12 211 ± 117 217 ± 105 59.45 86.00 73.62 0.00 3.12 217 ± 105 216 ± 102 57.84 79.87 2151 0.51 3.10 217 ± 105 217 ± 105 57.84 79.87 71.51 0.051 3.10 217 ± 105 217 ± 105 57.84 79.87 71.51 0.051 3.10 217 ± 105 217 ± 105 57.84 79.87 71.51 0.051 3.10 217 ± 105 217 ± 105 57.84 79.87 71.51 0.057 3.40 152 ± 294 217 ± 136 57.84 73.86 0.00 5.37 241 ± 108 222 ± 44 60.45 82.60 73.11 0.00 5.37 241 ± 108 66.05 82.80 73.11 0.00 5.37 241 ± 108 66.05 82.80 76.45 0.00 3.18 202 ± 123 60.56 88.20 76.45 164.87 66.29 76.45 66.05 88.20 74.25 0.00 2.85 161 ± 118 66.29 75.94 69.84 <td>7/4/2010</td> <td>70.93</td> <td>83.70</td> <td>77.01</td> <td>0.16</td> <td>2.56</td> <td>193 ± 98</td> <td>ഗ</td>	7/4/2010	70.93	83.70	77.01	0.16	2.56	193 ± 98	ഗ
67.98 89.30 76.39 0.10 1.61 174 ± 111 174 ± 111 64.24 88.80 73.92 0.19 2.36 166 ± 126 166 ± 126 64.24 88.80 73.45 0.00 4.34 272 ± 90 1.61 1.17 ± 117 59.45 86.00 73.62 0.00 3.12 211 ± 117 1.74 ± 116 59.45 86.00 73.62 0.00 3.12 211 ± 117 64.82 85.10 74.24 0.05 1.66 156 ± 102 57.84 79.87 68.09 0.00 2.02 171 ± 136 57.84 79.87 68.09 0.00 2.02 171 ± 136 57.84 79.87 68.09 0.00 2.02 171 ± 136 57.84 79.87 78.27 0.00 2.14 268 ± 67 57.84 79.87 78.27 0.00 3.40 125 ± 94 57.84 79.87 78.27 0.00 3.10 2.12 ± 136 60.45 88.40 76.76 76.76 262 ± 44 60.58 88.40 75.70 0.00 3.18 202 ± 123 60.58 88.20 76.47 76.45 166.05 76.45 66.05 75.94 0.00 1.40 1.26 165 ± 113 60.58 88.20 76.45 0.00 1.40 1.24 60.58 88.20 74.25 0.00 2.85 161 ± 124 60.58 88.20 <t< td=""><td>7/5/2010</td><td>65.86</td><td>85.70</td><td>73.67</td><td>1.86</td><td>1.37</td><td>148±116</td><td>SE</td></t<>	7/5/2010	65.86	85.70	73.67	1.86	1.37	148±116	SE
64.24 88.80 73.92 0.19 2.36 166±126 1 62.20 83.70 73.45 0.000 4.34 272±90 1 59.45 86.00 73.45 0.000 3.12 211±117 1 59.45 86.00 73.52 0.000 3.12 217±105 217±105 62.05 85.10 71.51 0.51 3.10 217±105 217±105 64.82 83.40 71.51 0.51 3.10 217±105 217±105 64.82 83.40 78.27 0.000 1.89 86±23 2 57.02 89.40 73.11 0.57 3.40 152±94 2 72.59 86.60 73.11 0.99 2.43 131±92 2 60.45 82.60 75.71 0.98 2.41±108 2 2 64.16 92.90 76.41 0.99 2.62±44 2 2 68.53 88.40 75.71 0.99 </td <td>7/6/2010</td> <td>67.98</td> <td>89.30</td> <td>76.39</td> <td>0.10</td> <td>1.61</td> <td>174 ± 111</td> <td>S</td>	7/6/2010	67.98	89.30	76.39	0.10	1.61	174 ± 111	S
62.20 83.70 73.45 0.00 4.34 272±90 59.45 86.00 73.62 0.00 3.12 211±117 65.05 85.10 74.24 0.05 1.66 156±102 64.82 83.40 71.51 0.51 3.10 217±105 64.82 83.40 71.51 0.51 3.10 217±105 57.84 79.87 68.09 0.00 2.02 171±136 57.02 89.40 72.59 80.60 78.27 0.57 3.40 152±94 72.50 88.60 78.27 0.57 3.40 152±94 152±94 60.45 88.60 78.26 0.00 3.59 262±44 152±94 60.45 88.40 78.27 0.57 3.40 152±94 151±92 60.45 88.60 76.41 0.60 3.18 263±67 151±92 60.45 88.60 76.41 0.60 3.18 2.14 131±92	7/7/2010	64.24	88.80	73.92	0.19	2.36	166 ± 126	S
59.45 86.00 73.62 0.00 3.12 211 ± 117 117 62.05 85.10 74.24 0.05 1.66 156 ± 102 17 ± 105 64.82 83.40 71.51 0.51 3.10 217 ± 105 171 ± 136 57.84 79.87 68.09 0.00 1.89 86 ± 23 171 ± 136 57.02 89.40 72.59 0.00 1.89 86 ± 23 171 ± 136 57.02 89.40 72.59 0.00 1.89 86 ± 23 171 ± 136 57.02 89.40 72.59 0.00 1.89 86 ± 23 171 ± 136 64.16 92.90 73.66 0.00 5.14 268 ± 67 166.26 88.53 88.40 78.00 0.00 3.59 262 ± 44 112 ± 26 64.16 92.90 75.71 0.98 2.43 131 ± 92 131 ± 92 66.05 81.90 70.40 0.00 3.18 222 ± 144 126 59.72 81.90 70.40 0.00 3.59 262 ± 44 126 66.53 82.20 76.45 0.00 1.40 132 ± 124 126 66.53 88.20 76.46 74.25 0.00 1.82 161 ± 113 66.54 88.20 74.25 0.00 1.26 3.95 76 ± 45 66.54 88.20 74.25 0.00 1.26 3.95 76 ± 45 66.58 88.10 74.92 0.00 1.42 1.12 124 </td <td>7/8/2010</td> <td>62.20</td> <td>83.70</td> <td>73.45</td> <td>0.00</td> <td>4.34</td> <td>272 ± 90</td> <td>M</td>	7/8/2010	62.20	83.70	73.45	0.00	4.34	272 ± 90	M
62.05 85.10 74.24 0.05 1.66 156 ± 102 102 64.82 83.40 71.51 0.51 3.10 217 ± 105 217 ± 105 57.84 79.87 68.09 0.00 2.02 171 ± 136 171 ± 136 57.02 89.40 72.59 0.00 1.89 86 ± 23 171 ± 136 57.02 89.40 72.59 0.00 1.89 86 ± 23 171 ± 136 57.02 89.40 72.59 0.00 1.89 86 ± 23 171 ± 136 64.16 92.90 73.66 0.00 5.14 268 ± 67 1124 64.16 92.90 75.71 0.98 2.43 131 ± 92 112 ± 26 64.16 92.90 75.71 0.00 3.59 262 ± 44 126 ± 6.7 64.16 92.90 75.71 0.00 3.18 131 ± 92 121 ± 24 66.05 82.80 70.40 0.00 3.18 202 ± 123 161 ± 124 59.72 81.90 70.40 0.00 3.18 202 ± 123 161 ± 116 66.53 88.20 74.25 0.00 1.40 132 ± 124 162 ± 45 66.54 88.20 74.25 0.00 1.82 161 ± 113 165 ± 45 66.54 88.20 74.25 0.00 2.85 161 ± 113 165 ± 45 66.54 88.10 72.31 0.00 1.42 161 ± 124 126 65.64 88.10 72.34 0.00 1.42 161 ± 124	7/9/2010	59.45	86.00	73.62	0.00	3.12	211 ± 117	SW
64.82 83.40 71.51 0.51 3.10 217 ± 105 105 57.84 79.87 68.09 0.00 2.02 171 ± 136 171 ± 136 57.02 89.40 72.59 0.00 1.89 86 ± 23 36 ± 23 72.59 86.50 78.27 0.57 3.40 152 ± 94 75.24 72.59 82.60 73.66 0.00 5.14 268 ± 67 78.66 60.45 82.80 73.66 0.00 5.14 268 ± 67 78.66 64.16 92.90 75.71 0.98 2.43 131 ± 92 78.1 ± 92 64.16 92.90 75.71 0.00 5.37 241 ± 108 78.1 ± 92 64.65 81.90 70.40 0.00 1.40 132 ± 124 78.5 ± 124 59.72 81.90 70.40 0.00 3.18 202 ± 123 76.45 66.58 82.80 76.46 9.00 3.18 202 ± 123 76.45 66.59 75.94 69.84 1.26 3.95 76 ± 45 76.45 66.59 75.94 69.84 1.26 3.95 76 ± 45 76 ± 45 66.56 88.20 74.92 0.00 2.85 161 ± 118 76 ± 45 66.58 88.20 74.92 0.00 1.42 161 ± 124 76 ± 45 66.58 88.10 75.34 0.00 1.42 161 ± 124 66.86 88.10 75.58 0.00 1.42 161 ± 124 66.80	7/10/2010	62.05	85.10	74.24	0.05	1.66	156 ± 102	SE
57.84 79.87 68.09 0.00 2.02 171 ± 136 171 ± 136 57.02 89.40 72.59 0.00 1.89 86 ± 23 86 ± 23 86 ± 23 72.59 86.60 78.27 0.57 3.40 152 ± 94 86 ± 67 60.45 82.60 73.66 0.00 5.14 268 ± 67 86 ± 67 60.45 82.80 73.10 0.00 5.14 268 ± 67 262 ± 44 64.16 92.90 75.71 0.98 2.43 131 ± 92 86 64.5 82.80 73.11 0.00 3.59 262 ± 44 265 ± 44 66.05 81.90 70.40 0.00 3.59 262 ± 143 265 ± 44 59.72 81.90 73.11 0.00 3.18 2243 131 ± 92 66.58 81.90 70.40 0.00 3.18 202 ± 123 865 59.72 81.90 72.70 0.00 1.40 132 ± 124 86 66.59 75.94 69.84 1.26 3.95 76 ± 45 76 ± 45 66.59 75.94 69.84 1.26 3.95 76 ± 45 76 ± 45 66.86 88.20 74.92 0.00 2.85 161 ± 113 76 ± 45 66.28 88.10 72.31 0.00 1.42 161 ± 124 66.28 88.10 72.31 0.00 1.42 161 ± 124 66.28 88.10 72.31 0.00 1.42 161 ± 124 66.28 88.1	7/11/2010	64.82	83.40	71.51	0.51	3.10	217 ± 105	SW
57.02 89.40 72.59 0.00 1.89 86 ± 23 86 ± 23 72.59 86.60 78.27 0.57 3.40 152 ± 94 152 60.45 82.60 73.66 0.00 5.14 268 ± 67 265 ± 44 64.16 92.90 75.71 0.98 2.43 131 ± 92 131 ± 92 64.16 92.90 75.71 0.98 2.43 131 ± 92 131 ± 92 66.05 81.90 70.40 0.00 5.37 241 ± 108 241 ± 108 59.72 81.90 70.40 0.000 5.37 241 ± 108 262 ± 123 59.33 84.70 72.70 0.000 5.37 241 ± 108 262 ± 123 60.58 88.20 74.25 0.000 3.18 202 ± 123 262 ± 13 60.58 88.20 74.25 0.000 1.82 165 ± 113 265 ± 13 66.29 75.94 69.84 1.26 3.95 76 ± 45 76 ± 45 64.87 88.20 74.92 0.000 2.85 161 ± 116 63.68 82.20 72.31 0.00 1.42 161 ± 124 59.42 86.10 75.58 0.00 1.56 130 ± 110 59.42 88.10 75.58 0.00 1.42 161 ± 124	7/12/2010	57.84	79.87	68.09	0.00	2.02	171 ± 136	S
72.59 86.60 78.27 0.57 3.40 152 ± 94 152 60.45 82.60 73.66 0.00 5.14 268 ± 67 265 ± 44 68.53 88.40 78.00 0.00 3.59 262 ± 44 268 64.16 92.90 75.71 0.98 2.43 131 ± 92 64.16 92.90 75.71 0.00 5.37 241 ± 108 64.16 92.90 77.11 0.00 5.37 241 ± 108 66.05 82.80 73.11 0.00 5.37 241 ± 108 59.72 81.90 70.40 0.00 1.40 132 ± 124 59.33 84.70 72.70 0.00 3.18 202 ± 123 60.58 88.20 74.25 0.00 1.82 165 ± 113 66.29 75.94 69.84 1.26 3.95 76 ± 45 64.87 88.20 74.92 0.00 2.85 161 ± 118 63.68 82.20 72.31 0.00 1.42 161 ± 118 63.68 82.70 72.31 0.00 1.42 161 ± 124 59.42 86.10 75.58 0.00 1.56 130 ± 100 62.80 88.10 75.58 0.00 1.42 161 ± 124	7/13/2010	57.02	89.40	72.59	0.00	1.89	86 ± 23	ш
60.45 82.60 73.66 0.00 5.14 268 ± 67 268 ± 67 68.53 88.40 78.00 0.00 3.59 262 ± 44 268 ± 67 64.16 92.90 75.71 0.98 2.43 131 ± 92 66.05 82.80 73.11 0.00 5.37 241 ± 108 59.72 81.90 70.40 0.00 5.37 241 ± 108 59.72 81.90 70.40 0.00 1.40 132 ± 124 59.33 84.70 72.70 0.00 3.18 202 ± 123 60.58 88.20 74.25 0.00 1.82 165 ± 113 60.58 88.20 74.25 0.00 1.82 165 ± 113 64.87 88.20 74.92 0.00 2.85 181 ± 118 63.68 82.20 74.92 0.00 2.85 181 ± 118 63.68 82.20 75.34 0.00 1.42 161 ± 124 59.42 86.10 72.31 0.00 1.42 161 ± 124 59.42 88.10 75.58 0.00 1.56 130 ± 100	7/14/2010	72.59	86.60	78.27	0.57	3.40	152 ± 94	SE
68.53 88.40 78.00 0.00 3.59 262 ± 44 262 ± 44 64.16 92.90 75.71 0.98 2.43 131 ± 92 66.05 82.80 73.11 0.00 5.37 241 ± 108 59.72 81.90 70.40 0.00 5.37 241 ± 108 59.33 84.70 72.70 0.00 1.40 132 ± 124 59.33 84.70 72.70 0.00 1.82 165 ± 113 60.58 88.20 74.25 0.00 1.82 165 ± 113 66.29 75.94 69.84 1.26 3.95 76 ± 45 64.87 88.20 74.92 0.00 2.85 181 ± 118 63.68 82.20 74.92 0.00 2.85 181 ± 118 63.68 82.20 72.31 0.00 1.42 161 ± 124 59.42 86.10 75.58 0.00 1.42 161 ± 124 59.42 88.10 75.58 0.00 1.56 130 ± 100	7/15/2010	60.45	82.60	73.66	0.00	5.14	268 ± 67	M
64.16 92.90 75.71 0.98 2.43 131 ± 92 66.05 82.80 73.11 0.00 5.37 241 ± 108 59.72 81.90 70.40 0.00 1.40 132 ± 124 59.33 84.70 72.70 0.00 3.18 202 ± 123 59.35 88.20 74.25 0.00 1.82 165 ± 13 60.58 88.20 74.25 0.00 1.82 165 ± 13 66.29 75.94 69.84 1.26 3.95 76 ± 45 64.87 88.20 74.92 0.00 2.85 181 ± 118 63.68 82.20 74.92 0.00 2.85 181 ± 118 63.487 88.20 72.31 0.00 1.42 161 ± 124 59.42 86.10 72.31 0.00 1.56 130 ± 10 62.80 88.10 75.58 0.00 1.56 130 ± 10	7/16/2010	68.53	88.40	78.00	0.00	3.59	262 ± 44	V
66.05 82.80 73.11 0.00 5.37 241 ± 108 59.72 81.90 70.40 0.00 1.40 132 ± 124 59.33 84.70 72.70 0.00 3.18 202 ± 123 60.58 88.20 74.25 0.00 1.82 165 ± 13 66.29 75.94 69.84 1.26 3.95 76 ± 45 64.87 88.20 74.92 0.00 2.85 181 ± 118 63.68 82.20 74.92 0.00 2.85 181 ± 118 63.68 82.20 72.31 0.00 1.42 161 ± 128 59.42 86.10 72.31 0.00 1.42 161 ± 124 59.42 88.10 75.58 0.00 1.56 130 ± 100	7/17/2010	64.16	92.90	75.71	0.98	2.43	131±92	SE
59.72 81.90 70.40 0.00 1.40 132 ± 124 59.33 84.70 72.70 0.00 3.18 202 ± 123 59.33 84.70 72.70 0.00 3.18 202 ± 123 60.58 88.20 74.25 0.00 1.82 165 ± 113 66.29 75.94 69.84 1.26 3.95 76 ± 45 64.87 88.20 74.92 0.00 2.85 181 ± 116 63.68 82.20 72.31 0.00 1.42 161 ± 124 59.42 86.10 72.31 0.00 1.42 161 ± 124 62.80 88.10 75.58 0.00 1.56 130 ± 100	7/18/2010	66.05	82.80	73.11	0.00	5.37	241 ± 108	SW
59.33 84.70 72.70 0.00 3.18 202 ± 123 60.58 88.20 74.25 0.00 1.82 165 ± 113 66.29 75.94 69.84 1.26 3.95 76 ± 45 64.87 88.20 74.92 0.00 2.85 181 ± 116 63.68 82.20 72.02 1.12 5.15 258 ± 113 63.42 88.10 72.31 0.00 1.42 161 ± 124 59.42 86.10 72.31 0.00 1.56 130 ± 100 62.80 88.10 75.58 0.00 1.56 130 ± 100	7/19/2010	59.72	81.90	70.40	0.00	1.40	132 ± 124	SE
60.58 88.20 74.25 0.00 1.82 165 ± 113 66.29 75.94 69.84 1.26 3.95 76 ± 45 64.87 88.20 74.92 0.00 2.85 181 ± 118 63.68 82.20 72.02 1.12 5.15 258 ± 113 59.42 86.10 72.31 0.00 1.42 161 ± 124 62.80 88.10 75.58 0.00 1.56 130 ± 100	7/20/2010	59.33	84.70	72.70	0.00	3.18	202 ± 123	S
66.29 75.94 69.84 1.26 3.95 76 ± 45 64.87 88.20 74.92 0.00 2.85 181 ± 118 63.68 82.20 72.02 1.12 5.15 258 ± 113 59.42 86.10 72.31 0.00 1.42 161 ± 124 62.80 88.10 75.58 0.00 1.56 130 ± 100	7/21/2010	60.58	88.20	74.25	0.00	1.82	165 ± 113	S
64.87 88.20 74.92 0.00 2.85 181±118 63.68 82.20 72.02 1.12 5.15 258±113 59.42 86.10 72.31 0.00 1.42 161±124 62.80 88.10 75.58 0.00 1.42 161±124	7/22/2010	66.29	75.94	69.84	1.26	3.95	76 ± 45	ш
63.68 82.20 72.02 1.12 5.15 258 ± 113 5.15 5.15 1.12 5.15 1.12 5.15 1.13 5.15 5.15 1.12 5.15 5.15 1.13 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.12	7/23/2010	64.87	88.20	74.92	0.00	2.85	181 ± 118	s
59.42 86.10 72.31 0.00 1.42 161 ± 124 62.80 88.10 75.58 0.00 1.56 130 ± 100	7/24/2010	63.68	82.20	72.02	1.12	5.15	258 ± 113	3
62.80 88.10 75.58 0.00 1.56 130 ± 100	7/25/2010	59.42	86.10	72.31	0.00	1.42	161 ± 124	S
	7/26/2010	62.80	88.10	75.58	0.00	1.56	130 ± 100	SE

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Summary of Meterological Data May 2010 - October 2010 Cottage Grove Site

		Temperature	Ire			Wind	
						Average	
	Minimum	Maximum		:	Average	Wind	Average
	(⁰ F)	(⁰ F)	Average (⁰ F)	Precipitation	Wind Speed	Direction	Wind
7/27/2010	70.91	03 00	70.67			(saaifaa)	DIrection
7/28/2010	20.11	00.00	10.01	10.0	2.32	1 59 ± 103	S
0102/02/1	03.11	80.40	12.26	0.00	4.33	304 ± 69	MN
//29/2010	59.11	84.00	71.37	0.00	1.33	140 ± 109	SE
//30/2010	65.47	75.88	69.55	0.02	2.09	92 ± 63	ш
7/31/2010	64.99	84.40	73.19	0.00	1.81	142 ± 130	SE
8/1/2010	64.06	90.60	75.53	0.00	0.93	138 ± 90	SE
8/2/2010	71.63	86.90	78.29	0.05	2.08	185 ± 102	S
8/3/2010	69.55	94.00	80.49	0.00	2.23	215 ± 96	SW
8/4/2010	67.21	87.80	76.46	00.00	4.19	261 ± 92	N
8/5/2010	61.40	80.20	71.53	00.0	6.94	291±60	>
8/6/2010	58.43	83.90	70.87	0.00	2.84	227 ± 114	SW
8/7/2010	63.23	90.50	74.53	0.03	1.75	134 ± 93	SE
8/8/2010	71.17	96.10	80.41	0.33	2.32	107 ± 71	ш
8/9/2010	70.27	93.70	80.36	00.0	2.05	122 ± 109	SE
8/10/2010	69.00	90.10	75.86	1.73	2.67	116 ± 93	SE
8/11/2010	70.23	92.30	79.08	0.25	2.40	183 ± 100	S
8/12/2010	67.35	93.30	79.71	0.00	2.00	150 ± 113	SE
8/13/2010	66.38	89.10	74.71	1.88	3.84	116 ± 92	SE
8/14/2010	62.84	86.00	73.85	0.00	4.83	241 ± 98	SW
8/15/2010	62.99	76.44	68.83	0.00	11.10	286±5	N
8/16/2010	56.12	77.47	67.56	0.00	7.31	287 ± 58	N
8/17/2010	52.65	79.82	65.58	0.00	1.62	168 ± 116	S
8/18/2010	62.70	79.70	69.04	0.00	2.38	231 ± 85	SW
8/19/2010	65.47	79.87	73.65	0.00	3.11	105 ± 61	ш
8/20/2010	71.19	90.00	77.99	0.00	1.67	114 ± 70	SE
8/21/2010	66.24	84.80	72.60	0.00	2.09	187 ± 142	S
8/22/2010	60.21	91.50	74.83	0.00	1.69	114 ± 85	SE
8/23/2010	69.96	90.90	78.96	0.00	1.87	107 ± 62	ш
8/24/2010	56.89	76.96	69.89	0.04	7.57	271 ± 77	M
8/25/2010	53.09	73.20	62.90	00.0	4.48	302 ± 87	MN
8/26/2010	49.65	81.10	65.92	0.00	1.90	134 ± 99	SE

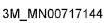
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Table 1

Summary of Meterological Data May 2010 - October 2010 Cottage Grove Site

		Temperature	Ire			Wind	
						Average	
					Average	Wind	Average
Date	MINIMUM	Maximum	c	Precipitation	Wind Speed	Direction	Wind
(YYYYY)	("F)	('F)	Average ([°] F)	(inches)	(mph)	(Degrees)	Direction
8/27/2010	60.57	87.60	73.80	0.00	2.78	159 ± 104	S
8/28/2010	63.10	90.10	75.61	0.00	2.38	108 ± 60	ш
8/29/2010	63.81	93.80	78.52	0.00	1.81	102±50	Ш
8/30/2010	74.30	92.40	81.61	0.00	2.11	105 ± 29	Ш
8/31/2010	67.09	87.60	75.48	0.89	2.85	176±98	S
9/1/2010	57.94	78.14	67.66	0.00	2.73	185 ± 133	S
9/2/2010	58.79	72.36	65.11	0.85	5.59	214 ± 100	SW
9/3/2010	48.85	60.97	57.49	0.00	12.38	294 ± 56	NN
9/4/2010	46.66	68.29	55.76	0.00	4.64	270 ± 108	M
9/5/2010	46.31	73.31	60.01	0.00	3.29	89 ± 50	ш
9/6/2010	58.76	70.94	64.54	0.11	4.25	110 ± 67	ш
9/7/2010	52.75	64.38	58.18	0.00	11.61	294 ± 19	MN
9/8/2010	43.47	70.64	55.91	0.00	2.57	203 ± 121	SW
9/9/2010	49.11	64.28	56.99	0.00	3.27	87 ± 15	ш
9/10/2010	57.62	68.01	61.73	0.04	4.73	89 ± 28	Ш
9/11/2010	50.86	72.51	61.93	0.02	6.30	227 ± 101	SW
9/12/2010	49.21	78.63	62.21	0.00	3.51	209 ± 115	MS
9/13/2010	46.00	73.21	58.88	0.00	3.51	242 ± 136	MS
9/14/2010	48.07	70.14	57.77	0.00	1.90	106 ± 116	Э
9/15/2010	53.53	66.03	58.48	1.00	4.69	99 ± 74	Ш
9/16/2010	50.02	56.25	52.89	0.08	3.79	258 ± 112	M
9/17/2010	52.07	62.30	56.90	0.00	2.04	218 ± 102	SW
9/18/2010	43.64	59.99	51.00	0.01	3.73	270 ± 108	M
9/19/2010	43.68	65.18	54.03	0.00	2.66	117 ± 107	SE
9/20/2010	51.33	74.73	59.41	0.02	4.34	92 ± 22	Э
9/21/2010	49.87	76.28	65.46	0.13	5.36	280 ± 68	M
9/22/2010	46.12	67.87	56.27	0.07	2.77	142 ± 108	SE
9/23/2010	59.29	71.17	65.68	0.59	3.45	126 ± 85	SE
9/24/2010	51.03	59.94	55.24	0.93	13.20	290 ± 12	N
9/25/2010	43.53	61.86	50.81	0.40	2.32	240 ± 141	SW
9/26/2010	36.09	67.82	49.67	0.23	1.55	160 ± 108	ა

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Summary of Meterological Data May 2010 - October 2010 Cottage Grove Site

		Temperature	re			Wind	
						Average	
					Average	Wind	Average
Date		maximum	c	Precipitation	Wind Speed	Direction	Wind
(M/D/YYYY)	('F)	("F)	Average ([°] F)	(inches)	(hdm)	(Degrees)	Direction
9/27/2010	41.29	74.73	57.74	0.09	2.12	200 ± 122	S
9/28/2010	49.54	67.86	58.03	0.07	2.84	226 ± 131	SW
9/29/2010	49.46	74.16	60.70	0.03	3.74	238 ± 108	SW
9/30/2010	45.45	71.36	57.00	0.00	3.41	256 ± 125	8
10/1/2010	42.68	70.64	51.67	0.01	2.36	208 ± 142	SW
10/2/2010	35.23	55.63	45.19	0.03	3.14	195 ± 159	S
10/3/2010	31.60	65.86	45.53	0.02	1.53	140 ± 112	SF
10/4/2010	37.13	70.89	51.26	0.01	1.40	115 ± 82	SE
10/5/2010	39.06	76.35	56.36	0.00	1.31	117 ± 83	SE
10/6/2010	44.33	70.97	57.58	0.00	3.42	217 ± 131	SW
10/7/2010	38.84	77.26	53.63	0.00	1.31	184 ± 118	S
10/8/2010	48.01	87.00	63.98	0.00	1.60	155 ± 100	SE
10/9/2010	51.46	86.70	65.19	0.00	1.31	124 ± 86	SE
10/10/2010	49.13	81.00	62.41	0.00	1.00	159 ± 110	S
10/11/2010	48.36	81.10	61.30	00.0	1.49	168 ± 134	s
10/12/2010	48.63	72.59	58.30	00.0	3.80	203 ± 121	SW

¹ Data set incomplete due to interruption of datalogger

Notes:

Average Wind Direction refers to the direction from which the wind is blowing. All data calculated from 5 min averages.

Appendix H

Appendix H

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APPENDIX H PERIMETER MONITORING

WESTERN

		rove Site - Perimeter Mon	
. Date:	6/10/2010	2. Weather:	62 °F, Light Rain
Prepared	By: B McLo	ughlin - Weston	
		ction Level - 2.5 ppm above background a	s a 15 min TWA)
	Instrument used:	Mini-RAE 2000	
Cal	ibration performed? (Y or N		· · · · · · · · · · · · · · · · · · ·
	tation / Sample Location	Time	Reading (provide units)
	Station 1	14:15	0.0 - 0.1 ppm
	Station 2	14:07	0.0 ppm
	Station 3	14:00	0.0 ppm
	Station 4	14:28	0.0 - 0.1 ppm
		COMMENTS:	
Ambient /	Air Monitoring - PM10 (Partic		ng/m ³ above background)
	Instrument used:	MIE DataRam PDR	ıg/m ³ above background)
Cali	Instrument used: bration performed? (Y or N)	MIE DataRam PDR) Yes	
Cali	Instrument used:	MIE DataRam PDR	Reading (provide units)
Cali	Instrument used: bration performed? (Y or N) ation / Sample Location	MIE DataRam PDR) Yes Time	Reading (provide units) 0.000 mg/m ³
Cali	Instrument used: bration performed? (Y or N) ation / Sample Location Station 1	MIE DataRam PDR) Yes Time 14:15	Reading (provide units)
Cali	Instrument used: bration performed? (Y or N) ation / Sample Location Station 1 Station 2	MIE DataRam PDR Yes 14:15 14:07	Reading (provide units) 0.000 mg/m ³ 0.000 mg/m ³
Cali St	Instrument used: bration performed? (Y or N) ation / Sample Location Station 1 Station 2 Station 3 Station 4	MIE DataRam PDR Yes 14:15 14:07 14:00	Reading (provide units) 0.000 mg/m³ 0.000 mg/m³ 0.003 mg/m³ 0.013 mg/m³
Cali St	Instrument used: bration performed? (Y or N) ation / Sample Location Station 1 Station 2 Station 3 Station 4	MIE DataRam PDR Yes 14:15 14:07 14:00 14:28 COMMENTS:	Reading (provide units) 0.000 mg/m³ 0.000 mg/m³ 0.003 mg/m³ 0.013 mg/m³
Cali St	Instrument used: bration performed? (Y or N) ation / Sample Location Station 1 Station 2 Station 3 Station 4	MIE DataRam PDR Yes 14:15 14:07 14:00 14:28 COMMENTS:	Reading (provide units) 0.000 mg/m³ 0.000 mg/m³ 0.003 mg/m³ 0.013 mg/m³
Cali St	Instrument used: bration performed? (Y or N) ation / Sample Location Station 1 Station 2 Station 3 Station 4	MIE DataRam PDR Yes 14:15 14:07 14:00 14:28 COMMENTS:	Reading (provide units) 0.000 mg/m³ 0.000 mg/m³ 0.003 mg/m³ 0.013 mg/m³

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	ove Site - Perimeter Mon	
e: 6/16/2010	2. Weather:	68.6 °F, Partly Cloudy
	ong (Weston)	
bient Air Monitoring - (VOCs) (Acti	on Level - 2.5 ppm above background a	as a 15 min TWA)
Instrument used:	Mini-RAE 2000	
Calibration performed? (Y or N)	Yes	
Station / Sample Location	Time	Reading (provide units)
Station 1	11:48	0.0 ppm
Station 2	12:05	0.1 ppm
Station 3	12:14	0.0 ppm
Station 4	12:21	0.0 ppm
om the NW @ 2.9 mph.	COMMENTS:	
bient Air Monitoring - PM10 (Particu		mg/m ³ above background)
Instrument used:	MIE DataRam PDR	mg/m ³ above background)
Instrument used: Calibration performed? (Y or N)	MIE DataRam PDR Yes	
Instrument used:	MIE DataRam PDR Yes Time	Reading (provide units)
Instrument used: Calibration performed? (Y or N)	MIE DataRam PDR Yes Time 11:48	Reading (provide units) 0.001 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location	MIE DataRam PDR Yes 11:48 12:05	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1	MIE DataRam PDR Yes 11:48 12:05 12:14	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2	MIE DataRam PDR Yes 11:48 12:05 12:14 12:21	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4	MIE DataRam PDR Yes 11:48 12:05 12:14	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from the NW @ 2.9 mph.	MIE DataRam PDR Yes 11:48 12:05 12:14 12:21 COMMENTS:	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from the NW @ 2.9 mph.	MIE DataRam PDR Yes 11:48 12:05 12:14 12:21 COMMENTS:	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 rom the NW @ 2.9 mph.	MIE DataRam PDR Yes 11:48 12:05 12:14 12:21 COMMENTS:	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 rom the NW @ 2.9 mph.	MIE DataRam PDR Yes 11:48 12:05 12:14 12:21 COMMENTS:	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from the NW @ 2.9 mph.	MIE DataRam PDR Yes 11:48 12:05 12:14 12:21 COMMENTS:	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4	MIE DataRam PDR Yes 11:48 12:05 12:14 12:21 COMMENTS:	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from the NW @ 2.9 mph.	MIE DataRam PDR Yes 11:48 12:05 12:14 12:21 COMMENTS:	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from the NW @ 2.9 mph.	MIE DataRam PDR Yes 11:48 12:05 12:14 12:21 COMMENTS:	Reading (provide units) 0.001 mg/m ³ 0.001 mg/m ³ 0.000 mg/m ³

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WESTER

Calibration performed? (Y or N) Yes Station / Sample Location	2.5 ppm above background RAE 2000 Time 14:51 14:44 14:36 14:29 COMMENTS:	as a 15 min TWA) Reading (provide units) 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm
Ambient Air Monitoring - (VOCs) (Action Level - Instrument used: Mini- Calibration performed? (Y or N) Yes Station / Sample Location	2.5 ppm above background RAE 2000 Time 14:51 14:44 14:36 14:29 COMMENTS:	Reading (provide units) 0.0 ppm 0.0 ppm 0.0 ppm
Instrument used: Mini- Calibration performed? (Y or N) Yes Station / Sample Location Station 1 Station 1 Station 2 Station 3 Station 4 of from NW @ 16.5 mph. How Station 1	Time 14:51 14:44 14:36 14:29 COMMENTS:	Reading (provide units) 0.0 ppm 0.0 ppm 0.0 ppm
Station / Sample Location Station 1 Station 2 Station 3	14:51 14:44 14:36 14:29 COMMENTS:	0.0 ppm 0.0 ppm 0.0 ppm
Station 1 Station 2 Station 3 Station 4 nd from NW @ 16.5 mph.	14:51 14:44 14:36 14:29 COMMENTS:	0.0 ppm 0.0 ppm 0.0 ppm
Station 2 Station 3 Station 4 nd from NW @ 16.5 mph.	14:44 14:36 14:29 COMMENTS:	0.0 ppm 0.0 ppm
Station 3 Station 4 nd from NW @ 16.5 mph.	14:36 14:29 COMMENTS:	0.0 ppm
Station 4	14:29 COMMENTS:	
nd from NW @ 16.5 mph.	COMMENTS:	0.0 ppm
	10 ft bgs).	
Calibration performed? (Y or N) Yes	oring) (Action Level - 0.1 DataRam PDR	mg/m ³ above background)
Station / Sample Location	Time	Reading (provide units)
Station 1	14:51	0.002 mg/m ³
Station 2	14:44	0.013 mg/m ³
Station 3	14:36	0.009 mg/m ³
Station 4	14:29	0.006 mg/m ³
d from NW @ 16.5 mph.	COMMENTS:	

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WISSIGN

7/9/2010	2. Weather:	85.0 °F, Clear
ared By: W. Westley (W	Veston)	
ent Air Monitoring - (VOCs) (Action I	Level - 2.5 ppm above background a	s a 15 min TWA)
Instrument used:	Mini-RAE 2000	
Calibration performed? (Y or N)	Yes	
Station / Sample Location	Time	Reading (provide units)
Station 1	16:18	0.0 ppm
Station 2	16:10	0.0 - 0.2 ppm
Station 3	16:35	0.0 ppm
Station 4	16:29	0.0 ppm
	COMMENTS:	
r suspends site activities for the day afte 100 Yds of Direct load Soil Block D9 1-5	er Excavation of the Direct Load Soil Bl material was Staged on the EW-4 Sta	ock D9 1-5. Station #2 was Monitored a ging Area.
100 Yds of Direct load Soil Block D9 1-5 ent Air Monitoring - PM10 (Particulate	material was Staged on the EW-4 Sta	ock D9 1-5. Station #2 was Monitored a ging Area. ng/m ³ above background)
100 Yds of Direct load Soil Block D9 1-5 ent Air Monitoring - PM10 (Particulate Instrument used:	material was Staged on the EW-4 Sta Monitoring) (Action Level - 0.1 r MIE DataRam PDR	ging Area.
100 Yds of Direct load Soil Block D9 1-5 ent Air Monitoring - PM10 (Particulate Instrument used: Calibration performed? (Y or N)	Monitoring) (Action Level - 0.1 r MIE DataRam PDR Yes	ging Area. ng/m ³ above background)
100 Yds of Direct load Soil Block D9 1-5 ent Air Monitoring - PM10 (Particulate Instrument used: Calibration performed? (Y or N) Station / Sample Location	material was Staged on the EW-4 Sta Monitoring) (Action Level - 0.1 r MIE DataRam PDR Yes Time	ging Area. ng/m ³ above background) Reading (provide units)
100 Yds of Direct load Soil Block D9 1-5 ent Air Monitoring - PM10 (Particulate Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1	Monitoring) (Action Level - 0.1 r MIE DataRam PDR Yes Time 16:18	ging Area. ng/m ³ above background) Reading (provide units) 0.006 mg/m ³
100 Yds of Direct load Soil Block D9 1-5 ent Air Monitoring - PM10 (Particulate Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2	Monitoring) (Action Level - 0.1 r MIE DataRam PDR Yes Time 16:18 16:10	ging Area. ng/m ³ above background) Reading (provide units) 0.006 mg/m ³ 0.007 mg/m ³
100 Yds of Direct load Soil Block D9 1-5 ent Air Monitoring - PM10 (Particulate Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1	Monitoring) (Action Level - 0.1 r MIE DataRam PDR Yes Time 16:18	ging Area. ng/m ³ above background) Reading (provide units) 0.006 mg/m ³
100 Yds of Direct load Soil Block D9 1-5 ent Air Monitoring - PM10 (Particulate Instrument used: Calibration performed? (Y or N) Station / Sample Location	material was Staged on the EW-4 Sta Monitoring) (Action Level - 0.1 r MIE DataRam PDR Yes Time	ging Area. ng/m ³ above background) Reading (provide units)

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WEIGN

Cottage Grove Site - Perimeter Monitoring Form 2. Weather: 1. Date: 7/19/2010 76 °F, Cloudy 3. Prepared By: **R. McLoughlin - Weston** 4. Ambient Air Monitoring - (VOCs) (Action Level - 2.5 ppm above background as a 15 min TWA) Mini-RAE 2000 Instrument used: Calibration performed? (Y or N) Yes Station / Sample Location Time Reading (provide units) 0.5 - 0.7 ppm Station 1 13:42 13:34 0.8 - 0.9 ppm Station 2 Station 3 13:27 0.6 - 0.7 ppm Station 4 13:53 0.3 - 0.6 ppm COMMENTS: Wind from N/NW @ 3.1 mph. Bolander currently hauling direct load material to SKB Landfill. Material being hauled is D9 1-2 direct load material staged on EW-3. 5. Ambient Air Monitoring - PM10 (Particulate Monitoring) (Action Level - 0.1 mg/m³ above background) MIE DataRam PDR Instrument used: Calibration performed? (Y or N) Yes Station / Sample Location Time Reading (provide units) Station 1 13:42 0.011 mg/m³ 0.073 mg/m^3 Station 2 13:34 13:27 0.018 mg/m^3 Station 3 Station 4 13:53 0.011 mg/m³ COMMENTS: A noticable spike in PM10 readings was observed when haul truck (706-111) passed by Station 2 during monitoring event. As the truck passed the PM10 reading jumped to 0.7 mg/m^{3.} The time weighted average never exceeded the action level. Truck traffic currently very low, no truck encountered at any of the other monitoring stations during this perimeter monitoring event.

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3M_MN00717152

WESTON

	concernenter mon	nitoring Form 83 °F, Sunny & Clear	
ate: 7/21/2010	2. Weather:	83 °F, Sunny & Clear	
repared By: R. McLoughlir			
mbient Air Monitoring - (VOCs) (Action L		as a 15 min TWA)	
Instrument used:	Mini-RAE 2000		
Calibration performed? (Y or N)	<u>N</u>		
Station / Sample Location	Time	Reading (provide units)	
Station 1	13:09	0.0 ppm	
Station 2	13:02	0.0 - 0.2 ppm	
Station 3	12:55	0.0 - 0.1 ppm	
Station 4	13:17 COMMENTS:	0.0 ppm	
mbient Air Monitoring - PM10 (Particulate Instrument used:	Monitoring) (Action Level - 0.1 MIE DataRam PDR	mg/m ³ above background)	
		mg/m ³ above background)	
Instrument used:	MIE DataRam PDR	mg/m ³ above background) Reading (provide units)	
Instrument used: Calibration performed? (Y or N)	MIE DataRam PDR N		
Instrument used: Calibration performed? (Y or N) Station / Sample Location	MIE DataRam PDR N Time	Reading (provide units)	
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1	MIE DataRam PDR N Time 13:09	Reading (provide units) 0.015 mg/m ³ 0.024 mg/m ³ 0.016 mg/m ³	
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4	MIE DataRam PDR N 13:09 13:02 12:55 13:17 COMMENTS:	Reading (provide units) 0.015 mg/m³ 0.024 mg/m³ 0.016 mg/m³ 0.006 mg/m³	
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3	MIE DataRam PDR N 13:09 13:02 12:55 13:17 COMMENTS:	Reading (provide units) 0.015 mg/m³ 0.024 mg/m³ 0.016 mg/m³ 0.006 mg/m³	
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 elevated PM10 readings at Station 2 slightly	MIE DataRam PDR N IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Reading (provide units) 0.015 mg/m³ 0.024 mg/m³ 0.016 mg/m³ 0.006 mg/m³	

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WEDEN

. Prepared By: D. Armstro	ng (WESTON)	
Ambient Air Monitoring - (VOCs) (Action	on Level - 2.5 ppm above background	as a 15 min TWA)
Instrument used:	Mini-RAE 2000	
Calibration performed? (Y or N)	Y	
Station / Sample Location	Time	Reading (provide units)
Station 1	13:10	0.0 ppm
Station 2	13:18	0.1 ppm (Peak = 1.6 ppm)
Station 3	13:26	0.0 ppm
Station 4	13:33	0.0 ppm
	COMMENTS:	
	on haul road improvements.	
/ind from North @ 6.0 mph olander excavating D9 Layer 2 and working <u>Ambient Air Monitoring - PM10 (Particul</u> Instrument used:	ate Monitoring) (Action Level - 0.1	mg/m ³ above background)
olander excavating D9 Layer 2 and working Ambient Air Monitoring - PM10 (Particul		mg/m ³ above background)
olander excavating D9 Layer 2 and working Ambient Air Monitoring - PM10 (Particul Instrument used:	ate Monitoring) (Action Level - 0.1 MIE DataRam PDR	mg/m ³ above background) Reading (provide units)
Ambient Air Monitoring - PM10 (Particul Instrument used: Calibration performed? (Y or N)	ate Monitoring) (Action Level - 0.1 MIE DataRam PDR Y	
Ambient Air Monitoring - PM10 (Particul Instrument used: Calibration performed? (Y or N) Station / Sample Location	ate Monitoring) (Action Level - 0.1 MIE DataRam PDR Y Time	Reading (provide units)
Ambient Air Monitoring - PM10 (Particul Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1	ate Monitoring) (Action Level - 0.1 MIE DataRam PDR Y Time 13:10	Reading (provide units) 0.005 mg/m ³
Ambient Air Monitoring - PM10 (Particul Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2	ate Monitoring) (Action Level - 0.1 MIE DataRam PDR Y Time 13:10 13:18	Reading (provide units) 0.005 mg/m ³ 0.013 mg/m ³

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WESTER

	trong (WESTON) ction Level - 2.5 ppm above backgro Mini-RAE 2000 N Y Time	
ir Monitoring - (VOCs) (A Instrument used: oration performed? (Y or N ation / Sample Location	ction Level - 2.5 ppm above backgro Mini-RAE 2000 N Y	
Instrument used: pration performed? (Y or N ation / Sample Location	Mini-RAE 2000	
oration performed? (Y or N ation / Sample Location	J) Y	······
ation / Sample Location		
	Time	
Station 1		Reading (provide units)
	15:38	0.0 ppm
Station 2	15:31	0.0 ppm
Station 3	15:24	0.0 ppm
Station 4	15:17	0.0 ppm
	COMMENTS:	
ir Monitoring - PM10 (Parti Instrument used:	culate Monitoring) (Action Level MIE DataRam PDR	- 0.1 mg/m ³ above background)
oration performed? (Y or N		
ation / Sample Location	Time	Reading (provide units)
Station 1	15:38	0.012 mg/m ³
Station 2	15:31	0.037 mg/m ³
Station 3	15:24	0.025 mg/m ³
	15:17	0.007 mg/m ³
	COMMENTS:	
	<u> </u>	0.025 mg/m ³

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WISSIGN

ate: 8/11/2010	2. Weather:	90.1 °F, Sunny
epared By: D. Armstror	ng/R. McLoughlin (WESTON)	
nbient Air Monitoring - (VOCs) (Action	n Level - 2.5 ppm above background a	is a 15 min TWA)
Instrument used:	Mini-RAE 2000	
Calibration performed? (Y or N)	Y	
Station / Sample Location	Time	Reading (provide units
Station 1	15:29	0.1 ppm
Station 2	15:37	0.0 ppm
Station 3	15:45	0.0 ppm
Station 4	15:56	0.0 ppm
from W/SW @ 3.5 mph	COMMENTS:	
nbient Air Monitoring - PM10 (Particula Instrument used:	ite Monitoring) (Action Level - 0.1 MIE DataRam PDR	ng/m ³ above background)
		mg/m ³ above background)
Instrument used:	MIE DataRam PDR	mg/m ³ above background) Reading (provide units)
Instrument used: Calibration performed? (Y or N)	MIE DataRam PDR Y	Reading (provide units) 0.013 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location	MIE DataRam PDR Y Time	Reading (provide units) 0.013 mg/m ³ 0.004 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1	MIE DataRam PDR Y Time 15:29	Reading (provide units) 0.013 mg/m ³
Instrument used:	MIE DataRam PDR	mg/m ³ above background)

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WESTEN

	9 Site (CGD9) - Perimet	70.3 °F, Cloudy
ate: 8/18/201	10 2. Weather:	70.3 °F, Cloudy
epared By: D. Armstro	ong/R. McLoughlin (WESTON)	
nbient Air Monitoring - (VOCs) (Acti		d as a 15 min TWA)
Instrument used:	Mini-RAE 2000	
Calibration performed? (Y or N)	Ŷ	
Station / Sample Location	Time	Reading (provide units)
Station 1	14:36	0.0 ppm
Station 2	14:30	0.0 ppm
Station 3	14:22	0.1 - 0.2 ppm
Station 4	14:44	0.0 ppm
· · · · · · · · · · · · · · · · · · ·	COMMENTS:	
nbient Air Monitoring - PM10 (Particu		.1 mg/m ³ above background)
Instrument used:	MIE DataRam PDR	.1 mg/m ³ above background)
Instrument used: Calibration performed? (Y or N)	MIE DataRam PDR Y	
Instrument used: Calibration performed? (Y or N) Station / Sample Location	MIE DataRam PDR Y Time	Reading (provide units)
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1	MiE DataRam PDR Y Time 14:36	
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2	MiE DataRam PDR Y 14:36 14:30	Reading (provide units) 0.057 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1	MIE DataRam PDR Y 14:36 14:30 14:22 14:44	Reading (provide units) 0.057 mg/m ³ 0.068 mg/m ³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4	MIE DataRam PDR Y 14:36 14:30 14:22	Reading (provide units) 0.057 mg/m³ 0.068 mg/m³ 0.023 mg/m³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4	MIE DataRam PDR Y 14:36 14:30 14:22 14:44	Reading (provide units) 0.057 mg/m³ 0.068 mg/m³ 0.023 mg/m³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 From W/NW @ 3.3 mph	MIE DataRam PDR Y 14:36 14:30 14:22 14:44	Reading (provide units) 0.057 mg/m³ 0.068 mg/m³ 0.023 mg/m³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from W/NW @ 3.3 mph	MIE DataRam PDR Y 14:36 14:30 14:22 14:44	Reading (provide units) 0.057 mg/m³ 0.068 mg/m³ 0.023 mg/m³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from W/NW @ 3.3 mph	MIE DataRam PDR Y 14:36 14:30 14:22 14:44	Reading (provide units) 0.057 mg/m³ 0.068 mg/m³ 0.023 mg/m³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3	MIE DataRam PDR Y 14:36 14:30 14:22 14:44	Reading (provide units) 0.057 mg/m³ 0.068 mg/m³ 0.023 mg/m³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from W/NW @ 3.3 mph	MIE DataRam PDR Y 14:36 14:30 14:22 14:44	Reading (provide units) 0.057 mg/m³ 0.068 mg/m³ 0.023 mg/m³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from W/NW @ 3.3 mph	MIE DataRam PDR Y 14:36 14:30 14:22 14:44	Reading (provide units) 0.057 mg/m³ 0.068 mg/m³ 0.023 mg/m³
Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4 from W/NW @ 3.3 mph	MIE DataRam PDR Y 14:36 14:30 14:22 14:44	Reading (provide units) 0.057 mg/m³ 0.068 mg/m³ 0.023 mg/m³

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WEIGH

Cotta	ge Grove D9 Site		Monitoring Form
Date:	9/8/2010	2. Weather:	68 °F, Sunny
	·····	·	
Prepared By:	R. McLoughlin (WES	STON)	
Ambient Air Monitori	ng - (VOCs) (Action Level -	2.5 ppm above background as	a 15 min TWA)
Instrum	ent used: Mini	-RAE 2000	
Calibration per	formed? (Y or N) Y		
Station / Sam	ple Location	Time	Reading (provide units)
Stati	on 1	15:29	0.0 ppm
Stati	on 2	15:23	0.0 ppm
Stati		15:38	0.0 ppm
Statio	on 4	15:44	0.0 ppm
		COMMENTS:	
ind from E/SE @ 2.2 m	iph		
Ambient Air Monitorir	ng - PM10 (Particulate Monit	oring) (Action Level - 0.1 m	g/m ³ above background)
		oring) (Action Level - 0.1 m DataRam PDR	g/m ³ above background)
Instrume Calibration perf	ent used: MIE [ormed? (Y or N) Y		
Instrume Calibration perf Station / Sam	ent used: MIE [ormed? (Y or N) Y ple Location	DataRam PDR	Reading (provide units)
Instrume Calibration perf	ent used: MIE [ormed? (Y or N) Y ple Location	Time 15:29	Reading (provide units) 0.006 mg/m ³
Instrume Calibration perf Station / Sam Static Static	ent used: MIE [ormed? (Y or N) Y ple Location on 1 on 2	Time 15:29 15:23	Reading (provide units) 0.006 mg/m ³ 0.001 mg/m ³
Instrume Calibration perf Station / Sam Static Static Static	ent used: MIE [ormed? (Y or N) Y ple Location on 1 on 2 on 3	Time 15:29 15:23 15:38	Reading (provide units) 0.006 mg/m ³ 0.001 mg/m ³ 0.031 mg/m ³
Instrume Calibration perf Station / Sam Static Static	ent used: MIE [ormed? (Y or N) Y ple Location on 1 on 2 on 3	Time 15:29 15:23 15:38 15:44	Reading (provide units) 0.006 mg/m ³ 0.001 mg/m ³
Instrume Calibration perf Station / Sam Statio Statio Statio Statio	ent used: MIE f ormed? (Y or N) Y ple Location on 1 on 2 on 3 on 4	Time 15:29 15:38 15:44 COMMENTS:	Reading (provide units) 0.006 mg/m ³ 0.001 mg/m ³ 0.031 mg/m ³
Instrume Calibration perf Station / Sam Statio Statio Statio Statio Station 1 in this sampling ove road work. An excav	ent used: MIE I formed? (Y or N) Y ple Location 0 on 1 0 on 2 0 on 3 0 on 4 0 g event was measured approx vator is parked just east of act act end loader drove down the head the monitoring station dur	Time 15:29 15:23 15:38 15:44 COMMENTS: imately 15 yards to the west of u ual Station 1 and is moving the H naul road past the monitoring stating the 5-min average dust reading the 5-min average dust reading	Reading (provide units) 0.006 mg/m³ 0.001 mg/m³ 0.031 mg/m³ 0.015 mg/m³ sual location because of ongoing East IDPE pipe for the East Cove. tion during the 5 min-average dust reading at Station 4.
Instrume Calibration perf Station / Sam Statio Statio Statio Statio Station 1 in this sampling ove road work. An excav	ent used: MIE I formed? (Y or N) Y ple Location 0 on 1 0 on 2 0 on 3 0 on 4 0 g event was measured approx vator is parked just east of act act end loader drove down the head the monitoring station dur	Time 15:29 15:23 15:38 15:44 COMMENTS: imately 15 yards to the west of u ual Station 1 and is moving the H haul road past the monitoring statements	Reading (provide units) 0.006 mg/m³ 0.001 mg/m³ 0.031 mg/m³ 0.015 mg/m³ sual location because of ongoing East IDPE pipe for the East Cove. tion during the 5 min-average dust readi
Instrume Calibration perf Station / Sam Statio Statio Statio Statio Station 1 in this sampling ove road work. An excav	ent used: MIE I formed? (Y or N) Y ple Location 0 on 1 0 on 2 0 on 3 0 on 4 0 g event was measured approx vator is parked just east of act act end loader drove down the head the monitoring station dur	Time 15:29 15:23 15:38 15:44 COMMENTS: imately 15 yards to the west of u ual Station 1 and is moving the H naul road past the monitoring stating the 5-min average dust reading the 5-min average dust reading	Reading (provide units) 0.006 mg/m³ 0.001 mg/m³ 0.031 mg/m³ 0.015 mg/m³ sual location because of ongoing East IDPE pipe for the East Cove. tion during the 5 min-average dust reading at Station 4.

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WEIGH

Date: 9/27/20	2. Weather:	74 °F, Sunny
	ghlin (WESTON)	
Ambient Air Monitoring - (VOCs) (Act	ion Level - 2.5 ppm above background	as a 15 min TWA)
Instrument used:	Mini-RAE 2000	
Calibration performed? (Y or N)	N	
Station / Sample Location	Time	Reading (provide units)
Station 1	14:15	0.0 ppm
Station 2	14:08	0.0 ppm
Station 3	14:26	0.0 ppm
Station 4	13:59	0.0 ppm
	COMMENTS:	
a. Currently backfilling with clean materia	al from the east cove road construction p	Bolander continuing backfill activities in the D9 roject.
a. Currently backfilling with clean materia Ambient Air Monitoring - PM10 (Particu	al from the east cove road construction p ulate Monitoring) (Action Level - 0.	noject. 1 mg/m ³ above background)
a. Currently backfilling with clean materia Ambient Air Monitoring - PM10 (Particu Instrument used:	al from the east cove road construction p ulate Monitoring) (Action Level - 0. MIE DataRam PDR	roject.
a. Currently backfilling with clean materia Ambient Air Monitoring - PM10 (Particu Instrument used: Calibration performed? (Y or N)	al from the east cove road construction p ulate Monitoring) (Action Level - 0. MIE DataRam PDR Y	roject. 1 mg/m ³ above background)
a. Currently backfilling with clean materia Ambient Air Monitoring - PM10 (Particu Instrument used: Calibration performed? (Y or N) Station / Sample Location	al from the east cove road construction p ulate Monitoring) (Action Level - 0. MIE DataRam PDR Y Time	roject. 1 mg/m ³ above background) Reading (provide units)
a. Currently backfilling with clean materia Ambient Air Monitoring - PM10 (Particu Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1	al from the east cove road construction p ulate Monitoring) (Action Level - 0. MIE DataRam PDR Y Time 14:20	roject. 1 mg/m ³ above background) Reading (provide units) 0.002 mg/m ³
a. Currently backfilling with clean materia Ambient Air Monitoring - PM10 (Partice Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2	al from the east cove road construction p ulate Monitoring) (Action Level - 0. MIE DataRam PDR Y Time 14:20 14:08	roject. 1 mg/m ³ above background) Reading (provide units)
a. Currently backfilling with clean materia Ambient Air Monitoring - PM10 (Partice Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3	al from the east cove road construction p ulate Monitoring) (Action Level - 0. MIE DataRam PDR Y Time 14:20 14:08 14:26	roject. 1 mg/m ³ above background) Reading (provide units) 0.002 mg/m ³
a. Currently backfilling with clean materia Ambient Air Monitoring - PM10 (Particu Instrument used: Calibration performed? (Y or N) Station / Sample Location Station 1 Station 2 Station 3 Station 4	al from the east cove road construction p ulate Monitoring) (Action Level - 0. MIE DataRam PDR Y Time 14:20 14:08 14:26 13:59 COMMENTS:	1 mg/m ³ above background) Reading (provide units) 0.002 mg/m ³ 0.013 mg/m ³

Z:\3m-cottage grove\D9_Construction\Perimeter Monitoring\CGD9 PerimeterMonitoring 09.27.10,Perimeter Monitoring Form

Cotta			
Date:	10/1/2010	2. Weather:	58 °F, Sunny
-			
Prepared By:	R. McLoughlin (WE		
		2.5 ppm above background a	s a 15 min TWA)
		-RAE 2000	
	erformed? (Y or N) N		
	mple Location	Time	Reading (provide units)
	tion 1	11:29	0.0 ppm
	tion 2	11:21	0.0 ppm
	tion 3	11:17	0.0 ppm
Sta	tion 4	11:14	0.0 ppm
/ind from S @ 1.4 mpt		COMMENTS:	
	ring - PM10 (Particulate Monit		ng/m ³ above background)
Instrum	nent used: MIE	oring) (Action Level - 0.1 n DataRam PDR	ng/m ³ above background)
Instrun Calibration pe	nent used: MIE rformed? (Y or N) Y	DataRam PDR	
Instrun Calibration per Station / San	nent used: MIE rformed? (Y or N) Y nple Location		ng/m ³ above background) Reading (provide units)
Instrun Calibration pe Station / Sar Stat	nent used: MIE rformed? (Y or N) Y nple Location ion 1	DataRam PDR Time 	Reading (provide units)
Instrum Calibration pe Station / San Stat Stat	nent used: MIE rformed? (Y or N) Y nple Location ion 1 ion 2	DataRam PDR Time 11:26	
Instrun Calibration pe Station / San Stat Stat	nent used: MIE rformed? (Y or N) Y nple Location tion 1 tion 2 tion 3	Time 11:26	Reading (provide units) 0.007 mg/m ³
Instrum Calibration pe Station / San Stat Stat Stat Stat	ment used: MIE rformed? (Y or N) Y nple Location	Time 11:26 COMMENTS:	Reading (provide units)
Instrum Calibration per Station / Sar Stat Stat Stat Dust Monitor not charg as recorded at only one	ment used: MIE rformed? (Y or N) Y nple Location	Time 11:26 COMMENTS:	Reading (provide units) 0.007 mg/m ³

Z:\3m-cottage grove\D9_Construction\Perimeter Monitoring\CGD9 Perimeter Monitoring 10.01.10,Perimeter Monitoring Form

WIJICN

1. Date: 10/6/2010 2. Weather: 51 °F, Sunny 3. Prepared By: R. McLoughlin (WESTON) 4. Ambient Air Monitoring - (VOCs) (Action Level - 2.5 ppm above background as a 15 min TWA) Instrument used: Mini-RAE 2000 Callbration performed? (Y or N) N Station / Sample Location Time Station 1 - Station 2 7:50 0.0 ppm Station 3 7:41 0.0 ppm Station 4 7:59 0.0 ppm Station 4 7:59 0.0 ppm Station 4 7:59 No current site activity (activity to the east of the D9 site for east cove road construction Activities). Station 1 not monity	its)	nd as a 15 min TWA) Reading (provide units) - 0.0 ppm 0.0 ppm	/ESTON) el - 2.5 ppm above background ini-RAE 2000 Time -	epared By: R. McLoughlin (WE nbient Air Monitoring - (VOCs) (Action Level Instrument used: Mir Calibration performed? (Y or N) N
Ambient Air Monitoring - (VOCs) (Action Level - 2.5 ppm above background as a 15 min TWA) Instrument used: Mini-RAE 2000 Calibration performed? (Y or N) N Station / Sample Location Time Reading (provide unit Station 1 - - Station 2 7:50 0.0 ppm Station 3 7:41 0.0 ppm Station 4 7:59 0.0 ppm COMMENTS: Vind from E @ 0.5 mph Vind from E @ 0.5 mph	its)	Reading (provide units) - 0.0 ppm 0.0 ppm	el - 2.5 ppm above background ini-RAE 2000 Time -	nbient Air Monitoring - (VOCs) (Action Level Instrument used: Mir Calibration performed? (Y or N) N
Ambient Air Monitoring - (VOCs) (Action Level - 2.5 ppm above background as a 15 min TWA) Instrument used: Mini-RAE 2000 Calibration performed? (Y or N) N Station / Sample Location Time Reading (provide unit Station 1 - - Station 2 7:50 0.0 ppm Station 3 7:41 0.0 ppm Station 4 7:59 0.0 ppm COMMENTS: Vind from E @ 0.5 mph Vind from E @ 0.5 mph	its)	Reading (provide units) - 0.0 ppm 0.0 ppm	el - 2.5 ppm above background ini-RAE 2000 Time -	nbient Air Monitoring - (VOCs) (Action Level Instrument used: Mir Calibration performed? (Y or N) N
Instrument used: Mini-RAE 2000 Calibration performed? (Y or N) N Station / Sample Location Time Reading (provide unit) Station 1 - - Station 2 7:50 0.0 ppm Station 3 7:41 0.0 ppm Station 4 7:59 0.0 ppm COMMENTS:	its)	Reading (provide units) - 0.0 ppm 0.0 ppm	ini-RAE 2000 Time	Instrument used: Mir Calibration performed? (Y or N) N
Calibration performed? (Y or N) N Station / Sample Location Time Reading (provide unit Station 1 - - Station 2 7:50 0.0 ppm Station 3 7:41 0.0 ppm Station 4 7:59 0.0 ppm COMMENTS:	its)	- 0.0 ppm 0.0 ppm	Time -	Calibration performed? (Y or N) N
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Station 1 - - Station 2 7:50 0.0 ppm Station 3 7:41 0.0 ppm Station 4 7:59 0.0 ppm COMMENTS:	its)	- 0.0 ppm 0.0 ppm		Station / Sample Location
Station 2 7:50 0.0 ppm Station 3 7:41 0.0 ppm Station 4 7:59 0.0 ppm COMMENTS: Wind from E @ 0.5 mph 0.5 mph		0.0 ppm		
Station 3 7:41 0.0 ppm Station 4 7:59 0.0 ppm COMMENTS:		0.0 ppm		Station 1
Station 4 7:59 0.0 ppm COMMENTS: Wind from E @ 0.5 mph 0.5 mph			7:50	Station 2
COMMENTS: Wind from E @ 0.5 mph		0.0 ppm	7:41	Station 3
Wind from E @ 0.5 mph			7:59	Station 4
			COMMENTS:	
Ambient Air Monitoring - PM10 (Particulate Monitoring) (Action Level - 0.1 mg/m ³ above background) Instrument used: MIE DataRam PDR		0.1 mg/m ³ above background)		
Calibration performed? (Y or N) N				
	its)	Reading (provide units)	Time	
Station / Sample Location Time Reading (provide uni			11110	Station / Sample Location
Station 1		0.020 mg/m ³		Station 1
Station 1 Station 2 7:50 0.020 mg/m ³			7:50	Station 1 Station 2
Station 1 Station 2 7:50 0.020 mg/m ³			7:50 7:41	Station 1 Station 2 Station 3

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