



engineering and constructing a better tomorrow

July 1, 2010

Mr. Jeff Grow
Division of Waste Management
Superfund Branch
14 Reilly Road
Frankfort, KY 40601

**Subject: Implementation Schedule and Soil Sampling Plan
Former Vermont American Facility
500 East Main Street, Louisville, Jefferson County, Kentucky
AI# 51784
MACTEC Project No. 6680-08-9635**

Dear Mr. Grow:

On behalf of Robert Bosch Tool Corporation (successor to Vermont American Corporation) MACTEC Engineering and Consulting, Inc. (MACTEC) has prepared this letter, with attachments, in response to your letter dated June 11, 2010.

Background

The Former Vermont American facility, located at 500 Main Street in Louisville, Jefferson County, Kentucky, was sold by Vermont American Corporation (VAC) to 500 Associates, Inc. (the current Owner) in 1987. On March 11, 2008, a Secretary's Final Order required VAC to remedy historic environmental releases following approval of a remedial proposal to be submitted to the Kentucky Division of Waste Management (KDWM). MACTEC submitted a *Management Plan* for your review on May 20, 2010, and follow-up electronic communication on June 9, 2010. On June 11, 2010, you issued a letter indicating the *Management Plan* was generally acceptable, pending performance of an acceptable Soil Sampling Program, and coordination with the Hazardous Waste Branch of the KDWM regarding characterization of the soil, prior to soil excavation. In your letter, you requested submittal of an approximate schedule for implementation of certain activities described in the *Management Plan*, including submittal of a Soil Sampling Plan.

The deadline for response provided in your letter was June 22, 2010. However, in subsequent electronic communication, you approved an extension of this deadline until July 1, 2010. The following sections of this letter and the attachments have been prepared to respond specifically to the requests in your letter.

Implementation Schedule

Attachment A contains a proposed schedule for implementing the Initial Removals and the first two Groundwater Sampling Events described in the *Management Plan* (Sections 4.3 and 5.0, respectively). The principal players associated with each task and the expected duration (in business days) are shown on the scheduling chart. Dates have been included in the schedule for reference. However (as discussed in more detail below), several factors will influence the actual dates of implementation.

In general, we anticipate the proposed implementation activities will be conducted in the following order:

- Once the Access Agreement is executed, 500 Associates will have vegetation cleared from the interior courtyard areas, and make the property available for inspection.
- MACTEC and its subcontractors will conduct an inspection of the property to make sure that it is accessible and safe for heavy equipment use.
- MACTEC will conduct Groundwater Sampling Event 1, including the four existing wells, before any of the wells are abandoned. A report will be prepared containing the analytical results, and proposed locations of two replacement wells for the two interior monitoring wells (W-2 and W-3).
- RBTC will engage a contractor to clean out and pressure wash the concrete floor and drain surfaces in the East Shop and east end of the Main Street Building, with particular attention to drains containing sludge or crystals.
- RBTC will engage a Professional Surveyor to locate and mark on the property, from available maps, the future Interstate right-of-way line, the former plater locations, and a sampling grid fitted to the outlines of the former platers.
- MACTEC will execute the proposed Soil Sampling Program, as described in Attachment B of this letter. The findings and analytical results will be documented in a summary report, to be submitted to the KDWM along with a request to the Hazardous Waste Branch that soils with COC concentrations below the residential PRGs be considered to no longer contain hazardous constituents.
- MACTEC will subcontract a Kentucky Certified Driller to abandon the two interior groundwater monitoring wells (W-2 and W-3) and replace them with two wells in Main Street (just north of the side walk), to be located west of the future Interstate right-of-way (ROW) line. Note: monitoring wells W-1 and W-4 are located close to the Interstate ROW line, and may need to be replaced in the future. We anticipate they will be

abandoned just prior to highway construction, and replaced after construction is completed, to avoid damage to those wells during construction.

- After the soil borings and well abandonment are completed, MACTEC will engage a subcontractor to break up and remove the concrete floor under the former East Main Plater, along with any obviously stained gravel and/or shallow soil directly beneath the floor.
- MACTEC will conduct Groundwater Sampling Event 2 approximately six months after Groundwater Sampling Event 1, and will include W-1, W-4 and the replacement wells for W-2 and W-3. Groundwater sampling of all available wells will continue subsequently according to the schedule in the *Management Plan*, at three years and five years after approval of the Management Plan (Events 3 and 4, respectively), with a Five-Year Review to be performed after Groundwater Sampling Event 4.

We anticipate that all of the field activities (except for Groundwater Sampling Event 2) listed on the Schedule in Attachment A can be accomplished before the end of Calendar Year 2010.

However, several **important assumptions** were made in preparing this schedule, as follows:

1. As the current Owner of the property, 500 Associates controls access to the buildings and exterior courtyard areas where the proposed activities will need to occur, and therefore **RBTC cannot solely control the schedule or prevent delays**. Today (July 1, 2010), the law firm of Middleton Reutlinger, on behalf of RBTC, has submitted a Draft Access Agreement to the law firm of Seiller Waterman, on behalf of 500 Associates. We have allowed 45 business days (9 weeks) for negotiation and execution of an Access Agreement that is acceptable to both parties. **If an acceptable Access Agreement cannot be negotiated with 500 Associates, the schedule for all subsequent activities will slip.**
2. We have allowed 10 business days after the Access Agreement is executed for 500 Associates to have vegetation cleared from the exterior areas of the property, and we plan to schedule an inspection of the property for the end of that period. The purpose of the property inspection will be to verify that building and exterior conditions in the areas where proposed activities will occur are adequate, so that these activities can proceed safely. **If vegetation is not cleared, or the condition of the Main Street and/or East Shop buildings is not adequate for safe operations by heavy equipment, the schedule for some or all of the proposed activities will be delayed until 500 Associates can address these conditions.**
3. As we have discussed previously, the most practical time to perform soil excavation and removal activities (if needed, based on location and results of the Soil Sampling Program) will be after demolition of the East Shop building and all or part of the Main Street building. Therefore, **scheduling of soil removal activities has been deferred until the schedule for building demolition is established**. However, the proposed Soil Sampling Program can be implemented (safety conditions permitting), and the waste

characterization/determination process completed with the Hazardous Waste Branch prior to building demolition.

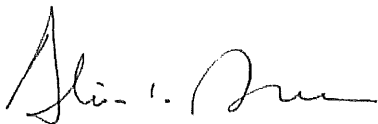
Soil Sampling Program

Attachment B contains a proposed Soil Sampling Plan and a figure showing the approximate locations of the proposed borings.

We hope this letter provides you with the information you require for your review of the project status. If you have any questions concerning this Plan, please feel free to call Alison Dunn at 859-566-3729.

Sincerely,

MACTEC ENGINEERING AND CONSULTING, INC.



Alison L. Dunn, P.G.
Project Manager/Principal Hydrogeologist
email: aldunn@mactec.com



Sarah M. Donaldson, P.G.
Senior Geologist
email: smdonaldson@mactec.com

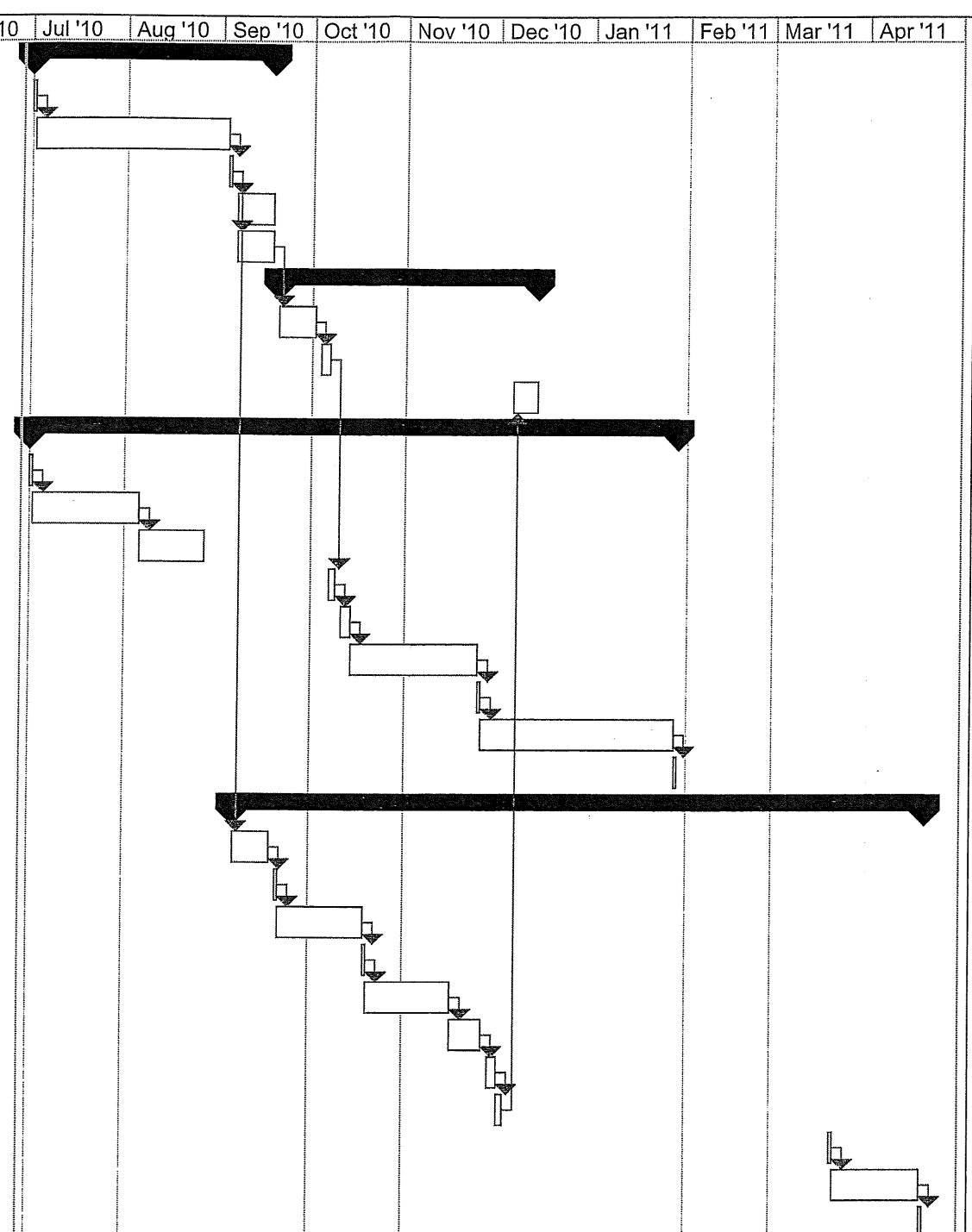
cc: John Young, Robert Bosch, LLC
David Luepke, Robert Bosch Tool Corporation
Charles G. Middleton, Middleton Reutlinger
Paul S. Johnstone, MACTEC

ATTACHMENT A

**PROPOSED SCHEDULE FOR
MANAGEMENT PLAN IMPLEMENTATION**

PROPOSED SCHEDULE FOR MANAGEMENT PLAN IMPLEMENTATION

ID	Task Name	Plaver	Duration	Start	Finish	Jun '10	Jul '10	Aug '10	Sep '10	Oct '10	Nov '10	Dec '10	Jan '11	Feb '11	Mar '11	Apr '11
1	Access Agreement and Property Condition		57 days	Thu 7/1/10	Fri 9/17/10											
2	RBTC submit draft Access Agreement to 500 Associates	RBTC	1 day	Thu 7/1/10	Thu 7/1/10											
3	Negotiate Access Agreement	500, RBTC	45 days	Fri 7/2/10	Thu 9/2/10											
4	Execute final Access Agreement	500, RBTC	1 day	Fri 9/3/10	Fri 9/3/10											
5	Schedule and implement clearing of vegetation	500	10 days	Mon 9/6/10	Fri 9/17/10											
6	Schedule and conduct property condition inspection	MACTEC	10 days	Mon 9/6/10	Fri 9/17/10											
7	Interior Cleaning and Surface Debris Removal		61 days	Mon 9/20/10	Mon 12/13/10											
8	Solicit and compare bids, schedule contractor	MACTEC	10 days	Mon 9/20/10	Fri 10/1/10											
9	Pressure wash floors and drains (EMP and East Shop)	Contractor	3 days	Mon 10/4/10	Wed 10/6/10											
10	Remove floor under EMP	Contractor	6 days	Mon 12/6/10	Mon 12/13/10											
11	Soil Sampling Program		152 days	Thu 7/1/10	Fri 1/28/11											
12	Submit Soil Sampling Plan for KDWM review	MACTEC	1 day	Thu 7/1/10	Thu 7/1/10											
13	KDWM review and approval of Soil Sampling Plan	KDWM	25 days	Fri 7/2/10	Thu 8/5/10											
14	Solicit bids, schedule contractors	MACTEC	15 days	Fri 8/6/10	Thu 8/26/10											
15	Site survey to locate ROW line, former platers, sampling grid	Contractor	2 days	Thu 10/7/10	Fri 10/8/10											
16	Advance soil borings and collect samples	MACTEC, Con.	3 days	Mon 10/11/10	Wed 10/13/10											
17	Sample analyses, compile data and prepare Report for internal review	MACTEC	30 days	Thu 10/14/10	Wed 11/24/10											
18	Submit Report and Request for Waste Determination to KDWM	MACTEC	1 day	Thu 11/25/10	Thu 11/25/10											
19	KDWM review Report and Request for Waste Determination	KDWM	45 days	Fri 11/26/10	Thu 1/27/11											
20	KDWM issue approved Waste Determination	KDWM	1 day	Fri 1/28/11	Fri 1/28/11											
21	Groundwater Sampling		162 days	Mon 9/6/10	Tue 4/19/11											
22	Schedule groundwater sampling from existing monitoring wells	MACTEC	10 days	Mon 9/6/10	Fri 9/17/10											
23	Groundwater Sampling Event 1	MACTEC	1 day	Mon 9/20/10	Mon 9/20/10											
24	Sample analyses, compile data and prepare Report for internal review	MACTEC	20 days	Tue 9/21/10	Mon 10/18/10											
25	Submit Report to KDWM	MACTEC	1 day	Tue 10/19/10	Tue 10/19/10											
26	KDWM review and approval of report	KDWM	20 days	Wed 10/20/10	Tue 11/16/10											
27	Schedule driller	MACTEC	8 days	Wed 11/17/10	Fri 11/26/10											
28	Abandon interior monitoring wells W-2 and W-3	Contractor	3 days	Mon 11/29/10	Wed 12/1/10											
29	Install replacement monitoring wells for W-2 and W-3 in Main Street	Contractor	2 days	Thu 12/2/10	Fri 12/3/10											
30	Groundwater Sampling Event 2	MACTEC	1 day	Mon 3/21/11	Mon 3/21/11											
31	Sample analyses, compile data and prepare Report for internal review	MACTEC	20 days	Tue 3/22/11	Mon 4/18/11											
32	Submit Report to KDWM	MACTEC	1 day	Tue 4/19/11	Tue 4/19/11											



AI # 51784, Former Vermont American Facility
500 East Main Street, Louisville, Kentucky

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

Date of Last Revision: Mon 6/28/10

ATTACHMENT B
SOIL SAMPLING PLAN

SOIL SAMPLING PLAN

FORMER VERMONT AMERICAN FACILITY
500 EAST MAIN STREET
LOUISVILLE, KENTUCKY
AGENCY INTEREST # 51784

July 1, 2010

1. PURPOSE

This Soil Sampling Plan is provided as a supplement to the *Management Plan* (MACTEC, May 20, 2010), to revise and provide more specific details concerning the Soil Sampling Program proposed in Section 4.3.2 of that plan. The Soil Sampling Program will focus on three areas of the property formerly occupied by plating lines and designated as Management Areas in the *Management Plan*. These areas and the approximate locations of the former plating lines (or platers) are shown on the map in Figure 1 (refer to the figures in the *Management Plan* for wider area view of the site). One Management Area (the site of the former East Main Plater) is inside the building that faces East Main Street, (the Main Street Building, also known by its subsequent use as a Bonded Warehouse). Two of the areas (the sites of the Circular Saw Plater, and Platers #2 and #3) are located in an open courtyard area bounded by the Main Street building to the north and the East Shop to the east. This open courtyard area was formerly occupied by buildings which were demolished by the current Owner in 1990.

The purpose of the Soil Sampling Program is to determine the concentrations of the constituents of concern (COCs) in soil beneath the former platers. In previous correspondence concerning this site, the Kentucky Division of Waste Management (KDWM) has indicated that soil beneath the former plating areas, if removed from the ground, would be considered a listed hazardous waste. However, under the KDWM's current Contained-In Determination (CID) policy, a soil may be determined to no longer be a hazardous waste if it no longer contains hazardous constituents above the residential screening levels for soil. The current residential screening levels in Kentucky are the U.S. Environmental Protection Agency (USEPA) Region 9 October 2002 Preliminary Remediation Goals (PRGs) for residential soil. Under the CID policy, the KDWM prefers that the determination be made based on in-situ data, before the soil is excavated.

The purpose of the Soil Sampling Program, therefore, will be to map the occurrence and concentrations of the COCs in the areas of the former platers, both horizontally and vertically, to provide the basis for a No Longer Contained-In Determination to be approved by the KDWM Hazardous Waste Branch. Once the map and determination are approved by the KDWM, should excavation of soil be required by future property use within the Management Areas, soils with concentrations of COCs below the PRGs should have no restricted uses if excavated and reused onsite. Profiling and appropriate disposal could still be required if soil from the Management Areas is taken offsite.

2. CONSTITUENTS OF CONCERN

As identified in the *Management Plan*, the COCs for soil at the site are lead (total), chromium (total), and chromium (hexavalent). The following are the PRGs for soil for these three constituents:

Constituent	Residential (mg/kg)	Industrial (mg/kg)
Lead (Total)	400	750
Chromium (Total)	210	450
Chromium (Hexavalent)	30	64

Analytical results from the Soil Sampling Program will be compared to both the Residential and Industrial PRGs. Although soil concentrations for all three COCs must be below the residential PRG for the soil to be determined to no longer be a hazardous waste, comparison to industrial PRGs may be helpful in the evaluation and management of soil to be left in place after excavation.

3. SAMPLING LOCATIONS

The proposed soil boring locations are shown on the map in Figure 1. Locations are approximate and may be adjusted as a result of the field survey (to be conducted prior to sampling) and/or obstructions that may be encountered in the field during sampling.

In developing the sampling locations, the intent of the proposed layout was to sample approximately on 15-foot centers. As shown in Figure 1, a grid with a 15-foot by 15-foot spacing

was superimposed on the former plating areas. Sampling locations were then adjusted to be aligned with the locations of the former plating lines.

There are 35 proposed soil boring locations identified on Figure 1. Of those, 23 are intended to be 10-foot deep borings (designated by open circles), and 12 are intended to be 20-foot deep borings (designated by filled circles).

Three soil samples will be collected for laboratory analysis from the 10-foot deep borings, and four from the 20-foot deep borings. Additional information concerning proposed soil sampling methods is provided in the following section.

4. FIELD METHODS

Soil borings will be advanced using direct push technology (DPT) methods, with a Geoprobe® rig or equivalent. A hammer bit will be used to penetrate the concrete floor inside the building, and soil below the surface will be sampled continuously using a hollow soil core barrel with a clear acetate sampling liner. Upon completion of sampling from each soil boring, the boring will be abandoned by backfilling with hydrated bentonite pellets.

The appearance of the soil will be observed and logged by MACTEC's field geologist. In the absence of any distinguishing visual evidence, soil will be sampled for laboratory analysis from the following three intervals in the 10-foot borings: 0-1 feet, 4-5 feet and 9-10 feet. In the 20-foot borings, soil will be sampled at the following four intervals: 0-1 feet, 6-7 feet, 13-14 feet and 19-20 feet. Sampling intervals may be adjusted in the field if insufficient soil recovery occurs within a designated interval, or if visual evidence of staining with plating solutions (such as bright yellow-blue-green colors in the soil) is observed.

Soils from the sampled intervals will be composited using clean nitrile gloves, stainless steel tools, and glass containers. Each composited sample will be stored in a laboratory-supplied 4-ounce glass jar, and sample jars will be kept in coolers chilled with ice. Samples will be transported or shipped by overnight carrier to a commercial laboratory for analysis, accompanied by a completed and signed chain-of-custody form.

A total of 117 field samples will be collected for analysis. In addition, for quality control purposes, MACTEC will submit approximately five field duplicates, four matrix spike/matrix spike duplicates, and one equipment rinsate blank per day of sampling, for a total of approximately 135 analytical samples.

5. ANALYTICAL METHODS

The following analytical methods, holding times and reporting limits will apply to the laboratory analyses of soil samples collected for this Soil Sampling Program:

Constituent	Method (USEPA SW-846)	Holding Time (days)	Reporting Limit (mg/kg)
Lead (Total)	6010B	180	0.25
Chromium (Total)	6010B	180	0.5
Chromium (Hexavalent)	3060A	30	2

6. REPORT

Upon completion of the laboratory analyses, MACTEC will prepare a report documenting the field methods and results, and including soil boring logs and laboratory analytical reports. The report will also include the surveyor's map, with final boring locations shown (approximately) on the map. An overlay map will be prepared identifying the soil boring locations where at least one sample was found to exceed the residential PRG for at least on COC, and tables will be provided summarizing the results for each sample.

If appropriate based on the analytical results, statistical and/or contouring analyses may be performed on the data. The report will include a map outlining the area(s) of soil to be treated as hazardous waste (if excavated) based on PRG exceedances. A request for No Longer Contained-In Determination will accompany the report, which will be submitted to both the Superfund and Hazardous Waste Branches of the KDWM.



APPROX. SCALE	1" = 20'
DATE	6/29/2010
DRAWN BY	ALD
APPROVED BY	SMD

PROPOSED SOIL BORING LOCATIONS
 FORMER VERMONT AMERICAN FACILITY
 500 EAST MAIN STREET, LOUISVILLE, KENTUCKY
 PROJECT NUMBER: 6680-08-9635

MACTEC
 2456 Fortune Drive, Suite 100
 Lexington, KY 40509
 (859) 255-3308

LEGEND

- EXISTING BUILDING
- PREVIOUS BUILDING
- PROPERTY LINE
- EDGE OF FUTURE INTERSTATE RIGHT-OF-WAY (APPROX.)
- EDGE OF FUTURE RETAINING WALL OR ABUTMENT (APPROX.)
- APPROXIMATE LIMIT OF RETAINING WALL AND ABUTMENT FOUNDATIONS
- MONITORING WELL
- MANAGEMENT AREA
- SAMPLING GRID (15 FT SPACING)
- PROPOSED SOIL BORING (10 FT DEEP)
- PROPOSED SOIL BORING (20 FT DEEP)

NORTH

0 10 20
 APPROX. SCALE IN FEET

FIG. 1