DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS
AN AFFILIATE OF DAY ENGINEERING, P.C.

December 21, 2006

Mr. Frank Sowers, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, New York 14414-8519

RE: General Circuits Brownfield Cleanup Program Site #C828085
95 Mount Read Boulevard, Rochester, New York
Sub-Slab Soil Gas Mitigation - IRM Work Plan Addendum #1, Revision 1

Dear Mr. Sowers:

This letter has been developed on behalf of 95 Mount Read Blvd., LLC, as IRM Work Plan Addendum #1 to address additional mitigation of potential soil vapor intrusion at the 95 Mt. Read Blvd. Site. This letter includes revisions that were made to the previous IRM Work Plan Addendum #1, dated November 30, 2006, to address the comments listed in your response of December 15, 2006, and as discussed with you by telephone on December 20, 2006.

Background

As noted in prior correspondence, the sub-slab depressurization (SSD) system that was originally installed to address the soil vapor intrusion does not appear to be effective within the southeast portion of the delineated Area of Concern (Area 5 as referenced in Day Environmental Inc.'s *Indoor Air Quality and Building Inventory: Report on February 2006 Follow-Up Sampling Event*, dated May 2006). Indoor air purification was subsequently selected as the technology of choice to provide additional mitigation of Area 5.

Equipment

The indoor air purification equipment proposed for use in supplementing the existing SSD system is the AllerAir 6000 VOCarb, DX model (see attached cut sheets). The VOCarb DX model is essentially a VOCarb unit with an extra-thick (36-pound) carbon filter for increased removal capacity and efficiency. AllerAir has confirmed that the VOCarb carbon mixture is highly effective at removing TCE and PCE, with anticipated absorbance capacities in excess of 50% by weight.

The AllerAir units will be operated continuously at the maximum speed of 400 CFM to provide a minimum of one room air change per hour in the proposed locations (see below). Additionally, it is anticipated that the AllerAir 6000's unobtrusiveness (small size, aesthetic finish, low power consumption and quiet operation) will allow it to be easily integrated into existing occupied spaces, and less susceptible to tenant tampering following installation. Electrical connection of the AllerAir 6000 units will be via existing electrical outlets.

Locations

In analyzing the SSD data obtained to date, it has been determined that:

- Area 5 (southwestern portion of the Area of Concern, as shown in Figure 1) was observed to contain locally elevated indoor air concentrations of TCE and PCE, while VOC concentrations in the remaining 2/28/06 indoor sample locations appear to be within acceptable limits following start-up of the SSD system.

- SSD vent points V-2 and V-6 (see Figure 1) are providing minimal air flows, indicative of tight soils and a minimal radius of influence. V-1, V-3 and V-4 are providing moderate air flows, and V-5 is providing the highest rate of sub-slab air removal.

- SSD monitoring points P-1 and P-2 (the western-most monitoring points) are showing minimal SSD pressures, while monitoring points P-3 and P-4 indicate more effective depressurization and radial influence in those areas.

Based upon this data, DAY proposes to install three indoor air purification units within Area 5 at the south-western end of the Area of Concern. The spaces in which the air purification units will be installed are designated Rooms 2, 3 and 4 in Figure 1 (room numbers were chosen to correspond to the numbers provided in DAY's *Indoor Air Quality and Building Inventory Report* dated September 2005). Indoor air treatment is known to be needed in Room 2 (the room in which the S-5 indoor air sample was collected), and given the suspect operating efficiency of the SSD system at this end of the Area of Concern, air purification units will also be installed in the two rooms adjacent to Room 2 (i.e. Rooms 3 and 4) that are also within the designated Area of Concern. Areas adjacent to Rooms 3 and 4 will be evaluated as a part of the effectiveness monitoring program to determine whether or not additional air purification units are needed.

Tenants occupying Rooms 2 through 4 will be consulted regarding specific installation locations within these rooms, and the units placed in these rooms will be appropriately labeled to designate each unit as an air purifier that must not be turned off, unplugged or moved; that the speed setting must not be altered; and providing a contact name and phone number for notification in the event that the unit malfunctions.

Effectiveness Monitoring

Effectiveness monitoring will involve collection of one additional set of indoor air samples from three locations (E-1 through E-3 shown in Figure 1) as follows:

- Sample E-1 (Room 2) and E-4 (basement) will be tested to verify the effectiveness of the existing basement and new room carbon filtration units in removing VOC's from the indoor air. Room 2, which is the location from which the S-5 sample was collected, is the location at which elevated concentrations of TCE and PCE were observed during the most recent indoor air sampling event, and also represents one of the largest rooms in which air purification devices will be operated (i.e. largest volume of air to be treated). As such, successful operation

of the carbon filtration unit in Room 2 can be considered representative of successful reduction of VOC's in each of the rooms to be newly supplied with carbon filtration units.

- Samples E-2 and E-3 will be collected from the rooms immediately adjacent to Room 3 and Room 4, respectively. These samples will be tested to verify that placement of the indoor air purification units in Rooms 2 through 4 is sufficient to supplement the SSD system in mitigating potential subslab soil vapor intrusion in Area 5, and to confirm that no additional indoor air purification units will are necessary.

As with prior indoor air sampling activities, the effectiveness monitoring air samples will be collected using Summa Canisters over an 8-hour period. The air flow-rate will be controlled with pre-calibrated regulators supplied by the laboratory. In addition, vacuum gauges will be connected to the regulators in order to monitor for proper operation (i.e., slow changes in vacuum) on an hourly basis. The three Summa Canister samples will be delivered under a chain-of-custody documentation to Columbia Analytical Services, Inc. Each of the samples will be tested for volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method TO-15.

Schedule

The carbon filtration units will be installed and operational by no later than February 28, 2007. The carbon systems will be operated for a minimum period of several weeks to equilibrate the carbon media and indoor air concentrations, following which indoor air testing for the effectiveness monitoring program will be performed and completed by no later than March 31, 2007. The results of the effectiveness monitoring program will be summarized in the monthly progress report for the site.

Site Management Plan

Once results of the effectiveness monitoring program are obtained indicating that additional carbon filtration units are not needed, then a comprehensive IRM Final Engineering Report (IRM-FER) will be prepared. The IRM-FER will include the initial version of the Site Management Plan (SMP), which will be a separately bound document developed to address the long-term operation, maintenance and monitoring program for the sub-slab depressurization and air purification units. The SMP will be updated as other elements of the overall remedy are implemented.

Initial plans for the SMP are to attempt to develop an on-site test procedure wherein the relative continuing effectiveness and absorbance capacity of the carbon media can be instantaneously evaluated. This on-site test procedure would involve use of a volatile test component that could be added to the intake of the carbon filtration units, following which the discharge from the carbon units could be measured by PID to determine relative removal efficiencies. If effective, this procedure would be detailed and included in the SMP, and could initially be performed periodically until such time as the effective service life of the carbon media was classified. In the event that a satisfactory on-site test procedure cannot be developed in this manner, then a more traditional indoor air sampling approach may be necessary wherein samples would be collected using Summa Canisters. Although more costly and time-consuming, the carbon service life would be classified as best possible based upon this data.

Please do not hesitate to call me with any questions on this Work Plan Addendum.

Very truly,
Day Environmental, Inc.

Barton F. Kline, P.E.
Project Manager

Attachments

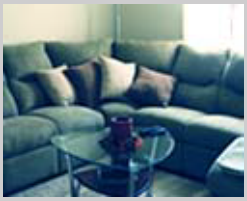
BFK2615.1 / 3681R-05

AllerAir Industries

The 6000 VOCARB

For specific airborne chemical problems and odors






Specially designed impregnated activated carbon bed alleviates VOC (volatile organic compound) situations

The AllerAir 6000 VOCARB features:

- A cleanable pre-filter to collect larger particles.
- A 24 lb. impregnated activated carbon bed specially designed to adsorb light weight noxious airborne chemicals.
- HEPA filter to trap 99.97% of solid particles as small as 0.3 microns.
- 2 anti-microbial filters.
- A 400 CFM (cubic feet per minute) 3 speed fan.
- All metal construction to avoid plastic vapors.
- Cylindrical shape to maximize air flow.

An excellent choice

For offices, clinics, work areas, large rooms, basements.

- Cleans up to 1500 sq. ft. (2 air changes an hour)
- Up to 12 changes of air an hour in smaller areas
- Quiet, excellent for overnight use
- Low electricity consumption (average 80 watts)
- 5 year guarantee (extendible to 10 years)
- Positive or negative air attachment available as an option
- Optional D and DX Models available (28 or 34 lbs of carbon and micro-particulate filter)

Our indoor air quality experts can design over 40 different blends of specially impregnated activated carbon to deal with any specific airborne chemical problems you may encounter

Effective for Volatile organic compounds such as:

- Formaldehyde
- Ammonia
- Sulfur dioxide
- Mold toxins
- Methylene chloride
- Toluene
- Tobacco smoke

The 6000 VOCARB

24 lbs. of specially impregnated activated carbon, combined wtih true HEPA

Protect yourself from toxic VOCs with the AllerAir 6000 VOCARB

AllerAir Industries Inc. Toll free 1-888-852-8247 / Fax: 1-877-688-2193 www.allerair.com

AllerAir Industries

6000 D and DX

Ideal for heavy concentration of gasses, odors, airborne chemicals and tobacco smoke

In Western industrial nations, Chemicals have replaced bacteria and virus as the biggest threat to our health.

Though our bodies have defenses against most particles, we are not protected from airborne chemicals, odors and gasses.

AllerAir 6000 D and DX models are packed with up to 36 pounds of Mac-B activated carbon to trap these chemicals, gasses and odors.

The refillable carbon bed and HEPA filtration are separated for convenient and economical replacement.

Activated carbon is the material the military uses for their gas masks.

The D models offer you denser carbon than our regular models to ensure extra noxious gas and odor adsorption.

Extra Activated Carbon

- Our activated carbon can trap up to 60% of its own weight in gasses and odors.
- The 6000 D and DX models have additional carbon to deal with heavy concentrations of chemicals and pollutants
- The D model has 28 lbs of carbon to provide one and a half times the gas and odor filtration of our EXEC models (with a regular carbon mix).
- The DX model has 36 lbs of carbon to ensure twice the chemical and odor filtration as our EXEC models (with regular carbon mix).

Refillable carbon filter

- The carbon bed is refillable to handle heavy use more economically.

Micro-HEPA filter

- This micro-HEPA filtration traps 95% of particles as small as 0.5 microns.

Vocarb models available

- Vocarb models are available for specific applications.
- Special blends of carbon accommodate up to 4000 different airborne chemicals.

Pre-filter

- Can be easily removed and vacuum- cleaned in as little as 30 seconds.
- 2 anti-microbial filters suppress microbes surrounding the carbon filter.

Cylindrical shape maximizes air flow

- Air flows through the filters and is then circulated out through the side in your chosen direction.
- Clean air avoids mixing with the contaminated air by the space which separates the vent from the filters and the heavier weight of chemicals which pull them down.

Effective for up to 1800 square feet

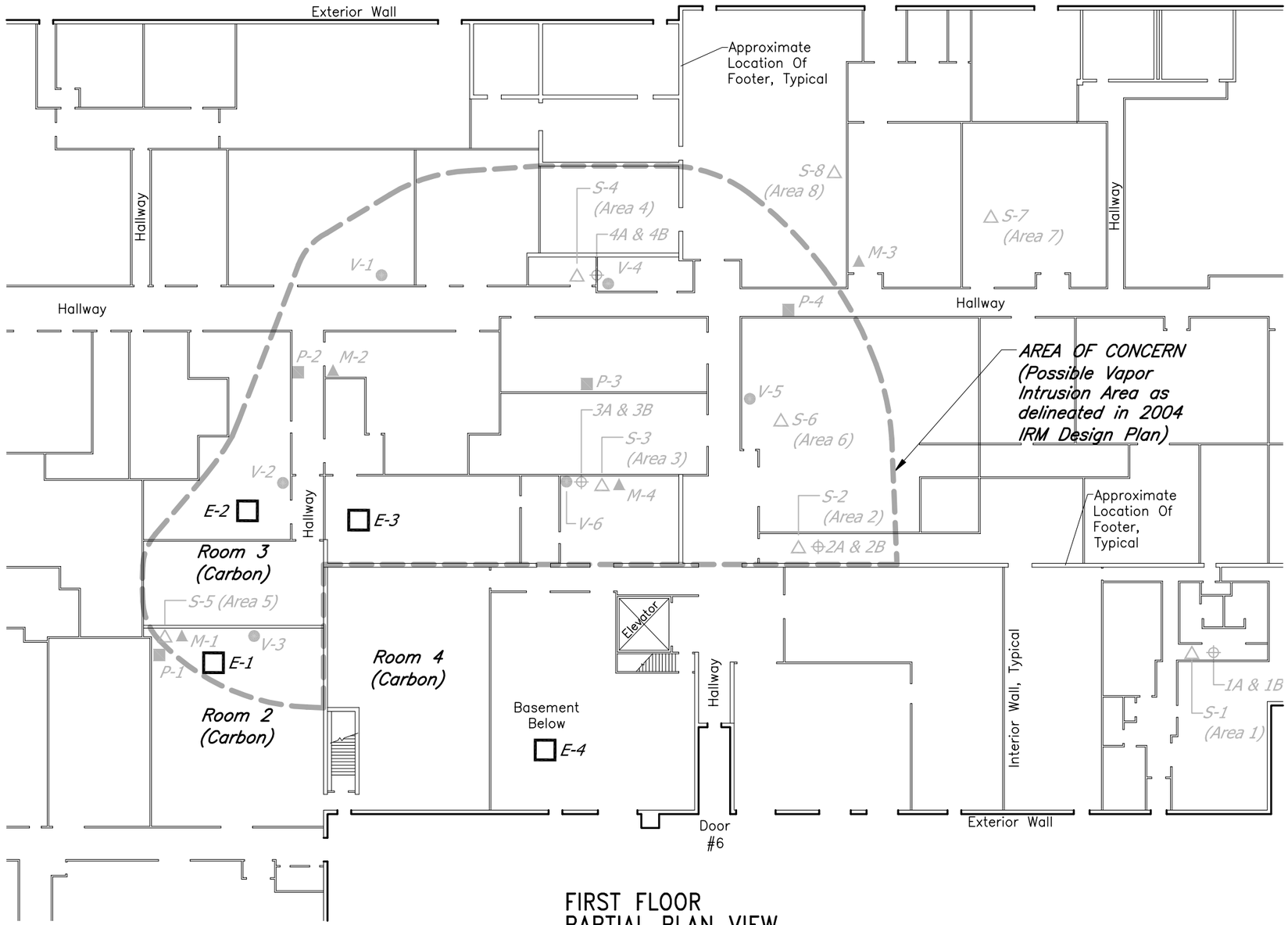
- Motor runs at any one of 3 chosen speeds to allow rapid room cleaning or quiet overnight use.
- Turbo setting changes air every 30 minutes.

*** More Features * More Options * Less Cost**

The AllerAir Guarantee

Ref4:
Ref5:
Ref6:

Ref1:
Ref2:
Ref3:



FIRST FLOOR
PARTIAL PLAN VIEW
1" = 30'

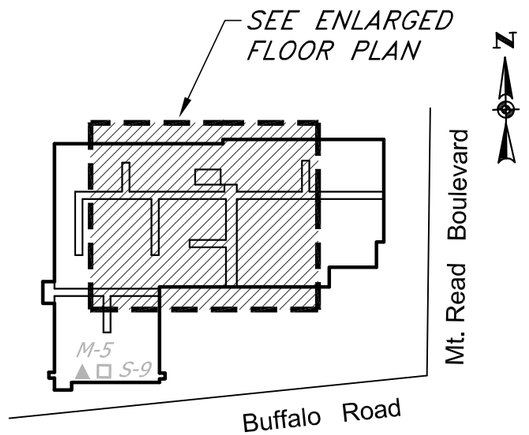
N

LEGEND:

E-3	Proposed Indoor Air Sample Location For Carbon Effectiveness Monitoring
S-4	Indoor Air Sample Location Collected on February 28, 2006
V-5	"As-Built" Vertical Vent Stack Location
P-1	"As-Built" Sub-Slab Pressure Test Location
M-5	Indoor Air Sample Location Collected On April 1, 2005
1A	Sub-Slab Soil Gas Sample Collected On March 5, 2004
1B	Indoor Air Sample Collected On March 5, 2004

NOTE:

1. Drawing produced from a drawing by The ERM Group, entitled "Figure 3-1; PCB, Asbestos & Sediment/Residue Sampling Locations", dated 11/20/1990; A blueline print by Miller-Anderson Architects, entitled "1st Floor Plan Details", date issued 3-3-2000; and from notes of site visits by representatives of Day Environmental, Inc.



BUILDING
KEY PLAN
Not To Scale

DATE	12-2006
FIELD VERIFIED BY	BFK
DATE DRAWN	12-21-2006
DRAWN BY	RJM
DATE ISSUED	12-21-2006
SCALE	As Noted

DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008
NEW YORK, NEW YORK 10165-1617

PROJECT TITLE
95 MT. READ BOULEVARD
ROCHESTER, NEW YORK

IRM WORK PLAN ADDENDUM #1, REV. 1

DRAWING TITLE
Indoor Air Purification Activities Layout

PROJECT NO.
3681R-05

FIGURE 1

Xerox432AnsiB-2; 11 x 17
Layout Name: Layout 1

Time Plotted: Thur Dec 21 10:01 2006
File Name: Maguire\3681R\3681R-IRM-ADD1.dwg