

September 28, 2010

Mr. Gary Bonarski New York State Department of Environmental Conservation Division of Environmental Remediation, Region 8 6274 East Avon-Lima Road Avon, New York 14414-9519

Re: Summary of Approach for Subslab Depressurization Former Brainerd Manufacturing Site, East Rochester, Site #V00519 Response to NYSDEC Comments

Dear Mr. Bonarski:

Per conversations with Justin Deming of the Department of Health, you and Tom Forbes of Benchmark on August 12, 2010, we have prepared this letter to document our approach for sub-slab depressurization at the above site. Benchmark Environmental Engineering & Science, PLLC (Benchmark) will be undertaking this work on a design-build basis with post-installation performance testing to confirm that adequate depressurization is occurring. We undertook initial communication testing of the subslab to preliminarily evaluate the number of extraction points and types of exhaust fans required. As such, we have based the design using this information complemented by the realities of the site conditions. [Please note: A minimum pressure differential of 0.002 inches of water between ambient air and the sub slab depressurized air has been used as the design criterion].

Installation of the subslab depressurization system will be undertaken by Mitigation Tech, a Rochester, New York based vapor control (and radon) experienced contractor that has working relationships with the NYSDEC and NYSDOH. The layout for the system is shown on the attached Figure 1. Coordination between the building owner (Despatch Industries) and the lessee of the facility (Deskset) has occurred to assure concurrence on the extraction point locations.

The subslab vapor depressurization system will consist of a minimum of 28 extraction points. A typical construction detail for the extraction points is shown in Attachment A. The fan selected is a RadonAway GP Series 501 (see Attachment A for product literature for the fan). One fan will serve to extract subslab air from multiple extraction points. The number of extraction points per fan will be field determined. Preliminarily, we expect to use one fan per 4 to 6 points.

As discussed and agreed on with NYSDEC and NYSDOH, there are portions of this building that are unoccupied except for temporary occupancy when storing products (i.e., the areas labeled as Shipping 1, 2, & 3 (this is underlain by basement), Plating, Water Treatment, Storage, Assembly, and Degreaser. Thus, these areas are short term occupancy. In these areas where workers are not stationed regularly, we understand that we can use interior fans to assist with the extraction system. These fans will be outfitted with manometers that will be visually inspected per the agreed upon plan for inspection of the system. A typical manometer cut sheet is shown in Attachment A.

The plan is to initiate this work in early October 2010. The system should be operational by early November 2010. We will do a communication test after installation and we will apprise you of the scheduled date at least 5 days in advance. We intend to let the system operate for at least one month prior to adding any additional extraction points.

Please contact us if you have any questions.

Sincerely,

Raymond F. Laport

Project Manager

cc: J.Deming (NYSDOH)

A. Shaffer (Despatch Industries, Inc.)

of Lapott

S. Chalifaux (Boylan Brown)

W. Lippman

## Figure

# **FIGURE**

#### PROPOSED SUB-SLAB EXTRACTION POINTS

VOLUNTARY CLEANUP VAPOR EXTRACTION PLAN

FORMER BRAINERD MANUFACTURING BUILDING EAST ROCHESTER, NEW YORK PREPARED FOR DESPATCH INDUSTRIES, INC.



2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0599

JOB NO.: JOB##

#### Attachment A

## Pump and Manometer Information



## **GP Series**



#### **Radon Mitigation Fans**

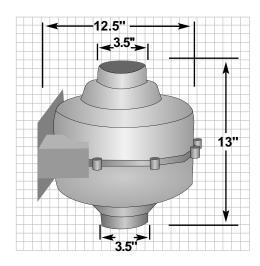
All RadonAway fans are specifically designed for radon mitigation. GP Series Fans provide a wide range of performance that makes them ideal for most sub-slab radon mitigation systems.

#### **Features:**

- Five-year hassle-free warranty
- Mounts on duct pipe or with integral flange
- 3.5" diameter ducts for use with 3" or 4" pipe
- Electrical box for hard wire or plug in
- ETL Listed for indoor or outdoor use
- Meets all electrical code requirements
- Thermally protected
- Rated for commercial and residential use.

	/**	Property of the state of the st	Me Mis	Typical CFM vs. Static Pressure WC					
Model	Watts	- de	<b>1.0</b> "	<b>/</b> 1.5"	<b>/</b> 2.0"	2.5"	3.0"	<b>3.5</b> "	4.0"
GP201	40-60	2.0	82	58	5	-	-	-	-
GP301	55-90	2.6	92	77	45	10	-	-	-
GP401	60-110	3.4	93	82	60	40	15	-	-
GP501	70-140	4.2	95	87	80	70	57	30	10

Choice of model is dependent on building characteristics including sub-slab materials and should be made by a radon professional.

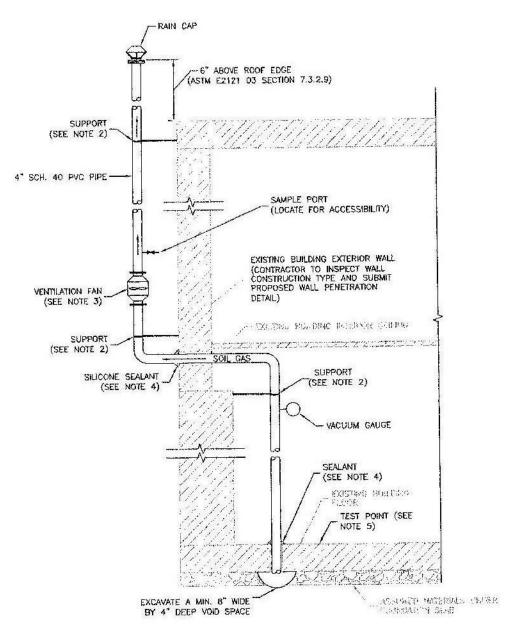


**For Further Information Contact:** 





### Extraction Point and Vent Details



1. REFER TO SUBSECTION 3.3.3 OF THE SOW FOR SSV SYSTEM COMPONENTS AND INSTALLATION METHODS.
2. SUPPORTS SHALL BE INSTALLED AT LEAST EVERY 6 FEET ON HORIZONTAL RUNS, VERTICAL RUNS SHALL BE SECURED EITHER ABOVE OR BELOW THE POINTS OF PENETRATION THROUGH FLOORS, CEILINGS AND ROOFS, OR AT LEAST EVERY 8 FEET ON RUNS THAT DO NOT

PENETRATE FLOORS, CEILINGS OR ROOFS (ASTM E2121 03 SECTION 7.3.2.5).

3. THE VENTILATION FAN SHALL BE A FANTECH HP220 OR AN APPROVED EQUIVALENT. THE FAN SHALL BE CONNECTED ABOVE AND BELOW TO THE VENT PIPE WITH FLEXIBLE CONNECTORS AND CLAMPED IN PLACE.

4. OPENINGS AROUND THE SUCTION POINT PIPE SHALL BE SEALED USING METHODS AND MATERIALS THAT ARE DURABLE AND PERMANENT. (ASTM E2121 03 SECTION 7.3.4.1). SEALANTS AND ADHESIVES SHAYBE COMPATIBLE WITH PIPING MATERIALS AS SPECIFIED BY THE PIPING MANIFACTURER, ALL SEALANTS SHALL BE APPROVED BY INSDEC PRIOR TO CONSTRUCTION.

5. SEE FIGURE 3.2 AND FIGURE 3.3 FOR PROPOSED PERMANENT POST—MITIGATION COMMUNICATION TEST PENETRATION LOCATIONS.

6. LOCATIONS AND LAYOUT OF SYSTEM ARE APPROXIMATE AND ARE FOR PRE—DESIGN PURPOSES ONLY, ALTERATIONS TO THE PROPOSED DESIGN PURPOSES ONLY, ALTERATIONS TO THE PROPOSED.

DESIGN AS A RESULT OF THE BUILDING/VISUAL INSPECTION AND PRE-DESIGN COMMUNICATION TESTING SHALL BE SUBMITTED AS A FINAL DESIGN BY THE CONTRACTOR AS PART OF THEIR WORK PLAN AND APPROVED BY NYSDEC (SOW SECTION 3.3).

