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November 10, 2015

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DNR R&R
SOUTH CENTRAL REGION

Ms. Denise Nettesheim
WDNR Fitchburg Service Center
3911 Fish Hatchery Road
Fitchburg, WI 53711

RE: Vapor System Commission Report and Reimbursement Claim # 3, Olde Tyme Cleaners DERF Site, 925 Horicon Street, Mayville, WI 53050

Dear Denise:

Status and Project Plans

On behalf of Olde Tyme Cleaners, below please find the Vapor System Commission Report and attached please find the completed DERF Claim # 3 for the project. The information summarizes the initial testing of the subslab vapor mitigation system performance at the site, and presents the operation and maintenance plan for the system. The vapor mitigation system was required to be installed as an interim remedial action due to elevated levels of vapors at the Olde Tyme Cleaners building.

As you know, additional Site Investigation efforts have been requested with a preliminary scope of work and cost estimate needed to flush out the details. At this time, Mr. Drews does not have the funding available to proceed with additional investigation efforts, and already has significant outstanding charges owed to Fehr Graham related to previously completed efforts.

Processing of the attached claim for DERF reimbursement is necessary for Mr. Drews to fund further work, and pay off the existing owed amount. It is our understanding that the DERF fund will require two years or longer to pay this claim.

Since preparation of a scope of work and cost estimate will take additional funds that are not available, and the actual implementation of the work will not proceed for two years or longer due to the lack of resources, it does not seem practical to move forward with identifying a scope of work at this time. If considered helpful, contact could be made now with the property owner to the east to evaluate if there are any opportunities to utilize existing information or resources to help minimize the future scope of work needed to evaluate the Olde Tyme Cleaners release. However, preparation of a full scope of work and cost estimate at this time, given the financial realities, does not seem prudent.

During the delay in the project activities, the subslab vapor mitigation system will continue to operate and be monitored as noted on the attached maintenance plan.

Drycleaning Machine Removal

The drycleaning machine was removed from the building on September 17, 2015. A contracted firm removed the machine for scrap, and they were very careful to avoid any further release of PCE. An estimated five gallons of residual PCE was recovered from the

machine during removal. We expect removal of the machine will help reduce the levels of PCE in the indoor air of the building.

Vapor Mitigation System Construction and Operation

As previously documented in the Site Investigation Report, an interim remedial action consisting of the installation of a subslab vapor mitigation system was completed at the site. Due to the elevated levels of vapors at the Olde Tyme Cleaners structure, and the use of the building for commercial and upstairs residential purposes, a subslab vapor mitigation system was installed on April 24, 2015 and has been operating continuously since installation.

The system layout is shown on Figure 1. The vapor mitigation system consists of two exterior-mounted Radon-Away GP-301 fans installed on two separate piping systems that withdraw air from two floor penetrations that are installed through the 8-inch thick concrete building floor. The systems capture vapors from the subslab beneath the building and vent them to the outside.

The system's two high-vacuum fans are located on the eastern exterior of the building wall. Each fan has a maximum draw of 1.8 amps and both are powered by separate 15 amp circuit breakers. Each fan has an exterior shut off switch installed next to the fan. Both fans meet the clearance requirements for vapor mitigation systems and exhaust the subslab vapors a minimum of two feet above openings that are within a ten feet horizontal distance.

Each system has two suction points that penetrates the building concrete floor to withdraw the subslab vapors. Soils beneath the concrete slab were noted to be sand (south system) and sand with some clay/silt (north system). The floor penetration piping consists of 3-inch Schedule 40 PVC, which is piped along the interior walls and extends through the eastern wall to the exterior.

To monitor suction and operation, there are U-Tube manometers installed on one of the vertical risers for each system. Viewing the manometers for water column displacement allows a quick and easy way to verify fan operation. The fans have a five-year warranty, and should continue to operate maintenance free.

Pressure Field Extension Testing

During installation, design testing was conducted on April 24, 2015 by Advanced Radon Solutions, with oversight by Fehr Graham. A shop vacuum was used to extract vapors from the subslab, with monitoring points installed approximately 11 to 12 feet away from the vacuum point to verify subslab pressure differentials.

The induced vacuum measurements at the monitoring points indicated sufficient connection between the operating fans and the subsurface vapors, with levels ranging from 0.031 inches water column on south system to 0.054 inches water column on the

north system (Figure B.4.b). Following the successful pre-installation testing, the four points were completed as 3-inch diameter suction points for the vapor mitigation systems.

On July 28, 2015, further communication testing was evaluated by monitoring at the locations shown on Figure 1. Measurements of the induced vacuum were recorded using a digital micromanometer at three existing subslab vapor probes and one existing monitoring well. The two extraction fans drawing subslab air from four total extraction locations were pulling at a rate of 2.1 to 3.5 inches of water column. Induced vacuum at locations ten to more than 20 feet from the nearest extraction point measured from 0.003 to 0.254 inches of water column, as shown on Figure 1.

Post-System Installation Chemical Testing

Original Interim Action plans called for testing of the indoor air 90-days after start-up and operation of the vapor mitigation system, but the WDNR and Wisconsin Department of Health and Human Services determined that post-system chemical testing was not necessary at this time.

Vapor Mitigation System Operation and Maintenance Plan

Ongoing monitoring of the subslab vapor system must be performed. A plan to monitor the system function on a monthly basis has been prepared using WDNR guidance and is attached. The plan documents the location of the system components and provides a form for recording monthly measurements of proper system operation. This form has been completed by Mr. Drews and the system has been functioning as designed since installation.

I trust this information meets your needs, and look forward to getting the DERF claim processed and in the line for payment.

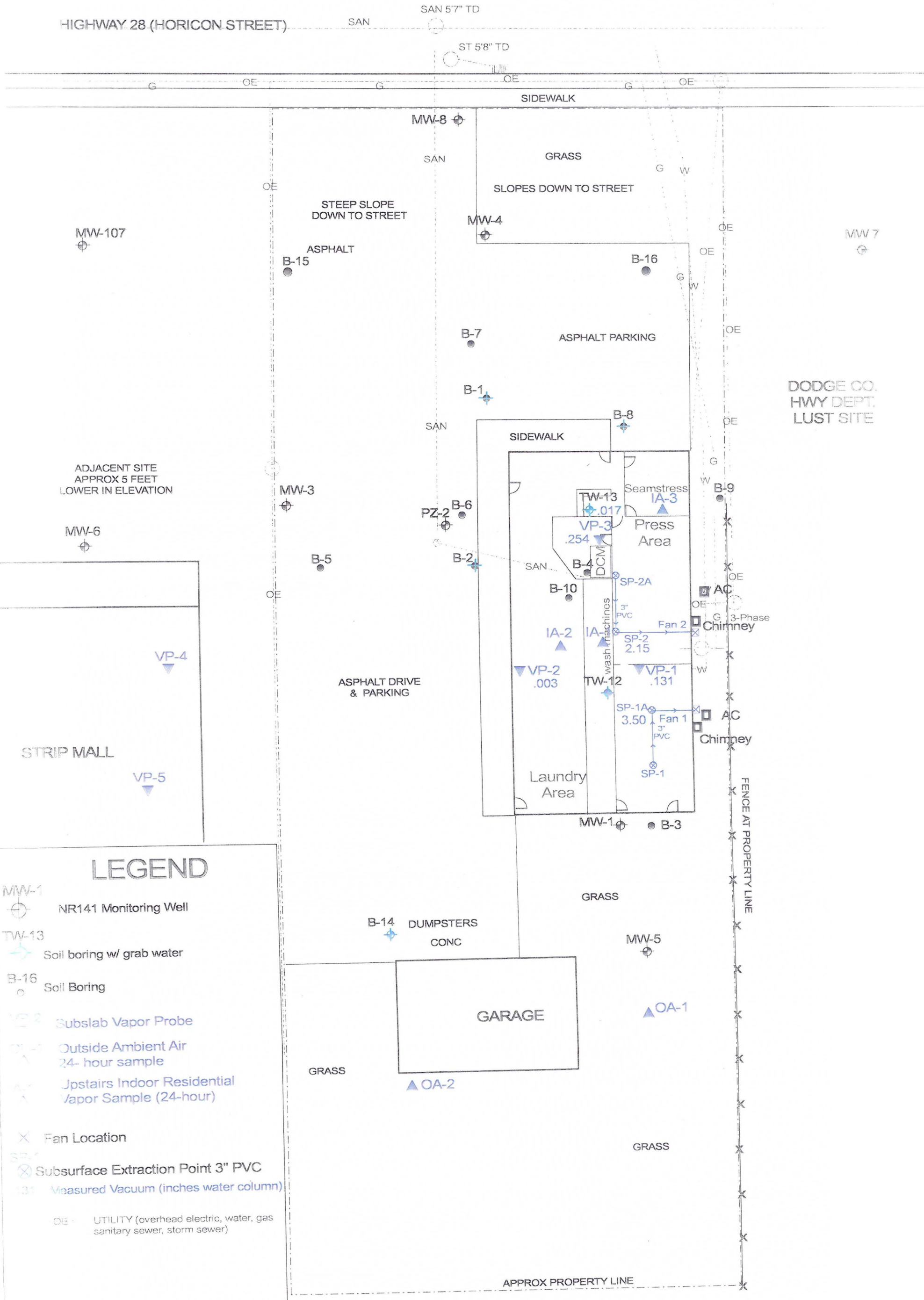
Let me know if you have any questions or comments. Feel free to call me at 920 892-2444 or e-mail me at kebbott@fehr-graham.com.

Sincerely,

Kendrick A. Ebbott, PG

Attachment: DERF Claim # 3
Figure 1: Vapor System Results July 28, 2015
Vapor Mitigation System Operation and Maintenance Plan

Cc: Mr. Dennis Drews, Olde Tyme Cleaners, w/ Attachments



TITLE: Vapor System Results: July 28, 2015

SITE: Olde Tyme Cleaners
925 Horicon St.
Mayville, WI
BRRTS# 02-14-551994

Project Number: OTC-2009-01
14-1133

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DATE 11/10/15

FILE CODE Base Map.skf

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FIGURE 1

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VAPOR MITIGATION SYSTEM MAINTENANCE PLAN

November 10, 2015

Property Located at:

925 Horicon Street, Mayville, WI 53050

WDNR BRRTS #: 02-14-551994

City of Mayville, Dodge County, Wisconsin

Introduction

This document is the Maintenance Plan for a Subslab Depressurization System (SSDS) at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code.

The maintenance activities relate to the SSDS (also identified as a vapor mitigation system) addressing subslab vapor contamination.

More site-specific information about this property may be found in:

- The case file in the DNR South Central Region Service Center office
- BRRTS on the Web (DNR's internet-based data base of contaminated sites at http://botw.dnr.state.wi.us/botw/SetUpBasicSearchForm.do
- GIS Registry PDF file for further information on the nature and extent of contamination: http://dnrmaps.wisconsin.gov/imf/imfApplyTheme.jsp?index=1 and
- The DNR Project Manager for this site in Dodge County, currently Ms. Denise Nettesheim at (608) 275-3209

Description of Contamination

Soil and groundwater contamination containing Tetrachloroethene (PCE) is present beneath the property at levels above relevant soil and groundwater standards established by the WDNR. Soil concentrations pose a risk to potential migration to groundwater (the groundwater pathway RCL) and groundwater concentrations exceed the NR140 Enforcement Standards.

Vapor contamination containing PCE is present in the indoor air and in the subslab vapors of the building, at concentrations above the WDNR / WDHFS standards.

Description of the SSDS to be Maintained

The SSDS is comprised of two fan systems installed to mitigate vapor contamination beneath the concrete floor of the building. Each fan is connected to two floor penetrations, and the fans are mounted on the building east exterior wall, with exterior electrical shut-off controls. The fans should operate on a continual basis.

Two U-Tube manometers are installed, one for each pair of extraction wells.

Monthly Inspections

Monthly inspection of the SSDS is required to verify that the fans are operating. Post installation testing documented subslab communication, as shown by the measured pressure differentials on Figure 1.

Both of the U-Tube manometer gauges must be visually inspected on a monthly basis to verify operation. The liquid levels in each U-Tube limb should not be equal if the fan is operating. Record the height of the elevated limb on the U-Tube to the nearest 0.1 inches of water column on the attached Subslab Depressurization System Inspection Log. It is recommended that the log be kept on a clipboard mounted on a pipe near each U-Tube.

Maintenance Activities

If problems are noted during inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs to the SSDS may include resurfacing or filling in any cracks or holes in the floor, replacing any cracked or broken PVC piping, and/or replacing a fan.

The property owner, in order to maintain the integrity of the SSDS, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners or tenants, etc.) for viewing.

Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cap or SSDS

The following activities are prohibited on any portion of the property where the SSDS is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the SSDS; 2) replacement with another SSDS; 3) excavating or grading of the land surface;

4) filling on capped or paved areas; 5) plowing for agricultural cultivation; or 6) construction or placement of a building or other structure.

Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

Contact Information

Current as of November 2015

Site Owner: Mr. Dennis Drews
N9312 21st Street
Neshkoro, WI 54960
(920) 212-0486

Consultant: Fehr Graham
1237 Pilgrim Road
Plymouth, WI 53073
(920) 892-2444
Attn: Mr. Kendrick Ebbott

WDNR: Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711
(608) 275-3209
Attn: Denise Nettesheim

Attachments: Subslab Depressurization System Inspection Log
Figure 1: Vapor System Results: July 28, 2015
Table A.5: Vapor Analytical Table

Vapor Mitigation System Inspection Log

Site Name Olde Tyme Cleaners
Address 925 Horicon Street
Mayville, WI
BRRTS# 02-14-551994

Contacts: Ken Ebbott or Mark Gibeault - Fehr Graham
920-892-2444 (Environmental Consulant)

Date	Time	Initials / Company	North System Riser SP-2 Reading U-Tube (inches water)	North System On?	South System : Riser SP-1 - inches water column	South System On? (Y / N)	Comments
NOTE: If U-Tube Levels are higher on one side than the other, system is ON							

HIGHWAY 28 (HORICON STREET)

SAN 5'7" TD

SAN

ST 5'8" TD

G OE G OE G OE

SIDEWALK

MW-8

SAN

GRASS

G W

SLOPES DOWN TO STREET

OE

STEEP SLOPE
DOWN TO STREET

MW-4

MW-107

ASPHALT

B-15

B-16

OE

G W

MW 7

B-7

ASPHALT PARKING

OE

B-1

DODGE CO.
HWY DEPT.
LUST SITE

B-8

SAN

SIDEWALK

OE

ADJACENT SITE
APPROX 5 FEET
LOWER IN ELEVATION

G W

B-9

MW-3

PZ-2

B-6

TW-13
.017

Seamstress
IA-3

VP-3
.254

Press
Area

MW-6

B-5

B-2

SAN

B-4

DCM

OE

SP-2A

B-10

OE

AC

3"
PVC

G 3-Phase

Fan 2

Chimney

IA-2

IA-1

SP-2
2.15

wash machines

VP-4

VP-2
.003

ASPHALT DRIVE
& PARKING

TW-12

VP-1
.131

W

SP-1A
3.50

Fan 1

AC

3"
PVC

Chimney

STRIP MALL

VP-5

Laundry
Area

SP-1

FENCE AT PROPERTY LINE

MW-1

B-3

GRASS

B-14

DUMPSTERS

CONC

MW-5

GARAGE

OA-1

GRASS

OA-2

GRASS

APPROX PROPERTY LINE

RESIDENTIAL

LEGEND

MW-1 — NR141 Monitoring Well

TW-13 — Soil boring w/ grab water

B-16 — Soil Boring

VP-2 — Subslab Vapor Probe

OU-1 — Outside Ambient Air 24- hour sample

IA-1 — Upstairs Indoor Residential Vapor Sample (24-hour)

Fan Location

SP-1 — Subsurface Extraction Point 3" PVC

.131 — Measured Vacuum (inches water column)

OE — UTILITY (overhead electric, water, gas sanitary sewer, storm sewer)

- N -

20 10 0 20 40 FEET

SCALE

TITLE: Vapor System Results: July 28, 2015

SITE: Olde Tyme Cleaners
925 Horicon St.
Mayville, WI
BRRTS# 02-14-551994

Project Number: OTC-2009-01
14-1133

APPVD

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DATE 11/10/15

FILE CODE Base Map.skf

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FIGURE 1

Table A.5
Vapor Analytical Table

Olde Tyme Cleaners
925 Horicon St., Mayville, WI
BRRTS #02-14-551994

Sample ID		N-C-Carcinogen Non Carcinogen	WDNR / WDHFS Residential Subslab	WDNR / WDHFS Residential Indoor Air	WDNR / WDHFS Non-Residential Subslab	WDNR / WDHFS Non-Residential Indoor Air	OA-1	OA-2	IA-1	IA-2	IA-3	VP-1	VP-2	VP-3	VP-4	VP-5
Sample Date							1/24/13	3/9/15	1/25/13	3/9/15	3/9/15	1/25/13	1/25/13	1/25/13	3/9/15	3/9/15
Sample Location							Next to Garage	Behind Garage	Upstairs Apt	Upstairs Apt	Seamstress Shop	SE Entryway-Laundry	Laundry Area	DCM	Salon - Utility	Strip Mall Hallway
Type of Sample							Ambient - outdoor	Ambient - outdoor	Indoor	Indoor	Indoor	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab
Collection Method							6 L Summa	6 L Summa	6 L Summa	6 L Summa	6 L Summa	6 L Summa	6 L Summa	6 L Summa	6 L Summa	6 L Summa
Time Period of Collection							30 min	24 hour	24 hour	24 hour	24 hour	30 min	30 min	30 min	30 min	30 min
Analytical Method							NIOSH TO-15	NIOSH TO-15	NIOSH TO-15	NIOSH TO-15	NIOSH TO-15	NIOSH TO-15	NIOSH TO-15	NIOSH TO-15	NIOSH TO-15	NIOSH TO-15
Method/Result Leak Detection							Shut-in; pass	Shut-in; pass	Shut-in; pass	Shut-in; pass	Shut-in; pass	Shut-in / water dam; pass	Shut-in / water dam; pass	Shut-in / water dam; pass	Shut-in / water dam; pass	Shut-in / water dam; pass
PID Readings (ppm)							0.0	0.0	0.0	0.0	0.0	11.1	0.0	310	0.0	0.0
Notes									(1)	(1)						
PCE	µg/m³	N	*420*	42	*1800*	180	<0.87	<0.25	379	65.1	179	*9,950+*	45.3	*2,920,000+*	52.6	83.8
TCE	µg/m³	C	*21*	2.1	*88*	8.8	<0.69	<0.24	<0.76	<0.30	<0.26	0.91	<0.74	<4,200	0.98	1.2
cis-1,2 Dichloroethene	µg/m³		NS	NS	NS	NS	<1.0	<0.26	<1.1	<0.33	<0.28	<1.1	<1.1	<6,180	<0.32	<0.32
trans-1,2 Dichloroethene	µg/m³	N	NS	NS	NS	NS	<1.0	<0.22	<1.1	<0.28	<0.23	<1.1	<1.1	<6,180	<0.26	<0.26
Vinyl Chloride	µg/m³	C	*17*	1.7	*280*	28	<0.33	<0.12	<0.36	<0.16	<0.13	<0.35	<0.35	<1,980	<0.15	<0.15

Notes:
* = 40 degrees F used in conversion factor based on estimated sample temperature (November)
* =68 degrees F (20 C) used in conversion factor based on estimated sample temperature (July)
N = Noncarcinogen; C = Carcinogen
(1) = Results compared to Residential Standards
ITALICS+ : Exceeds Subslab Vapor Standard
BOLD Exceeds Indoor Air Standard
NA=Not Analyzed
NS : No Standards
Standards from DNR Quick look-Up Table based on June 2014 EPA Screening Levels