



Oregon

John A. Kitzhaber, MD, Governor

Department of Environmental Quality

Northwest Region Portland Office

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September 25, 2012

John Hudson
Hudson Investment Company
917 SW Chestnut St.
Portland, Oregon 97219

RE: Project Status
Former Progress Dry Cleaners Site
8602 SW Hall Boulevard
Beaverton, Oregon
ECSI #4798

Dear Mr. Hudson:

This letter transmits results for ambient air samples collected by the Oregon Department of Environmental Quality (DEQ) from the interior of the former Progress Dry Cleaners site on September 12, 2012.

The purpose of the sampling was to evaluate whether the sub-slab vapor collection system was needed for the indoor air to be protective for site workers. The vapor collection system was turned off approximately 17 days before the sampling event.

Air Sampling Results

The air sampling results Table is attached. The results for the recent sampling show a substantial increase in indoor air concentrations, especially for tetrachloroethene (PCE) and trichloroethene (TCE). PCE and TCE concentrations are about a factor of 5 above their respective DEQ RBCs for indoor air, and are the highest reported concentrations since DEQ's cleanup work.

At the time of sampling the concrete had a noticeable separation between the original floor and the patch installed by DEQ following the soil removal action (see attached photos). The locations of the photos are shown on the attached figure. Cracking was noted previously in 2009 and seemed to correlate with a moderate increase in indoor air concentrations with the vapor collection fan operating. Although levels increased after the initial cracking they were still below current RBCs for indoor air. After the cracks were repaired the first time the indoor air concentrations decreased.

Based on these observations it appears that the vapor collection system can control vapors to protective levels even when cracks occur in concrete around the excavation.

DEQ staff also observed crystalline growth on the floor (see attached photos). It is unclear if this is related to the floor sealant, or from the concrete itself.

Letter to John Hudson
Former Progress Dry Cleaners Site
ECSI #4798

Recommendations

The vapor collection system appears capable of mitigating vapor migration into indoor air even when cracking occurs in the floor. Thus the fan should be turned on, and will likely need to be run for the foreseeable future. DEQ plans on additional air testing (without sealing the cracks) with the vapor collection system operating to verify it is effective even when cracks are present in the floor. Following indoor air sampling DEQ would seal the cracks following discussion with you regarding a preferred sealant. DEQ has Dry Cleaner Program funds to complete this work.

Alternately, a more robust remedy could be considered, although DEQ does not have funds available. Alternatives include installation of an additional vapor barrier over the entire floor and pouring a new lift of concrete, or expanding the vapor collection system as has been considered in the past.

Funding for this year (July 2012-June 2013) has already been allocated. For the Progress Cleaners site DEQ allocated \$4,000 for air sampling and report preparation, prior to the recent data that indicates more work is needed. Should you wish to implement additional remedies DEQ would not be able to provide reimbursement until the following funding cycle. Depending on the amount of reimbursement you request (I believe you have paid more than \$25,000 in cleanup costs) it is likely it would take several years to pay your reimbursement claim.

Please contact me at (503) 229-5587, or via e-mail at Pugh.Mark@deq.state.or.us if you have any questions or concerns.

Sincerely,



Mark Pugh, R.G.
Project Manager
Cleanup and Emergency Response Section

cc via e-mail: Dick Dezeeuw, DEQ Dry Cleaner Program
Keith Johnson, DEQ NWR
Jim Kincaid, Cable Houston Benedict & Haagensen

Attachments: Table: Summary of Air Sampling Results
Site Plan
Photos

Table. Summary of Air Sampling Results

	Date	PCE	TCE	cis-DCE	trans-DCE	Vinyl Chloride	Notes
Indoor Air (Pre-IRAM)							
Central Area	11/6/2006	59	40.0				Evren, 2006
Boiler Room	11/6/2006	8	4.0				Evren, 2006
Bathroom	11/6/2006	2,254	191.0				Evren, 2006
Southern Area	11/6/2006	1,983	298.0				Evren, 2006
Adjacent Space	11/6/2006	907	<100				Evren, 2006
Roof	11/6/2006	8	<2				Evren, 2006
Indoor Air (Post-IRAM)							
Inside Sample	3/13/2008	720	22	22	<1.7	0.012	Prior to floor sealing and fan installation and HVAC adjustment
Inside Front	9/9/2008	29	0.64	0.52	<0.020	0.0099	After floor sealing and fan installation
Inside Front	12/31/2008	2	0.046	<0.0099	<0.02	0.0077	After floor sealing and fan installation and HVAC adjustment
Inside Front	6/29/2009	21	0.24	0.14	ND	ND	After floor sealing and fan installation and HVAC adjustment
Inside Front	10/20/2009	7	0.16	0.08	<0.020	0.021	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Front	2/2/2010	1.7	0.14	0.02	<0.020	0.011	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Front	4/13/2010	1.6	0.12	0.059	<0.020	<0.0051	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Front	9/8/10	5.1	0.082	0.017	<0.020	0.012	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Front	4/29/2011	1.7	0.03	<0.099	<0.020	<0.0051	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Front (Air-1)	9/4/2011	2.6	0.14	0.48	<0.079	<0.051	After floor sealing and repair, and fan installation and HVAC adjustment
Air 2 Front	6/19/2012	4.4	<0.11	<0.079	<0.079	<0.051	After floor sealing and repair, and fan installation and HVAC adjustment
Air-2 Front	9/12/2012	200	19	11	0.13	0.061	Cracks again noted around excavation patch.
Inside Back	9/9/2008	25	0.59	0.5	<0.020	0.012	After floor sealing and fan installation
Inside Rear	12/31/2008	2	0.054	<0.0099	<0.055	<0.0064	After floor sealing and fan installation and HVAC adjustment
Inside Back	6/29/2009	21	0.5	0.16	ND	ND	After floor sealing and fan installation and HVAC adjustment
Inside Back	10/20/2009	6.9	0.18	0.086	<0.020	0.026	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Back	2/2/2010	2.5	0.3	0.029	<0.020	<0.0089	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Back	4/13/2010	2.7	0.13	<0.0099	<0.020	<0.0051	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Back	9/8/10	5.7	0.077	0.018	<0.020	0.013	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Back	4/29/2011	1.9	0.03	<0.099	<0.020	0.02	After floor sealing and repair, and fan installation and HVAC adjustment
Inside Back (Air-2)	9/4/2011	6.0	0.11	0.26	<0.079	<0.051	After floor sealing and repair, and fan installation and HVAC adjustment
Air 1 Back	6/19/2012	6.2	<0.11	0.17	<0.079	<0.051	After floor sealing and repair, and fan installation and HVAC adjustment
Air-2 Back	9/12/2012	190.0	14	7.9	<0.079	<0.051	Cracks again noted around excavation patch.
Vapor Collection Exhaust							
Vent Pipe	2/25/2008	<0.5	<0.5	<0.5	<0.5	<0.5	Prior to floor sealing and fan installation and HVAC adjustment
Vent Pipe	10/20/2009	3.3	<0.91	<0.40	<0.40	<0.26	After floor sealing and repair, and fan installation and HVAC adjustment
Vent Pipe	2/2/2010	83	12	24	<4	<5.1	After floor sealing and repair, and fan installation and HVAC adjustment
Vent Pipe	4/13/2010	86	13	24	<4	<5.1	After floor sealing and repair, and fan installation and HVAC adjustment
Vent Pipe	9/8/10	540	51	47	<4	41	After floor sealing and repair, and fan installation and HVAC adjustment
Vent Pipe	4/29/2011	100	7.7	22	<4	<5.1	After floor sealing and repair, and fan installation and HVAC adjustment
Outside							
Outside Sample	3/13/2008	<2.4	<1.6	<1.5	<1.7	<1.1	Prior to floor sealing and fan installation and HVAC adjustment
Outside Background	9/9/2008	0.21	0.042	<0.0099	<0.020	<0.0064	After floor sealing and fan installation
Outside Background	6/29/2009	0.13	ND	0.012	ND	ND	After floor sealing and fan installation and HVAC adjustment
Outside Background	10/20/2009	0.12	0.06	<0.0099	<0.020	<.0064	After floor sealing and repair, and fan installation and HVAC adjustment
Outside Background	4/13/2010	0.066	0.024	<0.0099	<0.020	<0.0051	After floor sealing and repair, and fan installation and HVAC adjustment

RBC for indoor air	47	2.9	150	250	2.8
RBC for soil gas	47,000	2,900	150,000	250,000	2,800

29

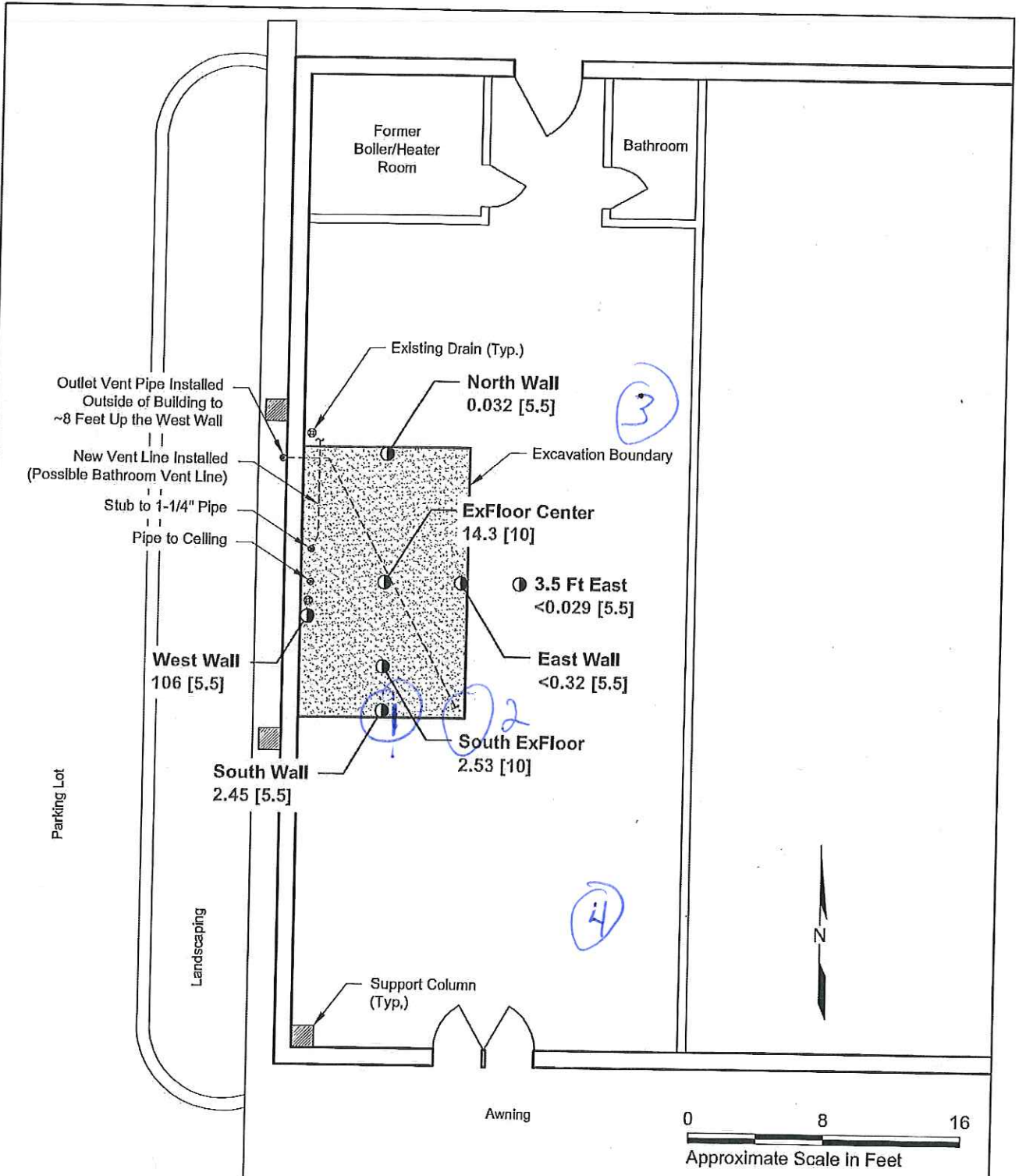
Bolded concentrations exceed RBCs for indoor air, Occupational Exposure Scenario

Yellow shading indicates concentrations >10X RBC

Note: RBCs for indoor air are not applicable to vent sample. Vent samples are well below applicable soil gas RBCs

JAB 8/6/07

F:\DATA\Jobs\DEC15656 Progress Cleaners\Task 5- IRM Completion Report\Figures\15656005.02 (Site Plan).dwg



West Wall 1 Confirmation Soil Sample and Designation
(Approximate Location)

106 [5.5] PCE Concentration in mg/kg
and [Depth in Feet]

Source: On site reconnaissance by Hart Crowser personnel.

Former Progress Dry Cleaners 8602 SW Hall Boulevard, Beaverton, Oregon	
Site Plan	
15656-00/Task 5	11/07
 HARTCROWSER	Figure 2

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Handwritten notes on a yellow sticky note, partially obscured by a paperclip. The text is illegible due to blurring and low resolution.

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Ken Cimeron
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Portland OR
97201
If found
PLEASE Return

4

Don't forget
to check the
ground for
leakage
of oil or
gas
at the
bottom
of the
tank

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