DRAFT

30 January 2009

Environmental Resources Management

40 Marcus Drive Suite 200 Melville, NY 11747 (631) 756-8900 (631) 756-8901 (fax) http://www.erm.com

Mr. Steven M. Scharf, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Action, Bureau A
625 Broadway
Albany, NY 12233-7015



Re: Revised Work Plan For Soil Vapor Intrusion/Indoor Air Quality Investigation Interior Building Areas Near Phase II Area Nos. 25 & 46 Former Grumman Plant 2, Bethpage, New York

Dear Mr. Scharf:

On behalf of Steel Los III, LP, (Steel Los III), ERM Consulting & Engineering, Inc. (ERM) is providing this updated Work Plan for a Supplemental Soil Vapor Intrusion (SVI)/Indoor Air Quality (IAQ) Investigation within the former Grumman Plant 2 building near Area of Concern Nos. 25 (Former Paint Storage, Mixing and Stripping Room) & 46 (Machine Pit) identified in a Phase II investigation conducted by Dvirka & Bartilucci in 1996.

#### Background

A SVI investigation was conducted pursuant to the Stipulation Agreement between Steel Los III and NYSDEC dated 4 February 2008, and involved collection of six (6) sub-slab vapor samples in accordance with ERM's 28 January 2008 Revised SVI Investigation Work Plan (the Work Plan) that was approved by New York State Department of Environmental Conservation.<sup>1</sup> The purpose of the SVI investigation was to evaluate whether there are any potential soil vapor intrusion issues within the former Grumman Plant 2 building that are associated with the former Areas of Concern.

The sub-slab vapor sampling was performed on 25 February 2008 and findings were presented to NYSDEC in ERM's 6 May 2008 letter<sup>2</sup>.

<sup>2</sup> Letter dated 6 May 2008 from Chris Wenczel-ERM to Steve Scharf-NYSDEC.

<sup>&</sup>lt;sup>1</sup> Letter dated 31 January 2008 from Steve Scharf-NYSDEC to Chris Wenczel-ERM.

Sampling locations SS-01 through SS-06 are shown in Figure 1, which were slightly adjusted in the field based on accessibility and positioned to cause minimal disruption to the business activities of the current tenant, the United States Postal Service (USPS). Detected compounds and associated concentrations are summarized below.

Detected Compounds	Are	ea 25		Area 46			
(μg/m³)	SS-01	SS-02	SS-03	SS-04	SS-05	SS-06	
1,1,1-Trichloroethane	33,400	1,260	2,050	4.01	11.7	23.7	
1,1-Dichloroethane	3,200	130	U	U	U	U	
1,1-Dichloroethene	1,520	14.3	U	U	U	U	
1,2,4-Trimethylbenzene	U	U	U	67.8	175	12.4	
1,3,5-Trimethybenzene	U	U	U	24.3	25.4	3.3	
1,3-Butadiene	U	U	U	1.84	U	U	
2-Butanone	U	U	15.1	17.2	24.3	11	
4-Ethyltoluene	U	U	U	10.2	16.2	2.98	
4-Methyl-2-pentanone	U	U	U	297	U	6.1	
Acetone	U	5.98	96.3	327	138	58.8	
Benzene	U	U	U	4.1	U	2.53	
Carbon disulfide	175	U	U	3.96	U	1.96	
Carbon tetrachloride	454	26.5	U	U	U	U	
Chloroethane	21.6	U	U	U	U	U	
Chloroform	815	26.8	24	3.71	U	15.6	
Cis-1,2-Dichloroethene	15.5	U	U	2.89	U	U	
Cyclohexane	10.7	U	U	U	U	U	
Ethanol	55	U	93.4	46.7	252	9.56	
Ethylbenzene	U	U	U	17.1	U	3.85	
Freon-113	196	37.2	U	U	U	U	
Heptane	U	U	U	2.94	U	2.32	
Isopropanol	U	U	U	7.74	U	6.15	
Methylene chloride	21.4	U	U	U	U	U	
n-Hexane	U	U	U	2.27	U	2.22	
o-Xylene	U	U	U	36.1	U	3.49	
p/m-Xylene	U	U	U	91.3	U	14	
Propylene	U	U	U	8.34	U	U	
Tetrachloroethene	U	138	U	6.33	U	2.86	
Toluene	U	U	11.7	22.1	21.9	14.2	
Trichloroethene	128	723	1,320	724	290	395	
Trichlorofluoromethane	U	U	13.7	3.51	U	16.8	

As noted in our 6 May 2008 letter, we do not expect any impacts to indoor air quality from the sub-slab vapors because the integrity of the floor slab is very good, and there are powerful heating/ventilation/air conditioning systems that continuously feed and circulate fresh air from outdoors under a positive pressure to all occupied areas of the building, which would suppress sub-slab vapors from entering the building. Specific details are presented below.

Accordingly, one (1) ambient air sampling location will be selected adjacent to a roof-top air intake.

A section of dedicated Teflon tubing will be extended from the Summa® canister to collect the sample from the breathing zone of a standing individual at four (4) to six (6) feet above the ground. Sampling will be discontinued while the canister still exhibits a slight vacuum. Photographs of the sampling vicinity will be collected.

#### **Laboratory Analysis**

At the conclusion of sampling, the canisters will be shipped via overnight delivery to Accutest Laboratories (NYSDOH Certification No. 10983) in Dayton, New Jersey, an Environmental Laboratory Accreditation Program- (ELAP)-certified laboratory. All samples will be analyzed for VOCs using USEPA Method TO-15, with a target detection limit of 1.0 micrograms per cubic meter (µg/m³) or less for all parameters except trichloroethene (TCE). The target detection limit for TCE in indoor air samples will be 0.25 ug/m³. If TCE is not detected in an indoor air sample at 1.0 ug/m³, using the standard TO-15 full-scan analysis, additional analysis of the sample will be carried out using GC/MS selective ion monitoring (SIM) to achieve the required 0.25 ug/m³ detection limit. This lower detection limit is required for TCE because the Decision Matrices in the NYSDOH Guidance will be used to evaluate indoor TCE concentrations, and Decision Matrix 1 evaluates the risks posed by TCE at concentrations as low as 0.25 ug/m³.

#### Health & Safety

All site activities will be performed in accordance with ERM's Health & Safety Guidance Manual. In addition, all sampling will be conducted by a two-person team.

#### Reporting

All laboratory data will be provided in ASP Category B deliverable format and the data validated. A letter report will be prepared and submitted to NYSDEC that include: 1) a summary of the sampling activities performed including any required deviations from this work plan, 2) a summary table of all sampling results reported  $\mu g/m^3$  with detection limits equal to  $1.0~\mu g/m^3$  or less, 3) completed "Indoor Air Quality Questionnaires, Building Inventory Forms, and Product Inventory Forms", 4) sampling logs, 5) photographs of sampling

are located a minimum of 150 feet away from the AOCs associated with VOC concentrations in soil and are less likely to be impacted from vapor intrusion from these areas.

After the floor slab has been inspected, the location of subsurface utilities determined, and the ambient air surrounding the proposed sampling screened with a PID, a hammer drill will be used to advance a one-inch diameter boring to a depth of approximately one-half-inch into the floor slab, a one-half-inch diameter boring will be drilled in the center of the initial one-inch boring to a minimum depth of three (3) inches beneath the floor slab into the sub-slab aggregate. Dedicated Teflon tubing (approximately 3/8-inch outside diameter) will be inserted two (2) inches into the subsurface through the one-half –inch diameter boring. The annular space between the floor and the tubing will then be sealed with beeswax.

To ensure the sample collected will be representative, one to three volumes of air will be purged from the tubing and the borehole using a dedicated purge pump. Following the purge, a PID will be attached to the sampling tubing and measurements will be monitored and the highest reading recorded. The PID will then be disconnected, and the tubing will be connected to the Summa® canister regulated for an 8-hour sample collection period. Sampling will be discontinued while the canister still exhibits a slight vacuum. After the sub-slab sample collection is complete, the tubing will be removed and the borehole will be filled to the floor surface with quick drying hydraulic cement. Photographs of the sampling vicinity will be collected.

#### Indoor Air Samples

Two (2) indoor air samples will be collected from the immediate location of the sub-slab samples are collected (SS-01 at Area No. 25 and SS-03 at Area No. 46). Sample collection will be through a section of dedicated Teflon tubing extending from the Summa® canister to the breathing zone of a seated person, approximately three (3) feet above the floor. Sampling will be discontinued while the canisters still exhibit a slight vacuum. Photographs of the sampling vicinity will be collected.

#### Ambient Air Samples

The Plant 2 building has roof-mounted heating/ventilation/air conditioning systems that continuously feed and circulate fresh air from outdoors under a positive pressure to all occupied areas of the building.

locations, 6) Data Validation Reports, and 7) Category B Laboratory Data Deliverables.

We anticipate that this work plan will meet the expectations of the NYSDEC and accordingly, ERM plans to conduct the sampling in early February. If you have any additional questions or comments, please do not hesitate to contact me at (631) 756-8900.

Very truly yours,

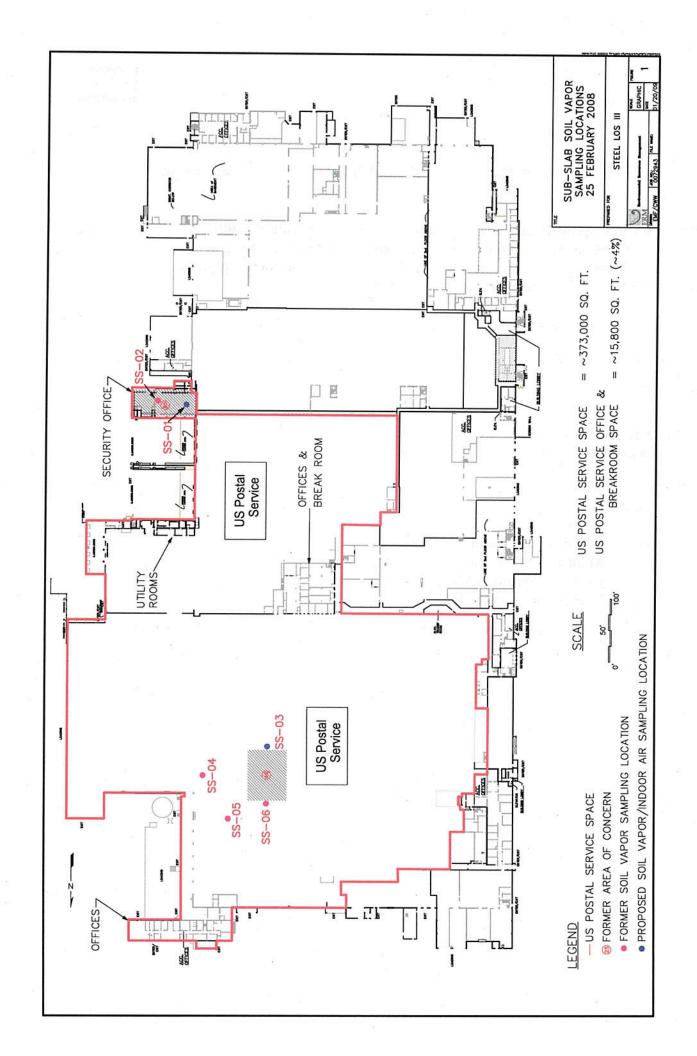
Chris W. Wenczel Senior Consultant

Attachments

cc: Kevin Lumpe, Steel Los III, LP

Manfred Bohms, Steel Los III, LP

John Swartwout, NYSDEC Walter Parish, NYSDEC



According to Steel Los III, the HVAC system for USPS space in the former Grumman Plant 2 building (the space containing former AOCs 25 & 46) consists of 34 rooftop units that produce an airflow of 2,560,000 CFM. The nominal fresh air setting is at 20%, resulting in a fresh air flow of 512,000 CFM. The footprint of the USPS space is 373,000 square feet, with an interior volume of 10,440,000 cubic feet. The HVAC system provides a minimum of 3 air changes an hour. In general, fresh air influx through the HVAC system places the space under positive pressure. The space is not airtight, allowing communication between indoor and outdoor air, which also lessens vapor intrusion concerns. The building's floor consists of a concrete slab that ranges from 6 to 12 inches in thickness with an average thickness of approximately 8 inches.

Ceiling heights range from 9 to 38.5 feet with 96% of the space consisting of high bay areas with a ceiling height of 24 feet or greater.

Although ERM believes its previous study determined that vapor intrusion is not of concern, the NYSDEC and NYSDOH have requested that Steel Los III to perform additional soil vapor sampling along with the simultaneous collection of an indoor air sample at each location.

The sample analytical results will be compared to NYSDOH guidance values to verify the absence of indoor air impacts from sub-slab vapors. This revised SVI Work Plan sets forth the proposed Scope of Work to satisfy the NYSDEC's request. The proposed Scope of Work is detailed below.

#### Scope of Work

Steel Los III intends to conduct the SVI investigation during the month of February 2009. Proposed sampling locations are shown in Figure 1.

Sub-slab, indoor air and outdoor air sampling will be performed following the applicable protocols identified in the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (October 2006). Prior to collection of samples, ERM will complete the "Indoor Air Quality Questionnaire and Building Inventory, and Product Inventory Forms" contained in Appendix B of the NYSDOH Guidance. This will include activities such as use of a photoionization detector (PID) to identify areas of potential interferences, and removing possible sources of VOCs from the sampling area. All samples will be collected with

individually-certified clean 6-liter Summa® canisters fitted with regulators programmed to collect the sample over an 8-hour period.

All sub-slab soil vapor, indoor air and outdoor air samples will be collected over the same 8-hour period. This corresponds to a flow rate of 0.002 liters per minute (L/min), which is less than the maximum 0.2 L/min required by the NYSDOH Guidance. At each sample location, all the pertinent data will be recorded in the field notebook and/or data collection forms. This information will include the following items:

- Sampler's name;
- Date, time and PID reading;
- Date and time of sample start and stop;
- Summa® canister serial number;
- Initial and final Summa® canister vacuum
- Sample identification, and descriptive location of the sampling area;
- Sample identification for other corresponding samples at the same property;
- Weather conditions including barometric pressure, and ambient temperature inside and outside the building;
- Sampling depth(s);
- Soil type at sample location, if known;
- Soil vapor purge volumes;
- Apparent moisture content of the air being sampled;
- Description of features that may impact the vapor measurements (e.g., storage areas for materials that may contain VOCs, drainage facilities, utility lines, any contamination noted, floor stains, etc.);
   and
- All equipment calibrations performed.

#### Sub-Slab Soil Vapor Samples

Two (2) sub-slab soil vapor samples will be collected: one soil vapor sample will be collected from each of the two areas at the previous sampling locations where the highest VOC concentrations were observed (SS-01 at Area No. 25 and SS-03 at Area No. 46). Proposed sample locations are shown in Figure 1, to be verified in the field based on accessibility and positioned to cause minimal disruption to the business activities of the current tenant, the USPS.

The proposed sampling location in AOC 25 is considered representative of a worse-case location regarding soil vapor intrusion since it is located in an area with a low ceiling and a security office situated on top of an area of known sub-slab VOC concentrations in soil. Other office areas

6 May 2008

Mr. Steven M. Scharf, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Action, Bureau A
625 Broadway
Albany, NY 12233-7015

Re: Soil Vapor Intrusion Investigation Results Interior Building Areas Near Phase II Area Nos. 25 & 46 Former Grumman Plant 2, Bethpage, New York

Dear Mr. Scharf:

On behalf of Steel Los III, LP, (Steel Los III), ERM Consulting & Engineering, Inc. (ERM) has prepared this letter report to present the results of the Soil Vapor Intrusion (SVI) Investigation recently performed within the former Grumman Plant 2 building near Area of Concern Nos. 25 (Former Paint Storage, Mixing and Stripping Room) & 46 (Machine Pit) identified in a Phase II investigation conducted by Dvirka & Bartalucci in 1996. The SVI investigation was conducted pursuant to the Stipulation Agreement between Steel Los III and NYSDEC dated 4 February 2008, and involved collection of six (6) sub-slab vapor samples in accordance with ERM's 28 January 2008 Revised SVI Investigation Work Plan (the Work Plan) that was approved by New York State Department of Environmental Conservation.<sup>1</sup>

#### Background

The New York State Department of Environmental Conservation (NYSDEC) requested that Steel Los III perform a SVI investigation to evaluate whether there are any potential soil vapor intrusion issues within the former Grumman Plant 2 building that are associated with the former Areas of Concern.

Historic environmental reports associated with the former Grumman Plant 2 building were reviewed including the April 1996 Phase II Site Assessment For Plant 2 and the December 1996 Supplemental Phase II Site Assessment For Plant 2 prepared by Dvirka & Bartalucci, the December 1997 Supplemental Site Investigation Report and Delisting Petition prepared by Eder Associates, and various correspondence from the NYSDEC regarding these documents.

ERM

Letter dated 31 January 2008 from Steve Scharf-NYSDEC to Chris Wenczel-ERM.

Environmental Resources Management

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Mr. Steven M. Scharf, P.E. 6 May 2008 Page 2

Based on these reviews, only two former areas were identified where volatile organic compounds (VOCs) were detected in soil at concentrations above the corresponding NYSDEC Soil Cleanup Objectives for those compounds. The former areas, by number, name and corresponding compounds detected in soil at that location are:

Area	Former Area Name	Detected Compounds
	Paint Storage, Mixing &	Methylene Chloride 1,1-DCA,
	Stripping Room	1,2-DCE, 1,1,1-TCA
46	Former Machine Pit	TCE, 1,1,1-TCA

1,1-DCA: 1,1-Dichloroethane 1,2-DCE: 1,2-Dichloroethene 1,1,1-TCA: 1,1,1-Trichloroethane

The Work Plan called for the collection sub-slab soil vapor samples from six (6) locations; two (2) in the vicinity of Area 25 - Former Paint Storage, Mixing and Stripping Room, and four (4) in the vicinity Area 46 - Former Machine Pits. Soil vapor sampling locations SS-03 and SS-06 were positioned at the perimeter of Area 46 because the machine pits have been filled in and a second concrete slab poured in-place over the pits. Soil vapor sampling locations SS-04 and SS-05 were relocated to the east of Area 46 at the request of the NYSDEC, and the revised locations were incorporated into the NYSDEC-approved Work Plan.

#### Sub-Slab Vapor Sampling

The sub-slab vapor sampling was performed on 25 February 2008. Sampling locations SS-01 through SS-06 are shown in Figure 1, which were slightly adjusted in the field based on accessibility and positioned to cause minimal disruption to the business activities of the current tenant, the United States Postal Service.

Sampling was performed following the protocols outlined in the NYSDEC-approved Work Plan and in accordance with the applicable protocols identified in the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (October 2006). An "Indoor Air Quality Questionnaire and Building Inventory, and Product Inventory Forms" was completed (Attachment 1) contained in Appendix B of the NYSDOH Guidance. Each sampling location was screened using a photoionization detector (PID) to identify areas of potential interferences, and removing possible sources of VOCs from the sampling area. The PID was properly calibrated using isobutylene at the beginning of the day. No interferences were noted at the sampling locations. All sub-slab soil vapor samples were collected over the same 8-hour period with individually-certified clean Summa® canisters fitted with appropriately programmed regulators. All the pertinent data was recorded for each sampling location and is summarized in Table 1.

#### Laboratory Analysis & Reporting

The six summa canisters were shipped via overnight courier to Alpha Analytical Laboratories (NYSDOH Certification No. 11627) in Mansfield, Massachusetts, an Environmental Laboratory Accreditation Program-(ELAP)-certified laboratory. The sub-slab vapor samples were analyzed for VOCs using USEPA Method TO-15, with a target detection limit of 1.0 micrograms per cubic meter ( $\mu g/m^3$ ) or less for all parameters. However, all samples required dilution during analyses due to elevated concentrations of target compounds, which resulted in higher detection limits.

All laboratory data was reported in ASP Category B deliverable format and a data usability validation was performed by a qualified ERM Chemist. The Data Usability Report is presented in Attachment 2. The validated analytical results are presented in Table 2. Laboratory data summary sheets are presented in Attachment 3. Detected compounds and associated concentrations are summarized below.

<b>Detected Compounds</b>	Are	a 25		Are	ea 46		
(μg/m³)	SS-01	SS-02	SS-03	SS-04	SS-05	SS-06	
1,1,1-Trichloroethane	33,400	1,260	2,050	4.01	11.7	23.7	
1,1-Dichloroethane	3,200	130	U	U	U	U	
1,1-Dichloroethene	1,520	14.3	U	U	U	U	
1,2,4-Trimethylbenzene	U	U	U	67.8	175	12.4	
1,3,5-Trimethybenzene	U	U	U	24.3	25.4	3.3	
1,3-Butadiene	U	U	U	1.84	U	U	
2-Butanone	U	U	15.1	17.2	24.3	11	
4-Ethyltoluene	U	U	U	10.2	16.2	2.98	
4-Methyl-2-pentanone	U	U	U	297	U	6.1	
Acetone	U	5.98	96.3	327	138	58.8	
Benzene	U	U	U	4.1	U	2.53	
Carbon disulfide	175	U	U	3.96	U	1.96	
Carbon tetrachloride	454	26.5	U	U	U	U	
Chloroethane	21.6	U	U	U	U	U	
Chloroform	815	26.8	24	3.71	U	15.6	
Cis-1,2-Dichloroethene	15.5	U	U	2.89	U	U	
Cyclohexane	10.7	U	U	U	U	U	
Ethanol	55	U	93.4	46.7	252	9.56	
Ethylbenzene	U	U	U	17.1	U	3.85	
Freon-113	196	37.2	U	U	U	U	
Heptane	U	U	U	2.94	U	2.32	
Isopropanol.	U	U	U	7.74	U	6.15	
Methylene chloride	21.4	U	U	U	U	U	
n-Hexane	U	U	U	2.27	U	2.22	
o-Xylene	U	U	U	36.1	U	3.49	
p/m-Xylene	U	U	U	91.3	U	14	
Propylene	U	U	U	8.34	U	U	
Tetrachloroethene	U	138	U.	6.33	U	2.86	
Toluene	U	U	11.7	22.1	21.9	14.2	
Trichloroethene	128	723	1,320	724	290	395	
Trichlorofluoromethane	U	U	13.7	3.51	U	16.8	

Mr. Steven M. Scharf, P.E. 6 May 2008 Page 4

The exact sources of VOCs in sub-slab soil vapor are unknown. Although minor use of detergent, lubricants and degreasers by the current tenant in servicing package conveyance systems and general housekeeping was noted, it is highly unlikely that current tenant operations are responsible for the sub-slab findings since the PID screening at each sampling location did not indicate the presence of VOCs in the ambient air.

We do not expect resultant impacts to indoor air quality from the subslab vapors because the integrity of the floor slab is very good in these areas, and there are powerful heating/ventilation/air conditioning systems that continuously feed and circulate fresh air from outdoors under a positive pressure to all occupied areas of the building, which would suppress sub-slab vapors from entering the building. We would like to meet with you to discuss these results. If you have any additional questions or comments, please do not hesitate to contact me at (631) 756-8900.

Very truly yours,

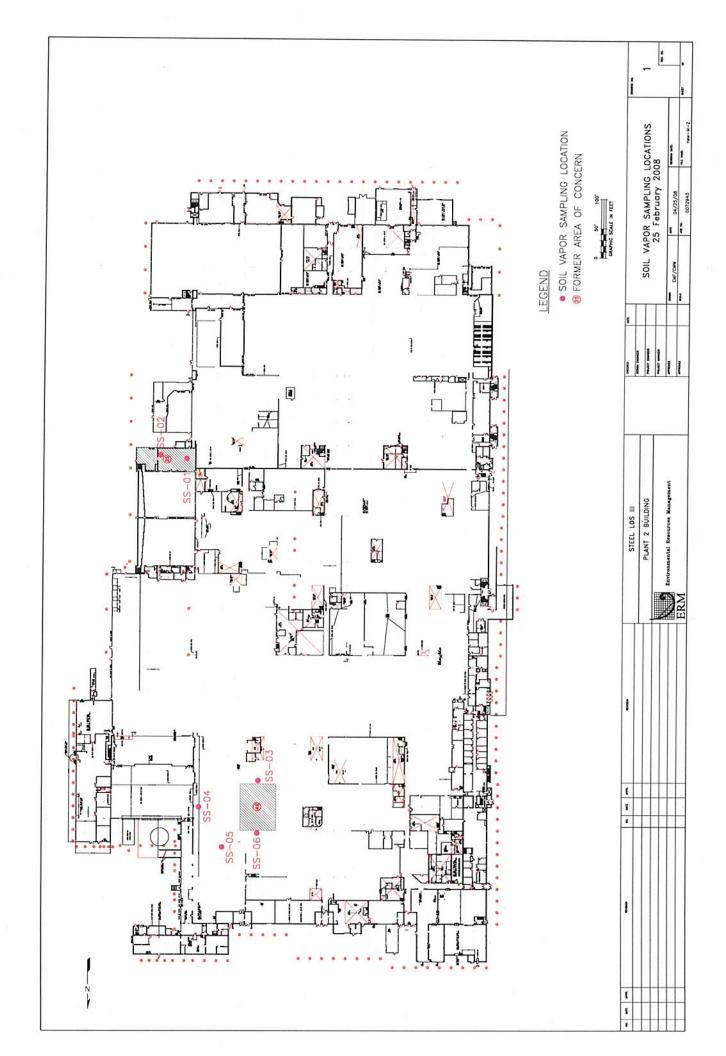
Chris W. Wenczel Senior Consultant

Attachments

cc: K

Kevin Lumpe, Steel Los III, LP Manfred Bohms, Steel Los III, LP John Swartwout, NYSDEC Walter Parish, NYSDEC

#### **FIGURES**



#### **TABLES**

Table 1 Sub-Slab Vapor Sampling - 25 February 2008 Former Areas 25 & 46 Steel Equities - Plant 2

	Ar	ea 25		Are	a 46	
Sample ID	SS-01	SS-02	SS-03	SS-04	SS-05	SS-06
Sampler's Name	KP/MJB	KP/MJB	KP/MJB	KP/MJB	KP/MJB	KP/MJB
	2/25/08	2/25/08	2/25/08	2/25/08	2/25/08	2/25/08
Date, Time And PID Reading Following	1000	0955	0950	0945	0940	0935
Purge	0.0PPM	0.0PPM	50.3PPM	9.1PPM	18.1PPM	29.1PPM
1	2/25/08	2/25/08	2/25/08	2/25/08	2/25/08	2/25/08
MAGES TO SATISFACE AND IMPROPRIESSONS AND INVESTIGATION OF THE PROPERTY AN	1000	0955	0950	0945	0940	0935
Date, Time And PID Reading in Room	0.0PPM	0.0PPM	0.0PPM	0.0PPM	0.0PPM	0.0PPM
	2/25/08	2/25/08	2/25/08	2/25/08	2/25/08	2/25/08
-k	1003	1002	0959	0958	0957	0956
Date And Time Of Sample Start And Stop	1802	1801	1758	1739	1740	1755
Summa® Canister Serial Number	210	235	459	393	320	198
Flow Controller ID Number	FC0084	FC0213	FC0283	FC0093	FC0398	FC0265
	-30"Hg+	-30"Hg+	-30"Hg+	-30"Hg+	-28"Hg	-30"Hg+
Initial And Final Summa® Canister Vacuum	-9"Hg	-4"Hg	-5"Hg	-3"Hg	-1"Hg	-5"Hg
	SS-01	SS-02	SS-03	SS-04	SS-05	SS-06
	See Figure	See Figure of				
Sample Identification, And Descriptive	of sampling	sampling	sampling	sampling	sampling	sampling
Location Of The Sampling Area	locations.	locations.	locations.	locations.	locations.	locations.
Sample Identification For Other						
Corresponding Samples At The Same	Į.		1	(	l)	
Property	None	None	None	None -	None	None
Weather Conditions Including Barometric	29.89"	29.89"	29.89"	29.89"	29.89"	00.00"
Pressure, And Ambient Temperature Inside	43°F	43°F	43°F	43°F	43°F	29.89" 43°F
And Outside The Building	70°F	70°F	43 F 70°F	43 F 70°F	43 F 70°F	43 F 70°F
Floor Slab Thickness	8"	8"	10"		8"	8"
Sampling Depth(S)	10" bgs	10" bgs	12" bgs	10" bgs	10" bgs	10" bgs
Soil Type At Sample Location, If Known	10 bgo	10 bgs	12 bgs	To bys	To bys	TO DGS
Soil Vapor Purge Volumes	200 ml	200 ml	200 ml	200 ml	200 ml	200 ml
raper raige rolation	2/25/08	2/25/08	2/25/08		2/25/08	2/25/08
All Equipment Calibrations Performed.	0900	0900	0900	27.1 "	A 1000 BIB 4	0900

#### Table 2 Sub-Slab Analytical Results Volatile Organic Compounds (VOCs) SVI Plant 2 Steel Equities Bethpage, New York

PERIOD: From 02/25/2008 thru 02/25/2008 - Inclusive

SAMPLE TYPE:

998 17					
CONSTITUENT	SITE LAB SAMPLE ID DATE	SS-01 L0802694-01 02/25/2008	SS-02 L0802694-02 02/25/2008	SS-03 L0802694-03 02/25/2008	SS-04 L0802694-04 02/25/2008
1,1,1-Trichloroethane	(ug/m3)	33400	1260	2050	4.01
1,1,2,2-Tetrachloroethane	(ug/m3)	13.7 U	13.7 U	13.7 U	3.43 U
1,1,2-Trichloroethane	(ug/m3)	10.9 U	10.9 U	10.9 U	2.72 U
1,1-Dichloroethane	(ug/m3)	3200	130	8.09 U	2.02 U
1,1-Dichloroethene	(ug/m3)	1520	14.3	7.92 U	1.98 U
1,2,4-Trichlorobenzene	(ug/m3)	14.8 U	14.8 U	14.8 U	3.71 U
1,2,4-Trimethylbenzene	(ug/m3)	9.82 U	9.82 U	9.82 U	67.8
1,2-Dibromoethane	(ug/m3)	15.4 U	15.4 U	15.4 U	3.84 U
1,2-Dichlorobenzene	(ug/m3)	12 U	12 U	12 U	3 U
1,2-Dichloroethane	(ug/m3)	8.09 U	8.09 U	8.09 U	2.02 U
1,2-Dichloropropane	(ug/m3)	9.24 U	9.24 U	9.24 U	2.31 U
1,3,5-Trimethylbenzene	(ug/m3)	9.82 U	9.82 U	9.82 U	24.3
1,3-Butadiene	(ug/m3)	4.42 U	4.42 U	4.42 U	1.84
1,3-Dichlorobenzene	(ug/m3)	12 U	12 U	12 U	3 U
1,4-Dichlorobenzene	(ug/m3)	12 U	12 U	12 U	3 U
1,4-Dioxane	(ug/m3j)	7.2 U	7.2 U	7.2 U	1.8 U
2,2,4-Trimethylpentane	(ug/m3)	9.34 U	9.34 U	9.34 U	2.33 U
2-Butanone	(ug/m3)	5.89 U	5.89 U	15.1 J	17.2 J
2-Hexanone	(ug/m3)	8.19 U	8.19 U	8.19 U	2.05 U
4-Ethyltoluene	(ug/m3)	9.82 U	9.82 U	9.82 U	10.2
4-Methyl-2-Pentanone	(ug/m3)	8.19 U	8.19 U	8.19 U	297
Acetone	(ug/m3)	4.75 U	5.98 J	96.3 J	327 J
Allyl chloride	(ug/m3)	6.26 U	6.26 U	6.26 U	1.56 U
Benzene	(ug/m3)	6.38 U	6.38 U	6.38 U	4.1
Benzyl chloride	(ug/m3)	10.3 U	10.3 U	10.3 U	2.59 U
Bromodichloromethane	(ug/m3)	13.4 U	13.4 U	13.4 U	3.35 U
Bromoform	(ug/m3)	20.6 U	20.6 U	20.6 U	5.16 U
Bromomethane	(ug/m3)	7.76 U	7.76 U	7.76 U	1.94 U
Carbon Disulfide	(ug/m3)	175	6.22 U	6.22 U	3.96
Carbon Tetrachloride	(ug/m3)	454	26.5	12.6 U	3.14 U
Chlorobenzene	(ug/m3)	9.2 U	9.2 U	9.2 U	2.3 U
Chloroethane	(ug/m3)	21.6	5.27 U	5.27 U	1.32 U
Chloroform	(ug/m3)	815	26.8	24	3.71
Chloromethane	(ug/m3)	4.13 U	4.13 U	4.13 U	1.03 U
cis-1,2-Dichloroethene	(ug/m3)	15.5	7.92 U	7.92 U	2.89
cis-1,3-Dichloropropene	(ug/m3)	9.07 U	9.07 U	9.07 U	2.27 U
Cyclohexane	(ug/m3)	10.7	6.88 U	6.88 U	1.72 U
Dibromochloromethane	(ug/m3)	17 U	17 U	17 U	4.26 U
Dichlorodifluoromethane	(ug/m3)	9.88 U	9.88 U	9.88 U	2.47 U

U - Non-detect.

J - Estimated value.

# Table 2 Sub-Slab Analytical Results Volatile Organic Compounds (VOCs) SVI Plant 2 Steel Equities Bethpage, New York

PERIOD: From 02/25/2008 thru 02/25/2008 - Inclusive

SAMPLE TYPE: Air

CONSTITUENT	SITE LAB SAMPLE ID DATE	SS-01 L0802694-01 02/25/2008	SS-02 L0802694-02 02/25/2008	SS-03 L0802694-03 02/25/2008	SS-04 L0802694-04 02/25/2008
Ethanol	(ug/m3)	55	47.1 U	93.4	46.7
Ethyl acetate	(ug/m3)	18 U	18 U	18 U	4.5 U
Ethylbenzene	(ug/m3)	8.68 U	8.68 U	8.68 U	17.1
Freon 113	(ug/m3)	196	37.2	15.3 U	3.83 U
Freon 114	(ug/m3)	14 U	14 U	14 U	3.49 U
Heptane	(ug/m3)	8.19 U	8.19 U	8.19 U	2.94
Hexachlorobutadiene	(ug/m3)	21.3 U	21.3 U	21.3 U	5.33 U
Hexane	(ug/m3)	7.04 U	7.04 U	7.04 U	2.27
Isopropyl Alcohol	(ug/m3)	12.3 U	12.3 U	12.3 U	7.74
m+p-Xylene	(ug/m3)	17.4 U	17.4 U	17.4 U	91.3
Methyl Tertiary Butyl Ether	(ug/m3)	7.2 U	7.2 U	7.2 U	1.8 U
Methylene Chloride	(ug/m3)	21.4	6.94 U	6.94 U	1.74 U
o-Xylene	(ug/m3)	8.68 U	8.68 U	8.68 U	36.1
Propylene	(ug/m3)	3.44 U	3.44 U	3.44 U	8.34
Styrene	(ug/m3)	8.51 U	8.51 U	8.51 U	2.13 U
Tetrachloroethene	(ug/m3)	13.6 U	138	13.6 U	6.33
Tetrahydrofuran	(ug/m3)	5.89 U	5.89 U	5.89 U	1.47 U
Toluene	(ug/m3)	7.53 U	7.53 U	11.7	22.1
rans-1,2-Dichloroethene	(ug/m3)	7.92 U	7.92 U	7.92 U	1.98 U
trans-1,3-Dichloropropene	(ug/m3)	9.07 U	9.07 U	9.07 U	2.27 U
Trichloroethene	(ug/m3)	128	723	1320	724
Trichlorofluoromethane	(ug/m3)	11.2 U	11.2 U	13.7	3.51
/inyl Acetate	(ug/m3)	7.04 U	7.04 U	7.04 U	1.76 U
Vinyl bromide	(ug/m3)	8.74 U	8.74 U	8.74 U	2.18 U
Vinyl chloride	(ug/m3)	5.11 U	5.11 U	5.11 U	1.28 U
Sum of Constituents	(ug/m3)	40012.20	2361.78	3624.20	1732.44

U - Non-detect.

J - Estimated value.

## Table 2 Sub-Slab Analytical Results Volatile Organic Compounds (VOCs) SVI Plant 2 Steel Equities

Steel Equities
Bethpage, New York

PERIOD: From 02/25/2008 thru 02/25/2008 - Inclusive

SAMPLE TYPE: Ai

CONSTITUENT	SITE LAB SAMPLE ID DATE	SS-05 L0802694-05 02/25/2008	SS-06 L0802694-06 02/25/2008	
1,1,1-Trichloroethane	(ug/m3)	11.7	23.7	
1,1,2,2-Tetrachloroethane	(ug/m3)	13.7 U	2.74 U	
1,1,2-Trichloroethane	. (ug/m3)	10.9 U	2.18 U	
1,1-Dichloroethane	(ug/m3)	8.09 U	1.62 U	
1,1-Dichloroethene	(ug/m3)	7.92 U	1.58 U	
1,2,4-Trichlorobenzene	(ug/m3)	14.8 U	2.97 U	
1,2,4-Trimethylbenzene	(ug/m3)	175	12.4	
1,2-Dibromoethane	(ug/m3)	15.4 U	3.07 U	
1,2-Dichlorobenzene	(ug/m3)	12 U	2.4 U	
1,2-Dichloroethane	(ug/m3)	8.09 U	1.62 U	
1,2-Dichloropropane	(ug/m3)	9.24 U	1.85 U	
1,3,5-Trimethylbenzene	(ug/m3)	25.4	3.3	
1,3-Butadiene	(ug/m3)	4.42 U	0.884 U	
1,3-Dichlorobenzene	(ug/m3)	12 U	2.4 U	
1,4-Dichlorobenzene	(ug/m3)	12 U	2.4 U	
1,4-Dioxane	(ug/m3)	7.2 U	1.44 U	
2,2,4-Trimethylpentane	(ug/m3)	9.34 U	1.87 U	
2-Butanone	(ug/m3)	24.3 J	11 J	
2-Hexanone	(ug/m3)	8.19 U	1.64 U	
4-Ethyltoluene	(ug/m3)	16.2	2.98	
4-Methyl-2-Pentanone	(ug/m3)	8.19 U	6.1	
Acetone	(ug/m3)	138 J	58.8 J	
Allyl chloride	(ug/m3)	6.26 U	1.25 U	
Benzene	(ug/m3)	6.38 U	2.53	
Benzyl chloride	(ug/m3)	10.3 U	2.07 U	
Bromodichloromethane	(ug/m3)	13.4 U	2.68 U	
Bromoform	(ug/m3)	20.6 U	4.13 U	
Bromomethane	(ug/m3)	7.76 U	1.55 U	
Carbon Disulfide	(ug/m3)	6.22 U	1.96	
Carbon Tetrachloride	(ug/m3)	12.6 U	2.51 U	35
Chlorobenzene	(ug/m3)	9.2 U	1.84 U	
Chloroethane	(ug/m3)	5.27 U	1.05 U	
Chloroform	(ug/m3)	9.76 U	15.6	
Chloromethane	(ug/m3)	4.13 U	0.825 U	
cis-1,2-Dichloroethene	(ug/m3)	7.92 U	1.58 U	
cis-1,3-Dichloropropene	(ug/m3)	9.07 U	1.81 U	
Cyclohexane	(ug/m3)	6.88 U	1.38 U	
Dibromochloromethane	(ug/m3)	17 U	3.4 U	
Dichlorodifluoromethane	(ug/m3)	9.88 U	7.25	*

U - Non-detect.

J - Estimated value.

#### Table 2 Sub-Slab Analytical Results Volatile Organic Compounds (VOCs) SVI Plant 2 Steel Equities

Bethpage, New York

PERIOD: From 02/25/2008 thru 02/25/2008 - Inclusive

SAMPLE TYPE:

CONSTITUENT	SITE LAB SAMPLE ID DATE	SS-05 L0802694-05 02/25/2008	SS-06 L0802694-06 02/25/2008	ini	
Ethanol	(ug/m3)	252	9.56		
Ethyl acetate	(ug/m3)	18 U	3.6 U		
Ethylbenzene	(ug/m3)	8.68 U	3.85		
Freon 113	(ug/m3)	15.3 U	3.06 U		
Freon 114	(ug/m3)	14 U	2.79 U		
Heptane	(ug/m3)	8.19 U	2.32		
Hexachlorobutadiene	(ug/m3)	21.3 U	4.26 U		
Hexane	(ug/m3)	7.04 U	2.22		
sopropyl Alcohol	(ug/m3)	12.3 U	6.15		
n+p-Xylene	(ug/m3)	17.4 U	14		
Methyl Tertiary Butyl Ether	(ug/m3)	7.2 U	1.44 U		
Methylene Chloride	(ug/m3)	6.94 U	1.39 U		
o-Xylene	(ug/m3)	8.68 U	3.49		
Propylene	(ug/m3)	3.44 U	0.688 U		
Styrene	(ug/m3)	8.51 U	1.7 U		
Tetrachloroethene	(ug/m3)	13.6 U	2.86		
Tetrahydrofuran Tetrahydrofuran	(ug/m3)	5.89 U	1.18 U		
oluene	(ug/m3)	21.9	14.2		
rans-1,2-Dichloroethene	(ug/m3)	7.92 U	1.58 U		
rans-1,3-Dichloropropene	(ug/m3)	9.07 U	1.81 U		
richloroethene	(ug/m3)	290	395		
richlorofluoromethane	(ug/m3)	11.2 U	16.8		
inyl Acetate	(ug/m3)	7.04 U	1.41 U		
finyl bromide	(ug/m3)	8.74 U	1.75 U	*.:	
/inyl chloride	(ug/m3)	5.11 U	1.02 U		
Sum of Constituents	(ug/m3)	954.50	616.07		

U - Non-detect.

J - Estimated value.

#### **ATTACHMENTS**

ATTACHMENT 1 - INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY, AND PRODUCT INVENTORY FORMS

ATTACHMENT 2 - DATA VALIDATION REPORT

ATTACHMENT 3 - ALPHA ANALYTICAL LABORATORIES DATA SUMMARY FORMS

### ATTACHMENT 1 - INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY, AND PRODUCT INVENTORY FORMS