

Aufman, Matt

From: Leo Moretz <lmoretz@harthickman.com>
Sent: Wednesday, July 17, 2013 8:02 AM
To: Assefa, Hanna; Aufman, Matt
Subject: RE: Trion, Inc. Sanford, NC

Thanks Hanna and Matt for assisting with this determination.

From: Assefa, Hanna [<mailto:hanna.assefa@ncdenr.gov>]
Sent: Tuesday, July 16, 2013 6:11 PM
To: Aufman, Matt
Cc: Leo Moretz
Subject: RE: Trion, Inc. Sanford, NC

The highest concentration of trichloroethene is 72 ug/l and corresponds to a hazard quotient of 3.2. The maximum allowable hazard quotient is 1. Soil gas samples must be collected.

From: Aufman, Matt
Sent: Tuesday, July 16, 2013 2:17 PM
To: Assefa, Hanna
Cc: Leo Moretz
Subject: FW: Trion, Inc. Sanford, NC
Importance: High

Hanna,
Here is a VIA request (data attached, request below)
Thanks,
Matt

Matthew Aufman
Phone: (919) 707-8348
<http://portal.ncdenr.org/web/wm/sf/ihs/recprogram>

From: Leo Moretz [<mailto:lmoretz@harthickman.com>]
Sent: Tuesday, July 16, 2013 1:46 PM
To: Aufman, Matt
Subject: Trion, Inc. Sanford, NC
Importance: High

Matt,

I would like to have Hanna Assefa take a look at the attached groundwater analytical data and determine if we need to proceed to the next step of collecting soil vapor samples at this site. TCE is the only compound detected above the IHSB Groundwater Screening Criteria for Vapor Intrusion. The highest detected concentration is 72 ug/l and the screening criteria is 4.4 ug/l. The wells are within 100' of occupied buildings and the site is industrial/commercial.

Can you please forward this information to her and get back to me ASAP as quick decisions need to be made by the RP. If you or Hanna need additional information from me, please let me know.

Thanks,

Leo

Leonard Moretz, PG, RSM Project Director/Branch Manager
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**Table 3
Summary of Groundwater Analytical Data
Trion, Inc. Facility
Sanford, North Carolina
H&H Job No. BAI-002**

Well ID	Sample Date	VOCs (8260B)											Total Metals (6010C)					
		Acetone	Chloroform	Chloromethane	Trichlorofluoromethane	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Toluene	1,2,4-Trichlorobenzene	Vinyl Chloride	Chromium	Copper	Manganese	Nickel	Zinc
Units		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Screening Criteria ⁽¹⁾		6,000	70	3	2,000	20	70	100	0.7	3	600	70	0.03	10	1,000	50	100	1,000
Screening Criteria ⁽²⁾		20,000,000	35	220	160	2,300	NS	140	49	4.4	16,000	30	25	NS	NS	NS	NS	NS
TMW-1	2/26/2008	<25.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	3/1/2011	6.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	7.3	17	290	<10	150
TMW-2	2/26/2008	<25.0	<1.0	2.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	3/2/2011	13	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	21	77	<10	140
TMW-3	2/26/2008	<25.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	0.86 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	3/1/2011	<5.0	<0.50	<0.50	0.94	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<10	75	<10	120
TMW-4	2/26/2008	<25.0	<1.0	<1.0	<1.0	<1.0	30.2	2.0	<1.0	9.5	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	3/13/2008	<25.0	<1.0	<1.0	<1.0	<1.0	35.6	2.9	<1.0	10.9	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	<1.0	<1.0	48.0	3.2	<1.0	13.3	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
TMW-5	3/2/2011	<5.0	<0.50	<0.50	<0.50	<0.50	49	3.6	<0.50	10	<0.50	<1.0	<0.50	<5.0	<10	93	29	38
	2/26/2008	<25.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
MW-6	5/12/2011 ³	<5.0	<0.50	<0.50	2.2	<0.50	<0.50	<0.50	0.57	<0.50	<0.50	<1.0	<0.50	<5.0	39	260	<10	130
	9/10/2009	<25.0	<1.0	<1.0	<1.0	<1.0	0.27 J	<1.0	<1.0	2.9	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	3/2/2011	16	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	<0.50	<1.0	<0.50	<5.0	<10	240	16	44
MW-7	4/23/2008	2.9 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.69 J	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	3/2/2011	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<10	140	10	<30
MW-8	4/23/2008	<25.0	<1.0	<1.0	<1.0	0.56 J	38.9	2.9	<1.0	12.7	<1.0	3.9	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	0.14 J	<1.0	<1.0	<1.0	113	9.5	<1.0	61.6	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	3/1/2011	<5.0	<0.50	<0.50	<0.50	<0.50	160	12	<0.50	61	<0.50	<1.0	<0.50	<5.0	<10	20	<10	36
MW-9	6/20/2013	<5.0	<0.50	<0.50	<0.50	<0.50	160	13	<0.50	72	<0.50	<1.0	<0.50	NA	NA	NA	NA	NA
	5/1/2008	<25.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	<1.0	<1.0	0.30 J	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
MW-10	3/2/2011	15	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<10	74	<10	<30
	4/23/2008	<25.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	0.27 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
MW-11	3/1/2011	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<10	76	<10	77
	5/1/2008	<25.0	<1.0	<1.0	<1.0	<1.0	137	6.2	<1.0	2.3	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	<1.0	<1.0	27.4	0.94 J	<1.0	1.8	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
MW-12	3/1/2011	<5.0	<0.50	<0.50	<0.50	<0.50	51	2.6	<0.50	1.8	<0.50	<1.0	<0.50	<5.0	14	110	<10	33
	5/1/2008	<25.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
	9/10/2009	<25.0	<1.0	<1.0	0.22 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA
MW-13	3/1/2011	7.2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<10	330	<10	36
	3/2/2011	<5.0	<0.50	<0.50	<0.50	<0.50	37	1.8	<0.50	30	<0.50	<1.0	<0.50	6.0	13	270	<10	98
	5/12/2011 ⁴	<5.0	<0.50	<0.50	<0.50	<0.50	39	1.8	<0.50	34	<0.50	<1.0	<0.50	NA	NA	NA	NA	NA
MW-14	6/20/2013	<5.0	<0.50	<0.50	<0.50	<0.50	40	2.0	<0.50	36	<0.50	<1.0	<0.50	NA	NA	NA	NA	NA
	3/2/2011	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	30	<10	150	<10	<30
	6/20/2013	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	NA
MW-15	3/2/2011	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.66	<1.0	<0.50	46	<10	110	<10	46
MW-16	5/18/2012	41.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<10	150	<10	<10
MW-17	5/18/2012	<5.0	<0.50	<0.50	<0.50	<0.50	8.1	<0.50	<0.50	4.9	<0.50	<1.0	<0.50	<10	<10	200	<10	<10
	6/20/2013	<5.0	<0.50	<0.50	<0.50	<0.50	5.3	<0.50	<0.50	2.7	<0.50	<1.0	<0.50	NA	NA	NA	NA	NA
DMW-1	5/18/2012	7.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	50	<10	52	<10	<10
	6/20/2013	6,500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.0	<1.0	0.70	NA	NA	NA	NA	NA

Notes:
1) Analytical results compared to NC DENR 15A NCAC 2L Groundwater Standards, revised April 1, 2013
2) Analytical results compared to NC DENR Inactive Hazardous Sites Branch (IHSS) Industrial Vapor Intrusion Preliminary Acceptable Groundwater Concentrations, revised July 2012
3) Sample collected from TMW-5 on 5/12/11 due to well obstruction during 3/1/11 - 3/2/11 sampling event
4) Sample collected from MW-13 on 5/12/11 to confirm concentrations detected during 3/2/11 sampling event
Only those compounds detected in at least one sample are shown above
Bold indicates an exceedance of the 2L Groundwater screening criteria referenced in note 1
Shaded indicates an exceedance of the IHSS screening criteria referenced in note 2
Method number follows parameter in parenthesis
VOCs= Volatile Organic Compound
NA = Not Analyzed, NS = Screening criteria not specified
µg/L = micrograms/liter