

**TABLE G-1. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Residents Exposed to Soil Gas (5 feet bgs) Migrating to Indoor Air (Slab-on-Grade Building Scenario)**

Nevada Environmental Response Trust Site  
Henderson, Nevada

**Sample Location with the Maximum Estimated Cancer Risk: RISG-1**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Indoor Air - 5 ft bgs (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Cancer Risk
Chloroform	3,900	4.7E-04	1.8E+00	1.5E-05
Carbon tetrachloride	51	3.7E-04	1.9E-02	4.0E-08
Tetrachloroethene	360	3.3E-04	1.2E-01	1.1E-08
<b>Total Cancer Risk</b>				<b>2E-05</b>

**Sample Location with the Maximum HI: RISG-77**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Indoor Air - 5 ft bgs (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Non-Cancer HQ
Chloroform	3,200	4.7E-04	1.5E+00	0.015
Trichloroethene	37	4.3E-04	1.6E-02	0.0076
Tetrachloroethene	570	3.3E-04	1.9E-01	0.0045
Xylenes (total)	20	4.3E-04	8.5E-03	0.000081
1,2,4-Trimethylbenzene	8.8	3.9E-04	3.4E-03	0.000054
1,1-Dichloroethene	19	5.2E-04	9.9E-03	0.000048
Carbon tetrachloride	12	3.7E-04	4.4E-03	0.000042
1,3-Dichlorobenzene	20	4.3E-04	8.6E-03	0.000041
Carbon disulfide	42	6.2E-04	2.6E-02	0.000036
Bromodichloromethane	11	3.6E-04	4.0E-03	0.000064
Toluene	62	4.8E-04	3.0E-02	0.000057
Acetone	120	6.5E-04	7.8E-02	0.000024
Benzene	4.3	3.6E-19	1.6E-18	5.0E-20
<b>Total Non-Cancer HI</b>				<b>0.03</b>

**Notes:**

bgs = below ground surface

ft = feet

µg/m<sup>3</sup> = microgram per cubic meter

VOC = volatile organic compound

EPC = exposure point concentration

HI = hazard index

HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Soil gas concentrations used in the risk calculation were the detected concentration from 5 ft bgs at RISG-1 and RISG-77, sampled on 03/11/2019 and 11/22/2019 respectively.

**TABLE G-2. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Residents Exposed to Soil Gas (10 - 15 feet bgs) Migrating to Indoor Air (Slab-on-Grade Building Scenario)  
Nevada Environmental Response Trust Site  
Henderson, Nevada**

**Sample Location with the Maximum Estimated Cancer Risk and HI: RISG-1**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Indoor Air - 10 ft bgs (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Cancer Risk	Non-Cancer HQ
Chloroform	8,900	2.2E-04	2.0E+00	1.6E-05	0.019
Naphthalene	150	1.8E-04	2.7E-02	3.2E-07	0.0085
Carbon tetrachloride	150	1.7E-04	2.5E-02	5.3E-08	0.00024
Ethylbenzene	74	2.0E-04	1.5E-02	1.3E-08	0.000014
Bromodichloromethane	2.7	1.6E-04	4.4E-04	5.8E-09	0.0000071
1,2-Dichloroethane	1.1	2.4E-04	2.7E-04	2.5E-09	0.000037
Tetrachloroethene	120	1.5E-04	1.8E-02	1.6E-09	0.00042
Trichloroethene	3.5	2.0E-04	6.9E-04	1.0E-09	0.00033
1,2-Dichloropropane	1.2	2.1E-04	2.5E-04	3.3E-10	0.000060
1,4-Dichlorobenzene	0.79	1.6E-04	1.3E-04	5.0E-10	0.00000015
1,1-Dichloroethane	3.5	2.4E-04	8.3E-04	4.7E-10	--
Methylene Chloride	4.4	2.8E-04	1.2E-03	4.4E-12	0.0000020
Benzene	75	5.9E-20	4.5E-18	1.2E-23	1.4E-19
Xylenes (total)	450	2.0E-04	8.9E-02	--	0.00085
1,2,4-Trimethylbenzene	240	1.8E-04	4.2E-02	--	0.00067
1,3,5-Trimethylbenzene	81	1.7E-04	1.4E-02	--	0.00023
1,2,4-Trichlorobenzene	0.82	1.2E-04	9.7E-05	--	0.000046
4-Ethyltoluene	54	2.1E-04	1.2E-02	--	0.000028
Ethyl acetate	7.7	2.4E-04	1.8E-03	--	0.000025
1,1-Dichloroethene	19	2.4E-04	4.6E-03	--	0.000022
n-Hexane	55	2.1E-04	1.1E-02	--	0.000016
Carbon disulfide	22	3.0E-04	6.5E-03	--	0.0000089
Toluene	190	2.2E-04	4.2E-02	--	0.0000081
4-Methyl-2-pentanone	33	2.1E-04	6.8E-03	--	0.0000022
n-Heptane	57	1.8E-04	1.0E-02	--	0.000024
Ethanol	160	4.9E-04	7.8E-02	--	0.0000075
2-Butanone	14	2.7E-04	3.8E-03	--	0.0000073
1,1,2-Trichloro-1,2,2-trifluoroethane	2.1	1.1E-04	2.3E-04	--	0.00000045
<b>Total Cancer Risk/Non-Cancer HI</b>				<b>2E-05</b>	<b>0.03</b>

**Notes:**

- = Not calculated
- bgs = below ground surface
- ft = feet
- µg/m<sup>3</sup> = microgram per cubic meter
- VOC = volatile organic compound
- EPC = exposure point concentration
- HI = hazard index
- HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Soil gas concentrations used in the risk calculation were the detected concentration from 15 ft bgs at RISG-1, sampled on 03/06/2015.

**TABLE G-3. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Residents Exposed to Soil Gas (5 feet bgs) Migrating to Indoor Air (Trailer Scenario)**

**Nevada Environmental Response Trust Site**

**Henderson, Nevada**

**Sample Location with the Maximum Estimated Cancer Risk and HI: RISG-77**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Indoor Air in Trailer - 5 ft bgs (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Cancer Risk	Non-Cancer HQ
Chloroform	3,200	5.1E-04	1.6E+00	1.3E-05	0.016
Bromodichloromethane	11	3.7E-04	4.1E-03	5.4E-08	0.0000066
Trichloroethene	37	4.5E-04	1.7E-02	2.5E-08	0.0081
Tetrachloroethene	570	3.3E-04	1.9E-01	1.8E-08	0.0046
Carbon tetrachloride	12	3.8E-04	4.5E-03	9.7E-09	0.000044
Benzene	4.3	4.0E-19	1.7E-18	4.8E-24	5.5E-20
Xylenes (total)	20	4.5E-04	8.9E-03	--	0.000086
1,2,4-Trimethylbenzene	8.8	4.0E-04	3.5E-03	--	0.000056
1,1-Dichloroethene	19	5.7E-04	1.1E-02	--	0.000052
1,3-Dichlorobenzene	20	4.6E-04	9.1E-03	--	0.000044
Carbon disulfide	42	7.0E-04	3.0E-02	--	0.000041
Toluene	62	5.1E-04	3.2E-02	--	0.000061
Acetone	120	7.5E-04	9.0E-02	--	0.000028
<b>Total Cancer Risk/Non-Cancer HI</b>				<b>1E-05</b>	<b>0.03</b>

**Notes:**

-- = Not calculated

bgs = below ground surface

ft = feet

µg/m<sup>3</sup> = microgram per cubic meter

VOC = volatile organic compound

EPC = exposure point concentration

HI = hazard index

HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Soil gas concentrations used in the risk calculation were the detected concentration from 5 ft bgs at RISG-77, sampled on 11/22/2019.

**TABLE G-4. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Residents Exposed to Soil Gas (10 - 15 feet bgs) Migrating to Indoor Air (Trailer Scenario)  
Nevada Environmental Response Trust Site  
Henderson, Nevada**

**Sample Location with the Maximum Estimated Cancer Risk and HI: RISG-77**

Chemical <sup>[1]</sup>	Soil Gas Concentration ( $\mu\text{g}/\text{m}^3$ ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Indoor Air in Trailer - 15 ft bgs ( $\mu\text{g}/\text{m}^3$ per $\mu\text{g}/\text{m}^3$ )	Air EPC ( $\mu\text{g}/\text{m}^3$ )	Cancer Risk	Non-Cancer HQ
Chloroform	5,800	1.4E-04	8.3E-01	6.8E-06	0.0081
Trichloroethene	57	1.3E-04	7.2E-03	1.1E-08	0.0035
Tetrachloroethene	1,100	9.3E-05	1.0E-01	9.5E-09	0.0025
Carbon tetrachloride	22	1.1E-04	2.3E-03	5.0E-09	0.000022
1,1-Dichloroethene	25	1.6E-04	4.0E-03	--	0.000019
1,3-Dichlorobenzene	18	1.3E-04	2.3E-03	--	0.000011
Carbon disulfide	21	2.0E-04	4.1E-03	--	0.0000057
2-Butanone	17	1.8E-04	3.1E-03	--	0.00000059
Acetone	34	2.2E-04	7.4E-03	--	0.00000023
<b>Total Cancer Risk/Non-Cancer HI</b>				<b>7E-06</b>	<b>0.01</b>

**Notes:**

-- = Not calculated

bgs = below ground surface

ft = feet

$\mu\text{g}/\text{m}^3$  = microgram per cubic meter

VOC = volatile organic compound

EPC = exposure point concentration

HI = hazard index

HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Soil gas concentrations used in the risk calculation were the detected concentration from 15 ft bgs at RISG-77, sampled on 11/22/2019.

**TABLE G-5. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Indoor Commercial/Industrial Workers Exposed to Soil Gas (5 feet bgs) Migrating to Indoor Air**

Nevada Environmental Response Trust Site

Henderson, Nevada

**Sample Location with the Maximum Estimated Cancer Risk: RISG-6**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Indoor Air - 5 ft bgs (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Cancer Risk
Chloroform	11,000	1.4E-04	1.5E+00	2.9E-06
Carbon tetrachloride	320	1.0E-04	3.3E-02	1.6E-08
Trichloroethene	37	1.2E-04	4.6E-03	1.5E-09
Tetrachloroethene	350	9.3E-05	3.2E-02	6.9E-10
<b>Total Cancer Risk</b>				<b>3E-06</b>

**Sample Location with the Maximum HI: RISG-2**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Indoor Air - 5 ft bgs (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Non-Cancer HQ
Tetrachloroethene	7,800	9.3E-05	7.2E-01	0.0041
Trichloroethene	110	1.2E-04	1.4E-02	0.0016
Chloroform	4,400	1.4E-04	6.1E-01	0.0014
1,2,4-Trichlorobenzene	3.6	7.4E-05	2.7E-04	0.000030
1,1-Dichloroethene	93	1.6E-04	1.4E-02	0.000016
Carbon tetrachloride	65	1.0E-04	6.8E-03	0.000016
Naphthalene	1.4	1.1E-04	1.6E-04	0.000012
Xylenes (total)	40	1.2E-04	5.0E-03	0.000011
cis-1,2-Dichloroethene	11	1.6E-04	1.7E-03	0.000010
1,2,4-Trimethylbenzene	11	1.1E-04	1.2E-03	0.0000046
2-Hexanone	4.0	1.3E-04	5.3E-04	0.0000040
Vinyl acetate	19	1.5E-04	2.9E-03	0.0000033
1,3,5-Trimethylbenzene	4.9	1.1E-04	5.4E-04	0.0000021
n-Hexane	24	1.3E-04	3.2E-03	0.0000010
Dichlorodifluoromethane	3.2	1.4E-04	4.4E-04	0.0000010
trans-1,2-Dichloroethene	1.1	1.6E-04	1.7E-04	0.0000010
Chloromethane	1.6	2.2E-04	3.5E-04	0.00000089
n-Heptane	7.3	1.1E-04	8.2E-04	0.00000047
1,2-Dichloroethane	0.089	1.5E-04	1.4E-05	0.00000045
2-Butanone	44	1.7E-04	7.5E-03	0.00000034
Chlorobenzene	0.50	1.3E-04	6.6E-05	0.00000030
4-Ethyltoluene	3.8	1.4E-04	5.2E-04	0.00000029
Acetone	140	2.0E-04	2.8E-02	0.00000021
Ethylbenzene	7.2	1.2E-04	9.0E-04	0.00000020
Toluene	27	1.4E-04	3.8E-03	0.00000017
Carbon disulfide	2.0	1.9E-04	3.8E-04	0.00000012
4-Methyl-2-pentanone	11	1.3E-04	1.4E-03	0.00000011
Methylene Chloride	0.97	1.8E-04	1.7E-04	0.000000066
Cyclohexane	9.8	1.4E-04	1.4E-03	0.000000054
Styrene	0.91	1.3E-04	1.2E-04	0.000000027
Ethanol	26	2.9E-04	7.5E-03	0.000000017
1,1,2-Trichloro-1,2,2-trifluoroethane	0.56	7.0E-05	3.9E-05	1.8E-09
Benzene	7.0	2.9E-19	2.1E-18	1.6E-20
<b>Total Non-Cancer HI</b>				<b>0.007</b>

**Notes:**

-- = Not calculated

bgs = below ground surface

ft = feet

µg/m<sup>3</sup> = microgram per cubic meter

VOC = volatile organic compound

EPC = Exposure point concentration

HI = Hazard index

HQ = Hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Soil gas concentrations used in the risk calculation were the detected concentration from 5 ft bgs at RISG-6 and RISG-2, sampled on 11/13/2019 and 03/19/2015 respectively.

**TABLE G-6. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Indoor Commercial/Industrial Workers Exposed to Soil Gas (10 - 15 feet bgs) Migrating to Indoor Air**

**Nevada Environmental Response Trust Site  
Henderson, Nevada**

**Sample Location with the Maximum Estimated Cancer Risk: RISG-6**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Indoor Air - 15 ft bgs (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Cancer Risk
Chloroform	22,000	3.6E-05	8.0E-01	1.5E-06
Carbon tetrachloride	640	2.7E-05	1.7E-02	8.5E-09
Trichloroethene	76	3.2E-05	2.5E-03	8.3E-10
Tetrachloroethene	750	2.4E-05	1.8E-02	3.8E-10
1,1-Dichloroethane	13	4.0E-05	5.1E-04	6.7E-11
<b>Total Cancer Risk</b>				<b>2E-06</b>

**Notes:**

-- = Not calculated

bgs = below ground surface

ft = feet

µg/m<sup>3</sup> = microgram per cubic meter

VOC = volatile organic compound

EPC = exposure point concentration

HI = hazard index

HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Soil gas concentrations used in the risk calculation were the detected concentration from 15 ft bgs at RISG-6 and RISG-2, sampled on 11/13/2019 and 03/19/2015 respectively.

**Sample Location with the Maximum HI: RISG-2**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Indoor Air - 15 ft bgs (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Non-Cancer HQ
Acrolein	11	5.4E-05	6.0E-04	0.0068
Tetrachloroethene	11,000	2.4E-05	2.6E-01	0.0015
Chloroform	7,100	3.6E-05	2.6E-01	0.00060
Trichloroethene	160	3.2E-05	5.2E-03	0.00059
Naphthalene	3.8	2.9E-05	1.1E-04	0.0000084
Carbon tetrachloride	130	2.7E-05	3.5E-03	0.0000080
1,2,4-Trichlorobenzene	3.7	1.9E-05	7.0E-05	0.0000080
1,1-Dichloroethene	170	4.1E-05	6.9E-03	0.0000079
1,1,2-Trichloroethane	0.20	3.2E-05	6.4E-06	0.0000073
Acrylonitrile	0.86	5.5E-05	4.7E-05	0.0000054
Xylenes (total)	61	3.2E-05	2.0E-03	0.0000045
1,2,4-Trimethylbenzene	20	2.9E-05	5.8E-04	0.0000022
Ethyl acetate	9.4	4.0E-05	3.8E-04	0.0000012
1,3,5-Trimethylbenzene	8.4	2.9E-05	2.4E-04	0.00000091
1,2-Dichloroethane	0.58	4.1E-05	2.4E-05	0.00000077
2-Hexanone	2.7	3.5E-05	9.5E-05	0.00000072
cis-1,2-Dichloroethene	2.6	4.2E-05	1.1E-04	0.00000062
Dichlorodifluoromethane	3.1	3.6E-05	1.1E-04	0.00000025
4-Ethyltoluene	6.0	3.5E-05	2.1E-04	0.00000012
Chlorobenzene	0.73	3.4E-05	2.5E-05	0.00000011
2-Butanone	51	4.6E-05	2.4E-03	0.00000011
Ethylbenzene	13	3.2E-05	4.2E-04	0.00000010
n-Hexane	7.8	3.5E-05	2.7E-04	0.000000088
Acetone	210	5.6E-05	1.2E-02	0.000000086
Carbon disulfide	4.4	5.0E-05	2.2E-04	0.000000072
trans-1,2-Dichloroethene	0.28	4.1E-05	1.2E-05	0.000000066
Toluene	36	3.7E-05	1.3E-03	0.000000060
Tetrahydrofuran	7.6	4.9E-05	3.8E-04	0.000000043
Methylene Chloride	1.6	4.7E-05	7.5E-05	0.000000029
Styrene	3.3	3.4E-05	1.1E-04	0.000000025
1,2-Dibromoethane	0.047	2.1E-05	9.8E-07	0.000000025
4-Methyl-2-pentanone	7.0	3.4E-05	2.4E-04	0.000000018
Ethanol	50	9.2E-05	4.6E-03	0.000000010
Bromodichloromethane	0.77	2.7E-05	2.1E-05	0.0000000078
1,1,2-Trichloro-1,2,2-trifluoroethane	0.57	1.8E-05	1.0E-05	4.6E-10
Benzene	12	2.4E-20	2.9E-19	2.2E-21
<b>Total Non-Cancer HI</b>				<b>0.01</b>

**TABLE G-7. Estimated Cancer Risks and Noncancer Hazard Indices – Outdoor Commercial/Industrial Workers Exposed to Soil Gas (5 feet bgs) Migrating to Outdoor Air  
Nevada Environmental Response Trust Site  
Henderson, Nevada**

Chemical <sup>[1]</sup>	Outdoor Air EPC ( $\mu\text{g}/\text{m}^3$ ) <sup>[2]</sup>	Cancer Risk	Non-Cancer HQ
Chloroform	1.3E-04	2.2E-10	0.00000028
1,4-Dioxane <sup>[3]</sup>	5.3E-05	1.9E-11	0.00000036
Acrylonitrile <sup>[3]</sup>	4.7E-07	2.3E-12	0.00000048
Bromodichloromethane	5.9E-07	1.6E-12	0.0000000020
Naphthalene	5.5E-07	1.4E-12	0.000000037
1,2-Dichloroethane	3.6E-07	6.9E-13	0.00000011
1,2-Dibromoethane <sup>[3]</sup>	1.5E-08	6.6E-13	0.0000000034
1,4-Dichlorobenzene	4.3E-07	3.5E-13	0.0000000011
Trichloroethene	8.0E-07	2.4E-13	0.000000082
Carbon tetrachloride	4.8E-07	2.1E-13	0.0000000099
Tetrachloroethene	1.0E-05	2.0E-13	0.000000053
Hexachlorobutadiene <sup>[3]</sup>	7.4E-08	1.2E-13	--
1,1-Dichloroethane	7.0E-07	8.2E-14	--
Methyl tert-butyl ether	1.3E-06	2.5E-14	0.00000000090
Bromoform <sup>[3]</sup>	1.6E-07	1.3E-14	--
Ethylbenzene	5.8E-08	1.1E-14	0.00000000012
1,2-Dichloropropane <sup>[3]</sup>	1.2E-08	3.3E-15	0.0000000062
1,1,1,2-Tetrachloroethane <sup>[3]</sup>	3.0E-09	1.6E-15	--
3-Chloro-1-propene	1.9E-09	8.2E-16	0.00000000038
Vinyl chloride <sup>[3]</sup>	1.5E-09	4.9E-16	0.000000000031
Methylene chloride	4.2E-07	3.0E-16	0.0000000014
Benzene	2.6E-22	1.5E-28	1.7E-24
2-Hexanone	6.3E-06	--	0.000000043
1,2,4-Trichlorobenzene <sup>[3]</sup>	2.6E-07	--	0.000000027
Vinyl acetate	2.5E-06	--	0.0000000026
tert-Butyl alcohol	5.6E-05	--	0.0000000023
2-Butanone	5.1E-05	--	0.0000000021
Acetone	3.1E-04	--	0.0000000020
Ethanol	7.0E-04	--	0.0000000014
Tetrahydrofuran	1.2E-05	--	0.0000000013
Xylenes (total)	3.3E-07	--	0.0000000068
cis-1,2-Dichloroethene	1.3E-07	--	0.0000000065
4-Methyl-2-pentanone	8.8E-06	--	0.0000000060
1,2,4-Trimethylbenzene	1.5E-07	--	0.0000000051
Chlorobenzene	1.3E-07	--	0.0000000051
1,3-Dichlorobenzene	2.7E-07	--	0.0000000027
1,2-Dichlorobenzene <sup>[3]</sup>	2.6E-07	--	0.0000000027
1,3,5-Trimethylbenzene	7.5E-08	--	0.0000000026
1,1-Dichloroethene	1.6E-07	--	0.0000000016
trans-1,2-Dichloroethene <sup>[3]</sup>	2.0E-08	--	0.0000000010

**TABLE G-7. Estimated Cancer Risks and Noncancer Hazard Indices – Outdoor Commercial/Industrial Workers Exposed to Soil Gas (5 feet bgs) Migrating to Outdoor Air  
Nevada Environmental Response Trust Site  
Henderson, Nevada**

Chemical <sup>[1]</sup>	Outdoor Air EPC ( $\mu\text{g}/\text{m}^3$ ) <sup>[2]</sup>	Cancer Risk	Non-Cancer HQ
Bromomethane <sup>[3]</sup>	2.3E-09	--	0.000000000094
Chloromethane <sup>[3]</sup>	4.0E-08	--	0.000000000091
Carbon disulfide	2.2E-07	--	0.000000000064
alpha-Methyl styrene	2.1E-07	--	0.000000000044
Chloroethane	5.6E-07	--	0.000000000011
Toluene	2.7E-07	--	0.000000000011
Styrene <sup>[3]</sup>	5.4E-08	--	0.000000000011
n-Octane	1.1E-09	--	0.000000000011
Dichlorodifluoromethane <sup>[3]</sup>	2.4E-09	--	0.000000000050
n-Butylbenzene	6.4E-09	--	0.000000000033
Cumene	3.9E-09	--	0.000000000020
n-Propylbenzene	8.0E-09	--	0.000000000017
sec-Butylbenzene	1.1E-09	--	0.000000000057
tert-Butylbenzene	1.1E-09	--	0.000000000055
p-Cymene	4.9E-10	--	0.000000000025
n-Hexane	7.6E-10	--	0.000000000022
4-Ethyltoluene <sup>[3]</sup>	3.5E-10	--	0.000000000018
Cyclohexane	4.4E-09	--	0.000000000015
n-Heptane	9.5E-11	--	0.0000000000049
1,1,1-Trichloroethane <sup>[3]</sup>	8.5E-10	--	0.0000000000035
1,1,2-Trichloro-1,2,2-trifluoroethane <sup>[3]</sup>	1.0E-10	--	4.2E-15
Freon 114 <sup>[3]</sup>	2.0E-12	--	8.1E-17
<b>Total Cancer Risk/Non-Cancer HI</b>		<b>2E-10</b>	<b>0.000001</b>

**Notes:**

-- = Not calculated

bgs = below ground surface

ft = feet

$\mu\text{g}/\text{m}^3$  = microgram per cubic meter

VOC = volatile organic compound

EPC = Exposure point concentration

HI = Hazard index

HQ = Hazard quotient

OU = Operable unit

UCL = Upper confidence limit

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI at 5 ft bgs in the commercial/industrial area in the BHRA Area are shown in this table.

[2] Air EPCs used in the risk calculation were the 95% UCLs on the mean air concentrations, which were calculated by multiplying detected soil gas concentrations at 5 ft bgs in the commercial/industrial area in the BHRA Area with depth-specific transfer factors.

[3] The maximum air EPC of the chemical detected in soil gas at 5 ft bgs in the commercial/industrial area in the BHRA Area was used in the risk calculation if the calculated 95% UCL was greater than the maximum air EPC due to elevated detection limits of soil gas samples.



**TABLE G-8. Estimated Cancer Risks and Noncancer Hazard Indices – Outdoor Commercial/Industrial Workers Exposed to Soil Gas (10 - 15 feet bgs) Migrating to Outdoor Air**

**Nevada Environmental Response Trust Site  
Henderson, Nevada**

Chemical <sup>[1]</sup>	Outdoor Air EPC ( $\mu\text{g}/\text{m}^3$ ) <sup>[2]</sup>	Cancer Risk	Non-Cancer HQ
Chloroform	1.1E-04	1.8E-10	0.00000022
1,2-Dibromo-3-chloropropane <sup>[3]</sup>	2.2E-08	9.6E-12	0.00000022
Acrylonitrile <sup>[3]</sup>	4.4E-07	2.2E-12	0.00000045
Naphthalene	3.3E-07	8.3E-13	0.00000023
Bromodichloromethane	1.4E-07	3.8E-13	0.00000000048
Hexachlorobutadiene	1.3E-07	2.1E-13	--
1,2-Dibromoethane <sup>[3]</sup>	3.8E-09	1.7E-13	0.00000000086
Carbon tetrachloride	3.4E-07	1.5E-13	0.0000000070
Tetrachloroethene	7.2E-06	1.4E-13	0.00000037
Trichloroethene	3.7E-07	1.1E-13	0.00000038
1,2-Dichloroethane <sup>[3]</sup>	5.8E-08	1.1E-13	0.000000017
1,1-Dichloroethane	4.5E-07	5.3E-14	--
1,1,2-Trichloroethane <sup>[3]</sup>	3.1E-08	3.7E-14	0.00000032
1,2-Dichloropropane <sup>[3]</sup>	1.7E-08	4.6E-15	0.0000000087
Ethylbenzene	3.6E-08	6.7E-15	0.00000000075
1,4-Dichlorobenzene <sup>[3]</sup>	3.1E-09	2.5E-15	0.000000000080
1,1,1,2-Tetrachloroethane <sup>[3]</sup>	1.1E-09	5.9E-16	--
Methylene chloride	1.9E-07	1.4E-16	0.00000000066
Vinyl chloride <sup>[3]</sup>	1.5E-10	4.8E-17	0.000000000030
Benzene	3.6E-23	2.1E-29	2.5E-25
Acrolein <sup>[3]</sup>	5.8E-06	--	0.000059
Ethyl acetate <sup>[3]</sup>	3.5E-06	--	0.00000010
2-Hexanone <sup>[3]</sup>	1.4E-06	--	0.000000094
1,2,4-Trichlorobenzene <sup>[3]</sup>	7.6E-08	--	0.000000078
Acetone	1.7E-04	--	0.000000011
2-Butanone	2.4E-05	--	0.000000010
Ethanol	3.7E-04	--	0.000000075
Xylenes (total)	1.8E-07	--	0.000000037
Tetrahydrofuran	3.6E-06	--	0.000000037
1,2,4-Trimethylbenzene	9.3E-08	--	0.000000032
Methylmethacrylate <sup>[3]</sup>	8.0E-07	--	0.000000023
Chlorobenzene <sup>[3]</sup>	4.1E-08	--	0.000000017
cis-1,2-Dichloroethene <sup>[3]</sup>	3.2E-08	--	0.000000016
4-Methyl-2-pentanone <sup>[3]</sup>	2.3E-06	--	0.000000016
1,3,5-Trimethylbenzene	4.6E-08	--	0.000000016
1,3-Dichlorobenzene <sup>[3]</sup>	1.5E-07	--	0.000000015
1,1-Dichloroethene	1.3E-07	--	0.000000014
Carbon disulfide	1.1E-07	--	0.0000000032
Chloromethane <sup>[3]</sup>	6.9E-09	--	0.0000000016
trans-1,2-Dichloroethene <sup>[3]</sup>	3.0E-09	--	0.0000000015

**TABLE G-8. Estimated Cancer Risks and Noncancer Hazard Indices – Outdoor Commercial/Industrial Workers Exposed to Soil Gas (10 - 15 feet bgs) Migrating to Outdoor Air**

**Nevada Environmental Response Trust Site  
Henderson, Nevada**

Chemical <sup>[1]</sup>	Outdoor Air EPC ( $\mu\text{g}/\text{m}^3$ ) <sup>[2]</sup>	Cancer Risk	Non-Cancer HQ
Styrene <sup>[3]</sup>	5.5E-08	--	0.000000000011
Chloroethane	2.5E-07	--	0.000000000052
Toluene	1.1E-07	--	0.000000000044
Dichlorodifluoromethane <sup>[3]</sup>	7.3E-10	--	0.000000000015
4-Ethyltoluene <sup>[3]</sup>	1.9E-10	--	0.000000000010
n-Hexane	1.2E-10	--	0.0000000000034
Cyclohexane <sup>[3]</sup>	2.3E-10	--	0.0000000000079
1,1,2-Trichloro-1,2,2-trifluoroethane <sup>[3]</sup>	4.3E-11	--	1.8E-15
<b>Total Cancer Risk/Non-Cancer HI</b>		<b>2E-10</b>	<b>0.00006</b>

**Notes:**

-- = Not calculated

bgs = below ground surface

ft = feet

$\mu\text{g}/\text{m}^3$  = microgram per cubic meter

VOC = volatile organic compound

EPC = Exposure point concentration

HI = Hazard index

HQ = Hazard quotient

OU = Operable unit

UCL = Upper confidence limit

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI at 10 or 15 ft bgs in the commercial/industrial area in the BHRA Area are shown in this table.

[2] Air EPCs used in the risk calculation were the 95% UCLs on the mean air concentrations, which were calculated by multiplying detected soil gas concentrations at 10 to 15 ft bgs in the commercial/industrial area in the BHRA Area with depth-specific transfer factors.

[3] The maximum air EPC of the chemical in soil gas at 10 to 15 ft bgs in the commercial/industrial area in the BHRA Area was used in the risk calculation if the calculated 95% UCL was greater than the maximum air EPC due to elevated detection limits of soil gas samples.

**TABLE G-9. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Construction Workers Exposed to Soil Gas (5 feet bgs) Migrating to Trench Air  
Nevada Environmental Response Trust Site  
Henderson, Nevada**

**Sample Location with the Maximum Estimated Cancer Risk: RISG-6**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Trench Air (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Cancer Risk
Chloroform	11,000	1.9E-07	2.1E-03	9.6E-12
Carbon tetrachloride	320	1.9E-08	6.2E-06	7.3E-15
Trichloroethene	37	6.8E-08	2.5E-06	2.0E-15
Tetrachloroethene	350	2.9E-08	1.0E-05	5.2E-16
<b>Total Cancer Risk</b>				<b>1E-11</b>

**Notes:**

-- = Not calculated

bgs = below ground surface

ft = feet

µg/m<sup>3</sup> = microgram per cubic meter

VOC = volatile organic compound

EPC = exposure point concentration

HI = hazard index

HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Soil gas concentrations used in the risk calculation were the detected concentration from 5 ft bgs at RISG-6 and RISG-2, sampled on 11/13/2019 and 03/19/2015 respectively.

**Sample Location with the Maximum HI: RISG-2**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Trench Air (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Non-Cancer HQ
Tetrachloroethene	7,800	2.9E-08	2.3E-04	0.000000076
Trichloroethene	110	6.8E-08	7.4E-06	0.000000047
Chloroform	4,400	1.9E-07	8.6E-04	0.000000049
2-Hexanone	4.0	8.4E-06	3.4E-05	0.000000015
Vinyl acetate	19	1.6E-06	3.1E-05	0.000000012
Naphthalene	1.4	1.7E-06	2.3E-06	0.000000011
2-Butanone	44	1.7E-05	7.4E-04	0.000000010
Acetone	140	3.2E-05	4.5E-03	0.000000020
4-Methyl-2-pentanone	11	5.4E-06	6.0E-05	0.000000010
Ethanol	26	2.8E-04	7.3E-03	0.000000010
1,2,4-Trichlorobenzene	3.6	3.4E-07	1.2E-06	0.0000000084
1,1-Dichloroethene	93	2.9E-08	2.7E-06	0.0000000094
Xylenes (total)	40	1.1E-07	4.3E-06	0.0000000015
Carbon tetrachloride	65	1.9E-08	1.3E-06	0.00000000091
1,2,4-Trimethylbenzene	11	1.1E-07	1.2E-06	0.00000000083
cis-1,2-Dichloroethene	11	2.0E-07	2.2E-06	0.00000000076
1,3,5-Trimethylbenzene	4.9	7.7E-08	3.8E-07	0.00000000026
1,2-Dichloroethane	0.089	7.1E-07	6.3E-08	0.00000000012
Toluene	27	1.2E-07	3.2E-06	0.000000000087
Methylene Chloride	1.0	2.8E-07	2.7E-07	0.000000000036
Chlorobenzene	0.50	2.4E-07	1.2E-07	0.000000000033
Carbon disulfide	2.0	6.6E-08	1.3E-07	0.000000000026
trans-1,2-Dichloroethene	1.1	8.5E-08	9.4E-08	0.000000000016
Styrene	0.91	2.7E-07	2.5E-07	0.000000000011
Ethylbenzene	7.2	9.1E-08	6.5E-07	0.000000000010
Chloromethane	1.6	1.1E-07	1.8E-07	8.4E-13
4-Ethyltoluene	3.8	4.2E-10	1.6E-09	2.4E-13
Trichlorofluoromethane	1.2	5.9E-09	7.0E-09	9.6E-14
Dichlorodifluoromethane	3.2	2.1E-09	6.8E-09	9.3E-14
n-Hexane	24	3.8E-10	9.1E-09	6.2E-14
Cyclohexane	9.8	5.0E-09	4.9E-08	3.8E-14
n-Heptane	7.3	2.1E-10	1.5E-09	5.2E-15
1,1,2-Trichloro-1,2,2-trifluoroethane	0.56	6.4E-10	3.6E-10	9.9E-17
Benzene	7.0	9.4E-24	6.6E-23	1.1E-26
<b>Total Non-Cancer HI</b>				<b>0.000002355770</b>

**TABLE G-10. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Construction Workers Exposed to Soil Gas (10 - 15 feet bgs) Migrating to Trench Air**

Nevada Environmental Response Trust Site  
Henderson, Nevada

**Sample Location with the Maximum Estimated Cancer Risk: RISG-6**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Trench Air (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Cancer Risk
Chloroform	22,000	1.9E-07	4.3E-03	1.9E-11
Carbon tetrachloride	640	1.9E-08	1.2E-05	1.5E-14
Trichloroethene	76	6.8E-08	5.1E-06	4.1E-15
Tetrachloroethene	750	2.9E-08	2.2E-05	1.1E-15
1,1-Dichloroethane	13	1.4E-07	1.8E-06	5.6E-16
<b>Total Cancer Risk</b>				<b>2E-11</b>

**Sample Location with the Maximum HI: RISG-2**

Chemical <sup>[1]</sup>	Soil Gas Concentration (µg/m <sup>3</sup> ) <sup>[2]</sup>	Transfer Factor for Soil Gas Migrating to Trench Air (µg/m <sup>3</sup> per µg/m <sup>3</sup> )	Air EPC (µg/m <sup>3</sup> )	Non-Cancer HQ
Acrolein	11	8.7E-06	9.6E-05	0.000014
Tetrachloroethene	11,000	2.9E-08	3.2E-04	0.0000011
Chloroform	7,100	1.9E-07	1.4E-03	0.00000079
Trichloroethene	160	6.8E-08	1.1E-05	0.00000069
Acrylonitrile	0.86	8.4E-06	7.2E-06	0.00000049
Naphthalene	3.8	1.7E-06	6.3E-06	0.00000029
2-Butanone	51	1.7E-05	8.6E-04	0.00000012
2-Hexanone	2.7	8.4E-06	2.3E-05	0.00000010
Acetone	210	3.2E-05	6.7E-03	0.00000029
Ethanol	50	2.8E-04	1.4E-02	0.00000019
Ethyl acetate	9.4	6.2E-06	5.9E-05	0.00000011
1,1,2-Trichloroethane	0.20	8.3E-07	1.7E-07	0.000000021
1,2,4-Trichlorobenzene	3.7	3.4E-07	1.3E-06	0.000000086
1,1-Dichloroethene	170	2.9E-08	4.9E-06	0.00000017
Tetrahydrofuran	7.6	1.4E-05	1.1E-04	0.000000073
4-Methyl-2-pentanone	7.0	5.4E-06	3.8E-05	0.000000065
1,2-Dibromoethane	0.047	7.1E-07	3.3E-08	0.000000023
Xylenes (total)	61	1.1E-07	6.6E-06	0.000000023
Carbon tetrachloride	130	1.9E-08	2.5E-06	0.000000018
1,2,4-Trimethylbenzene	20	1.1E-07	2.2E-06	0.000000015
Bromodichloromethane	0.77	2.6E-07	2.0E-07	0.000000014
1,2-Dichloroethane	0.58	7.1E-07	4.1E-07	0.0000000080
1,3,5-Trimethylbenzene	8.4	7.7E-08	6.5E-07	0.0000000044
Toluene	36	1.2E-07	4.2E-06	0.0000000012
cis-1,2-Dichloroethene	2.6	2.0E-07	5.3E-07	0.0000000018
Methylene Chloride	1.6	2.8E-07	4.5E-07	0.00000000059
Carbon disulfide	4.4	6.6E-08	2.9E-07	0.00000000057
Chlorobenzene	0.73	2.4E-07	1.7E-07	0.00000000048
Styrene	3.3	2.7E-07	9.1E-07	0.00000000041
Ethylbenzene	13	9.1E-08	1.2E-06	0.00000000018
trans-1,2-Dichloroethene	0.28	8.5E-08	2.4E-08	0.000000000041
4-Ethyltoluene	6.0	4.2E-10	2.5E-09	3.8E-13
Trichlorofluoromethane	1.6	5.9E-09	9.4E-09	1.3E-13
Dichlorodifluoromethane	3.1	2.1E-09	6.6E-09	9.0E-14
n-Hexane	7.8	3.8E-10	3.0E-09	2.0E-14
1,1,2-Trichloro-1,2,2-trifluoroethane	0.57	6.4E-10	3.7E-10	1.0E-16
Benzene	12	9.4E-24	1.1E-22	1.9E-26
<b>Total Non-Cancer HI</b>				<b>0.00001</b>

**Notes:**

bgs = below ground surface

ft = feet

µg/m<sup>3</sup> = microgram per cubic meter

VOC = volatile organic compound

EPC = exposure point concentration

HI = hazard index

HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Soil gas concentrations used in the risk calculation were the detected concentration from 15 ft bgs at RISG-6 and RISG-2, sampled on 11/13/2019 and 03/19/2015 respectively.

**TABLE G-11. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Residents Exposed to VOCs in Shallow Groundwater Migrating to Indoor Air (Slab-on-Grade Building Scenario)**

**Nevada Environmental Response Trust Site  
Henderson, Nevada**

**Sample Location with the Maximum Estimated Cancer Risk and HI: PC-67**

<b>Chemical<sup>[1]</sup></b>	<b>Groundwater Concentration (µg/L)<sup>[2]</sup></b>	<b>Transfer Factor for Groundwater Vapor Migrating to Indoor Air - 10 ft bgs (µg/m<sup>3</sup> per µg/L)</b>	<b>Air EPC (µg/m<sup>3</sup>)</b>	<b>Cancer Risk</b>	<b>Non-Cancer HQ</b>
Chloroform	1,000	1.4E-02	1.4E+01	1.2E-04	0.14
<b>Total Cancer Risk/Non-Cancer HI</b>				<b>1E-04</b>	<b>0.1</b>

**Notes:**

bgs = below ground surface

ft = feet

µg/L = microgram per liter

µg/m<sup>3</sup> = microgram per cubic meter

VOC = volatile organic compound

EPC = exposure point concentration

HI = hazard index

HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Groundwater concentrations used in the risk calculation were the detected concentration at PC-67, sampled on 01/14/2015.

**TABLE G-12. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Residents Exposed to VOCs in Shallow Groundwater Migrating to Indoor Air (Trailer Scenario)  
Nevada Environmental Response Trust Site  
Henderson, Nevada**

**Sample Location with the Maximum Estimated Cancer Risk and HI: PC-175**

Chemical <sup>[1]</sup>	Groundwater Concentration (µg/L) <sup>[2]</sup>	Transfer Factor for Groundwater Vapor Migrating to Indoor Air in Trailer - 20 ft bgs (µg/m <sup>3</sup> per µg/L)	Air EPC (µg/m <sup>3</sup> )	Cancer Risk	Non-Cancer HQ
Chloroform	550	8.5E-03	4.7E+00	3.9E-05	0.046
Carbon tetrachloride	1.4	4.6E-02	6.5E-02	1.4E-07	0.00062
Trichloroethene	2.2	1.9E-02	4.2E-02	6.2E-08	0.020
Tetrachloroethene	12	2.4E-02	2.9E-01	2.7E-08	0.0070
1,4-Dioxane	2.4	3.2E-05	7.6E-05	1.4E-10	0.0000024
1,1-Dichloroethene	2.7	7.0E-02	1.9E-01	--	0.00091
1,2,3-Trichloropropane	0.11	6.0E-04	6.6E-05	--	0.00021
<b>Total Cancer Risk/Non-Cancer HI</b>				<b>4E-05</b>	<b>0.08</b>

**Notes:**

- = not calculated
- bgs = below ground surface
- ft = feet
- µg/L = microgram per liter
- µg/m<sup>3</sup> = microgram per cubic meter
- VOC = volatile organic compound
- EPC = exposure point concentration
- HI = hazard index
- HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Groundwater concentrations used in the risk calculation were the detected concentration at PC-175, sampled on 09/15/2017.

**TABLE G-13. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Indoor Commercial/Industrial Workers Exposed to VOCs in Shallow Groundwater Migrating to Indoor Air**  
**Nevada Environmental Response Trust Site**  
**Henderson, Nevada**

**Sample Location with the Maximum Estimated Cancer Risk: PC-187**

Chemical <sup>[1]</sup>	Groundwater Concentration (µg/L) <sup>[2]</sup>	Transfer Factor for Groundwater Vapor Migrating to Indoor Air - 20 ft bgs (µg/m <sup>3</sup> per µg/L)	Air EPC (µg/m <sup>3</sup> )	Cancer Risk	Non-Cancer HQ
Chloroform	650	2.2E-03	1.4E+00	2.6E-06	0.0033
Carbon tetrachloride	10	1.2E-02	1.1E-01	5.6E-08	0.00026
Bromodichloromethane	1.9	8.9E-04	1.7E-03	5.1E-09	0.00000065
Trichloroethene	0.54	4.9E-03	2.6E-03	8.8E-10	0.00030
Bromoform	5.7	1.5E-04	8.4E-04	7.5E-11	--
1,4-Dioxane	0.66	8.0E-06	5.3E-06	2.2E-12	0.000000040
1,2,3-Trichloropropane	0.13	1.5E-04	2.0E-05	--	0.000015
<b>Total Cancer Risk/Non-Cancer HI</b>				<b>3E-06</b>	<b>0.004</b>

**Notes:**

- = not calculated
- bgs = below ground surface
- ft = feet
- µg/L = microgram per liter
- µg/m<sup>3</sup> = microgram per cubic meter
- VOC = volatile organic compound
- EPC = exposure point concentration
- HI = hazard index
- HQ = hazard quotient

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Groundwater concentrations used in the risk calculation were the detected concentration at PC-187, sampled on 10/24/2017.

**TABLE G-14. Estimated Cancer Risks and Noncancer Hazard Indices for Outdoor Commercial/Industrial Workers Exposed to VOCs in Shallow Groundwater Migrating to Outdoor Air Nevada Environmental Response Trust Site Henderson, Nevada**

Chemical <sup>[1]</sup>	Outdoor Air EPC ( $\mu\text{g}/\text{m}^3$ ) <sup>[2]</sup>	Cancer Risk	Non-Cancer HQ
Chloroform	1.3E-02	2.1E-08	0.000027
Carbon tetrachloride	9.3E-04	4.1E-10	0.0000019
1,4-Dichlorobenzene	1.4E-04	1.2E-10	0.000000037
Trichloroethene	1.7E-04	5.0E-11	0.000017
Bromodichloromethane	1.4E-05	3.8E-11	0.000000048
Hexachlorobutadiene	2.0E-05	3.3E-11	--
Tetrachloroethene	1.3E-03	2.4E-11	0.0000066
1,1-Dichloroethane	1.7E-04	2.0E-11	--
1,2-Dichloroethane	1.0E-05	2.0E-11	0.00000030
Bromoform	5.5E-06	4.4E-13	--
1,4-Dioxane	4.0E-07	1.5E-13	0.000000027
Methylene chloride	1.8E-04	1.3E-13	0.000000063
Benzene	1.9E-19	1.1E-25	1.3E-21
1,2,4-Trichlorobenzene	5.1E-05	--	0.0000052
1,2,3-Trichlorobenzene	9.7E-06	--	0.0000010
Chlorobenzene	1.4E-04	--	0.00000056
1,2,3-Trichloropropane	7.0E-07	--	0.00000048
1,1-Dichloroethene	2.1E-04	--	0.00000022
1,2-Dichlorobenzene	8.6E-05	--	0.000000088
1,3-Dichlorobenzene	4.9E-05	--	0.000000050
Toluene	5.0E-05	--	0.000000021
<b>Total Cancer Risk/Non-Cancer HI</b>		<b>2E-08</b>	<b>0.00006</b>

**Notes:**

- = not calculated
- $\mu\text{g}/\text{m}^3$  = microgram per cubic meter
- VOC = volatile organic compound
- EPC = exposure point concentration
- HI = hazard index
- HQ = hazard quotient
- OU = Operable Unit
- UCL = upper confidence limit

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for shallow wells over the commercial/industrial area in the BHRA Area are shown in this table.

[2] Air EPCs used in the risk calculation were the 95% UCLs on the mean air concentrations, which were calculated by multiplying detected groundwater concentrations in the commercial/industrial area in the BHRA Area with depth-specific transfer factors.



**TABLE G-15. Maximum Estimated Cancer Risks and Noncancer Hazard Indices – Construction Workers Exposed to VOCs in Shallow Groundwater Migrating to Trench Air**  
**Nevada Environmental Response Trust Site**  
**Henderson, Nevada**

**Sample Location with the Maximum Estimated Cancer Risk: PC-67**

Chemical <sup>[1]</sup>	Groundwater Concentration (µg/L) <sup>[2]</sup>	Transfer Factor for Groundwater Vapor Migrating to Trench Air - 10 ft bgs (µg/m <sup>3</sup> per µg/L)	Air EPC (µg/m <sup>3</sup> )	Cancer Risk
Chloroform	1,000	1.6E-03	1.6E+00	7.1E-09
<b>Total Cancer Risk</b>				<b>7E-09</b>

**Sample Location with the Maximum HI: PC-168**

Chemical <sup>[1]</sup>	Groundwater Concentration (µg/L) <sup>[2]</sup>	Transfer Factor for Groundwater Vapor Migrating to Trench Air - 10 ft bgs (µg/m <sup>3</sup> per µg/L)	Air EPC (µg/m <sup>3</sup> )	Non-Cancer HQ
1,1-Dichloroethene	1.2	1.2E-02	1.5E-02	0.000052
Chloroform	400	1.6E-03	6.3E-01	0.000036
Tetrachloroethene	16	4.3E-03	6.9E-02	0.000023
Trichloroethene	0.8	3.5E-03	2.8E-03	0.000018
Carbon tetrachloride	2.3	8.2E-03	1.9E-02	0.000014
1,2,3-Trichloropropane	0.066	1.8E-04	1.2E-05	0.00000054
1,4-Dichlorobenzene	0.44	6.7E-04	2.9E-04	0.000000034
1,4-Dioxane	2.4	5.1E-05	1.2E-04	0.000000023
1,2-Dichlorobenzene	0.49	5.5E-04	2.7E-04	0.000000019
<b>Total Non-Cancer HI</b>				<b>0.0001</b>

**Notes:**

bgs = below ground surface

ft = feet

µg/L = microgram per liter

µg/m<sup>3</sup> = microgram per cubic meter

VOC = volatile organic compound

EPC = exposure point concentration

HI = hazard index

HQ = hazard quotient

MEI = Maximally exposed individual

[1] Only detected VOCs contributing to the total cancer risk or non-cancer HI for the sample location with the maximum cancer risk and/or HI for the specific location(s) indicated in this table.

[2] Groundwater concentrations used in the risk calculation were the detected concentration at PC-67 and PC-168, sampled on 01/14/2015 and 11/14/2018 respectively.