Table 3-1
Leachate Study Summary Statistics and Comparison with Screening Criteria
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Analyte	CAS Number	Unit	Matrix	Summary Statistics								Comparison to Screening Criteria					
				No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Min RL of NDs	Max RL of NDs	Residential DW Protection	Percent Exceed (Detect)	Percent Exceed (Non-detect)	GSI Protection	Percent Exceed (Detect)	Percent Exceed (Non-detect)
Arsenic	7440-38-2	ug/Kg	Soil	28	100%	4,719	10,262	430	56,000	-	-	11,290*	7%	0%	11,290*	7%	0%
Arsenic	7440-38-2	ug/L	Water	28	100%	6.09	5.55	1.1	28	-	-	10	14%	0%	10	14%	0%
Boron	7440-42-8	ug/Kg	Soil	28	100%	4,148	2,600	830	11,000	-	-	10,000	7%	0%	100,000	0%	0%
Boron	7440-42-8	ug/L	Water	28	100%	48.1	23.5	18	140	-	-	500	0%	0%	5,000	0%	0%
Chromium, Hexavalent	18540-29-9	ug/Kg	Soil	28	0%	-	-	-	-	0.25	0.25	30,000	0%	0%	3,300	0%	0%
Chromium, Hexavalent	18540-29-9	ug/L	Water	28	4%	2.68	3.59	21	21	0.004	0.004	100	0%	0%	11	4%	0%
Cyanide, Total	57-12-5	ug/Kg	Soil	28	93%	88.7	70.0	16	240	0.012	0.012	4,000	0%	0%	390*	0%	0%
Cyanide, Total	57-12-5	ug/L	Water	28	46%	2.73	2.45	4.6	5.8	0.001	0.001	200	0%	0%	5.2	25%	0%
Fluoranthene	206-44-0	ug/Kg	Soil	28	79%	176	458	15	2,400	12	12	730,000	0%	0%	5,500	0%	0%
Fluoranthene	206-44-0	ug/L	Water	28	0%	-	-	-	-	0.77	0.77	210	0%	0%	1.6	0%	0%
Hexachlorobenzene	118-74-1	ug/Kg	Soil	28	7%	194	785	1,300	4,000	9.1	9.1	1,800	4%	0%	350	7%	0%
Hexachlorobenzene	118-74-1	ug/L	Water	28	0%	-	-	-	-	0.1	0.1	1	0%	0%	0.2	0%	0%
Hexachlorobutadiene	87-68-3	ug/Kg	Soil	28	4%	9.05	25.66	140	140	8.4	8.4	26,000	0%	0%	91	4%	0%
Hexachlorobutadiene	87-68-3	ug/L	Water	28	0%	-	-	-	-	0.12	0.12	15	0%	0%	0.053	0%	100%
Lithium	7439-93-2	ug/Kg	Soil	28	100%	5,907	3,927	1,100	16,000	-	-	12,500*	7%	0%	12,500*	7%	0%
Lithium	7439-93-2	ug/L	Water	28	100%	13.5	15.6	0.78	67	-	-	170	0%	0%	440	0%	0%
Methylene chloride	75-09-2	ug/Kg	Soil	28	0%	-	-	-	-	0.24	0.25	100	0%	0%	30,000	0%	0%
Methylene chloride	75-09-2	ug/L	Water	28	32%	1.74	2.96	1.2	9.2	0.19	0.19	5	18%	0%	1,500	0%	0%
Pentachlorophenol	87-86-5	ug/Kg	Soil	28	14%	120	491	41	2,600	15	15	22	14%	0%	17,000	0%	0%
Pentachlorophenol	87-86-5	ug/L	Water	28	4%	0.249	1.029	5.5	5.5	0.11	0.11	1	4%	0%	1.8	4%	0%
Selenium	7782-49-2	ug/Kg	Soil	28	100%	474	142	160	790	-	-	4,000	0%	0%	770*	4%	0%
Selenium	7782-49-2	ug/L	Water	28	25%	0.566	0.377	0.88	1.7	0.00073	0.00073	50	0%	0%	5	0%	0%
Strontium	7440-24-6	ug/Kg	Soil	28	100%	39,071	46,205	2,200	220,000	-	-	92,000	11%	0%	420,000	0%	0%
Strontium	7440-24-6	ug/L	Water	28	100%	56.6	54.6	3.9	220	-	-	4,600	0%	0%	21,000	0%	0%
Toluene	108-88-3	ug/Kg	Soil	28	7%	10.6	47.7	45	250	0.23	0.23	16,000	0%	0%	5,400	0%	0%
Toluene	108-88-3	ug/L	Water	28	75%	36.1	109.4	0.13	420	0.12	0.12	790	0%	0%	270	7%	0%
Xylenes, Total	1330-20-7	ug/Kg	Soil	28	4%	4.27	20.72	110	110	0.71	0.71	5,600	0%	0%	820	0%	0%
Xylenes, Total	1330-20-7	ug/L	Water	28	21%	1.58	4.18	0.49	19	0.29	0.29	280	0%	0%	41	0%	0%
Zinc	7440-66-6	ug/Kg	Soil	28	100%	44,564	64,664	4,800	350,000	-	-	2,400,000	0%	0%	220,000**	4%	0%
Zinc	7440-66-6	ug/L	Water	28	100%	121	428	7.8	2,300	-	-	2,400	0%	0%	220**	4%	0%

Notes:
There are no field duplicates in this data set.
Nondetects were substituted by half of reporting limit (RL) for the computation of summary statistics.
Laboratory QAQC results are not included.
* = Statewide Default Background Level or Regional Background Screening Level was used for criteria, per R 299.5750(B).
** = Generic facility-specific Part 201 Groundwater Surface Water Interface (GSI) and Soil GSI Protection Criteria were calculated for zinc using hardness data collected from receiving waters.

Table 3-2
Northeast Plant Perimeter Well Dow Shallow Groundwater Data Summary
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Analyte	Res. DW GW Criteria (ug/L)	GSI Protection Criteria (ug/L)	Monitor Well	4363	4363	4363	4363	4363	4363	6176	6176	6176	MW-10	MW-10	MW-10	4355	4355	4355
			Lab Sample ID	240-28946-1	240-28946-2	240-28946-5	240-28978-1	DRY	240-31891-6	240-28784-1	240-30477-2	240-31891-5	240-28790-3	240-30477-3	240-31891-7	240-28784-2	240-30477-4	240-31891-8
			Sample Date	9/6/2013	9/7/2013	9/7/2013	9/10/2013	10/18/2013	11/22/2013	9/5/2013	10/18/2013	11/22/2013	9/4/2013	10/18/2013	11/22/2013	9/5/2013	10/18/2013	11/25/2013
VOCs																		
Methylene chloride	5	1500		ND (<5.0)	NS	NS	NS	NS	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)
Toluene	790	270		ND(<1.0)	NS	NS	NS	NS	ND(<1.0)	ND (<1.0)	ND (<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)
m-Xylene & p-Xylene[1]	280	41		ND (<2.0)	NS	NS	NS	NS	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)
o-Xylene[1]	280	41		ND (<1.0)	NS	NS	NS	NS	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Total Cyanide	200	5.2		ND (<5.0)	NS	NS	NS	NS	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	**5.5 B**	ND (<5.0)	**5.5**
Metals																		
Arsenic	10	10		NS	**7.1**	NS	NS	NS	ND (<1.0)	**2.4**	**2.8**	**2.0**	**1.8**	ND (<1.0)	ND (<1.0)	**1.1**	**1.6**	**1.7**
Chromium VI	100	11		NS	NS	ND (<1.0)	NS	NS	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	3.2
Selenium	50	5		NS	ND (<2.0)	NS	NS	NS	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	**2.4**	**3.6**	**4.5**
Chlorinated Herbicides																		
Pentachlorophenol	1	2.8		NS	NS	NS	ND (<1.0)	NS	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)

[1] Residential Drinking Water Criteria and GSI Protection Criteria reported for Total Xylenes.

BOLD Result is detected.

BOLD & SHADED Result is detected at a concentration greater than a screening criteria.

NS Not Sampled - Well was dry and sample was not collected.

B Compound was found in the blank and sample

Table 3-2
Northeast Plant Perimeter Well Dow Shallow Groundwater Data Summary
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Analyte	Res. DW GW Criteria (ug/L)	GSI Protection Criteria (ug/L)		Monitor Well	4355	4355	4355	4355	4355	4355	4355	4355	6177	6177	6177
				Lab Sample ID	240-38327-1	240-38327-2	240-38327-3	240-38327-4	240-40314-1	240-40314-2	240-40314-3	240-40314-4	240-28790-2	240-30477-5	240-31891-9
				Sample Date	6/6/2014	6/6/2014	6/6/2014	6/6/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	9/4/2013	10/18/2013	11/25/2013
					(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOCs															
Methylene chloride	5	1500			NS	NS	NS	NS	NS	NS	NS	NS	ND (<5.0)	ND (<5.0)	ND (<5.0)
Toluene	790	270			NS	NS	NS	NS	NS	NS	NS	NS	ND(<1.0)	ND(<1.0)	ND(<1.0)
m-Xylene & p-Xylene[1]	280	41			NS	NS	NS	NS	NS	NS	NS	NS	ND (<2.0)	ND (<2.0)	ND (<2.0)
o-Xylene[1]	280	41			NS	NS	NS	NS	NS	NS	NS	NS	ND (<1.0)	ND (<1.0)	ND (<1.0)
Total Cyanide	200	5.2			**16**	**13**	**13**	**12**	**16**	**15**	**6.5**	**18**	ND (<5.0)	ND (<5.0)	ND (<5.0)
Metals															
Arsenic	10	10			NS	NS	NS	NS	NS	NS	NS	NS	**1.6**	**2**	**1.8**
Chromium VI	100	11			NS	NS	NS	NS	NS	NS	NS	NS	ND (<1.0)	ND (<1.0)	ND (<1.0)
Selenium	50	5			NS	NS	NS	NS	NS	NS	NS	NS	**2.1**	ND (<2.0)	**2**
Chlorinated Herbicides															
Pentachlorophenol	1	2.8			NS	NS	NS	NS	NS	NS	NS	NS	ND (<1.0)	ND (<1.0)	ND (<1.0)

[1] Residential Drinking Water Criteria and GSI Protection Criteria reported f

BOLD Result is detected.

BOLD & SHADED Result is detected at a concentration greater th

NS Not Sampled - Well was dry and sample was nc

B Compound was found in the blank and sample

Table 3-2
Northeast Plant Perimeter Well Dow Shallow Groundwater Data Summary
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Analyte	Res. DW GW Criteria	GSI Protection Criteria												
			Monitor Well	5385	5385	5385	5385	5385	5385	5385	5385	5385	5385	5385
			Lab Sample ID	240-28790-1	240-30433-3	240-31891-10	240-38327-5	240-38327-6	240-38327-7	240-38327-8	240-40314-5	240-40314-6	240-40314-7	240-40314-8
			Sample Date	9/4/2013	10/17/2013	11/25/2013	6/6/2014	6/6/2014	6/6/2014	6/6/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014
Analyte	**(ug/L)**	**(ug/L)**		**(ug/L)**	**(ug/L)**	**(ug/L)**	**(ug/L)**	**(ug/L)**	**(ug/L)**	**(ug/L)**	**(ug/L)**	**(ug/L)**	**(ug/L)**	**(ug/L)**
VOCs														
Methylene chloride	5	1500		ND (<5.0)	ND (<5.0)	ND (<5.0)	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	790	270		ND(<1.0)	ND(<1.0)	ND(<1.0)	NS	NS	NS	NS	NS	NS	NS	NS
m-Xylene & p-Xylene[1]	280	41		ND (<2.0)	ND (<2.0)	ND (<2.0)	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene[1]	280	41		ND (<1.0)	ND (<1.0)	ND (<1.0)	NS	NS	NS	NS	NS	NS	NS	NS
Total Cyanide	200	5.2		**560**	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)
Metals														
Arsenic	10	10		**1.8**	1.5	1.4	NS	NS	NS	NS	NS	NS	NS	NS
Chromium VI	100	11		ND (<1.0)	ND (<1.0)	ND (<1.0)	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	50	5		ND (<2.0)	ND (<2.0)	ND (<2.0)	NS	NS	NS	NS	NS	NS	NS	NS
Chlorinated Herbicides														
Pentachlorophenol	1	2.8		ND (<1.0)	ND (<1.0)	ND (<1.0)	NS	NS	NS	NS	NS	NS	NS	NS

[1] Residential Drinking Water Criteria and GSI Protection Criteria reported f

BOLD Result is detected.

BOLD & SHADED Result is detected at a concentration greater th

NS Not Sampled - Well was dry and sample was nc

B Compound was found in the blank and sample

Table 3-3
Southwest Plant Perimeter Well Dow Shallow Groundwater Data Summary
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Analyte	Res. DW GW Criteria (ug/L)	GSI Protection Criteria ug/L)													
Monitor Well				8817	8817	8817	8818	8818	8818	8874	8874	8874	8875	8875	8875
Lab Sample ID				240-29258-1	240-30433-1	240-31891-1	240-29258-2	240-30477-1	240-31981-4	240-28790-4	240-30433-2	240-31891-3	240-28784-3	240-30433-4	240-31891-2
Sample Date				9/16/2013	10/17/2013	11/21/2013	9/18/2013	10/18/2013	11/22/2013	9/4/2013	10/17/2013	11/21/2013	9/5/2013	10/17/2013	11/21/2013
VOCs															
Methylene chloride	5	1500		ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)
Toluene	790	270		ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
m-Xylene & p-Xylene[1]	280	41		ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)
o-Xylene[1]	280	41		ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Total Cyanide	200	5.2		ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)
Metals															
Arsenic	10	10		ND (<1.0)	ND (<1.0)	ND (<1.0)	**1.1**	ND (<1.0)	ND (<1.0)	**2.4**	**3.5**	**1.1**	**3.3**	**1.6**	**1.6**
Chromium VI	100	11		ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	**1.8**
Selenium	50	5		ND (<2.0)	ND (<2.0)	**2.0**	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)
Chlorinated Herbicides															
Pentachlorophenol	1	2.8		ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)

[1] Residential Drinking Water Criteria and GSI Protection Criteria reported for Total Xylenes.
BOLD Result is detected.

Table 3-4
Northeast Plant Perimeter Well MDEQ Shallow Groundwater Data Summary
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Analyte	Res. DW GW Criteria (ug/L)	GSI Protection Criteria (ug/L)		Monitor Well	MW-10	4355	6177	5385	5385	5385
				Lab Sample ID	1309040-02	1408022-01	1309040-03	1309040-01	1310122-01	1408022-02
				Sample Date	9/4/2013	8/1/2014	9/4/2014	9/4/2013	10/17/2013	8/1/2014
					(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOCs										
Methylene chloride	5	1500			ND (<5.0)	NS	ND (<5.0)	ND (<5.0)	ND (<5.0)	NS
Toluene	790	270			ND(<1.0)	NS	ND(<1.0)	ND(<1.0)	ND(<1.0)	NS
m-Xylene & p-Xylene[1]	280	41			ND (<2.0)	NS	ND (<2.0)	ND (<2.0)	ND (<2.0)	NS
o-Xylene[1]	280	41			ND (<1.0)	NS	ND (<1.0)	ND (<1.0)	ND (<1.0)	NS
Total Cyanide	200	5.2			ND (<5.0)	**19**	ND (<5.0)	**32**	**18**	**14**
Metals										
Arsenic	10	10			**1.5**	NS	**1.9**	**1.6**	**1.8**	NS
Chromium VI	100	11			ND (<5.0)	NS	ND (<5.0)	ND (<5.0)	ND (<5.0)	NS
Selenium	50	5			ND (<1.0)	NS	**2.0**	ND (<1.0)	ND (<1.0)	NS
Chlorinated Herbicides										
Pentachlorophenol	1	2.8			ND (<20)	NS	ND (<21)	ND (<21)	ND (<21)	NS

[1] Residential Drinking Water Criteria and GSI Protection Criteria reported for Total Xylenes.

BOLD Result is detected.

BOLD & SHADED Result is detected at a concentration greater than a screening criteria.

NS Not Sampled - Well was dry and sample was not collected.

Table 3-5
Southwest Plant Perimeter Well MDEQ Shallow Groundwater Data Summary
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Analyte	Res. DW GW Criteria (ug/L)	GSI Protection Criteria ug/L)	Monitor Well	8874	8874R	8875	8875R
			Lab Sample ID	1309040-04	1309040-06	1310122-02	1310122-03
			Sample Date	9/4/2013	9/4/2013	10/17/2013	10/17/2013
				(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOCs							
Methylene chloride	5	1500		ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)
Toluene	790	270		ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
m-Xylene & p-Xylene[1]	280	41		ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)
o-Xylene[1]	280	41		ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Total Cyanide	200	5.2		ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)
Metals							
Arsenic	10	10		**2.0**	**1.9**	**1.5**	**1.5**
Chromium VI	100	11		ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)
Selenium	50	5		ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Chlorinated Herbicides							
Pentachlorophenol	1	2.8		ND (<21)	ND (<20)	ND (<20)	ND (<20)

[1] Residential Drinking Water Criteria and GSI Protection Criteria reported for Total Xylenes.

BOLD Result is detected.

Table 5-1
Summary Statistics and Comparison with Ecological Screening Criteria of Combined Results -- 2005/6 Dow On-site, 2006 CH2M Hill Data, 2010 Dow and MDEQ Split Data
The Dow Chemical Company, Michigan Operations

Analyte Group	Analyte	CAS Number	Unit	Number of Samples					Summary Statistics								
				No. of Samples from 2005/6 Dow On-Site	No. of Samples from 2006 COM Blind	No. of Samples from 2010 Dow	No. of Samples from 2010 MDEQ	Total No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Max Detected Value (Off-site)	Min RL of NDs	Max RL of NDs	Max RL of NDs (Off-site)
Cyanide	Cyanide, Total	57-12-5	ug/kg	0	72	99	33	**204**	86.3%	148	153	10.625	863	863	6.6	610	610
Herbicides	2,4,5-T (Trichlorophenoxyacetic Acid)	93-76-5	ug/kg	0	72	0	0	**72**	1.4%	1.39	1.36	12.6275	12.6275	12.6275	2.17	5.58	5.58
Herbicides	2,4-D (Dichlorophenoxyacetic Acid)	94-75-7	ug/kg	0	72	0	0	**72**	15.3%	5.83	15.39	7.4375	83.8	83.8	1.79	4.61	4.61
Herbicides	Silvex (2,4,5-TP)	93-72-1	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	1.89	4.86	4.86
Mercury	Mercury	7439-97-6	ug/kg	23	72	99	33	**227**	85.5%	72.5	245.6	9.4	3,440	740	3.9	62.4	50
Metals	Aluminum	7429-90-5	ug/kg	23	0	99	33	**155**	100.0%	3,091,331	2,486,965	416,874	14,200,000	12,000,000	--	--	--
Metals	Antimony	7440-36-0	ug/kg	0	72	99	33	**204**	23.0%	263	604	14	4,530	4,530	150	1,470	1,470
Metals	Arsenic	7440-38-2	ug/kg	23	72	99	33	**227**	97.4%	4,614	5,647	195	59,200	38,029	194	785	785
Metals	Barium	7440-39-3	ug/kg	23	72	0	33	**128**	100.0%	38,856	22,224	7,620	137,000	120,000	--	--	--
Metals	Beryllium	7440-41-7	ug/kg	23	72	0	33	**128**	92.2%	293	196	42.625	1,170	1,110	35	580	47
Metals	Boron	7440-42-8	ug/kg	0	0	99	33	**132**	99.2%	8,986	3,728	970	22,627	22,627	9,200	9,200	9,200
Metals	Cadmium	7440-43-9	ug/kg	23	72	0	33	**128**	75.8%	282	276	32.6	1,570	990	15	872	872
Metals	Calcium	7440-70-2	ug/kg	23	0	0	0	**23**	100.0%	97,044,130	80,734,405	4,140,000	269,000,000	--	--	--	--
Metals	Chromium	7440-47-3	ug/kg	23	72	99	33	**227**	100.0%	9,614	7,351	783	60,700	46,700	--	--	--
Metals	Chromium VI	18540-29-9	ug/kg	23	0	0	0	**23**	13.0%	711	889	863	4,610	--	810	1,100	--
Metals	Cobalt	7440-48-4	ug/kg	23	72	99	33	**227**	100.0%	2,385	1,190	402	7,420	7,420	--	--	--
Metals	Copper	7440-50-8	ug/kg	23	72	0	33	**128**	100.0%	18,330	19,492	2,000	183,000	54,900	--	--	--
Metals	Iron	7439-89-6	ug/kg	23	0	0	33	**56**	100.0%	8,036,518	5,803,437	2,100,000	30,200,000	14,000,000	--	--	--
Metals	Lead	7439-92-1	ug/kg	23	72	99	33	**227**	100.0%	29,563	53,681	1,483	666,000	666,000	--	--	--
Metals	Lithium	7439-93-2	ug/kg	23	0	99	33	**155**	100.0%	6,075	3,423	1,040	16,570	16,570	--	--	--
Metals	Magnesium	7439-95-4	ug/kg	23	0	99	33	**155**	100.0%	3,142,780	2,943,442	177,576	15,521,500	15,521,500	--	--	--
Metals	Manganese	7439-96-5	ug/kg	23	0	99	33	**155**	100.0%	88,932	69,842	10,091	547,757	547,757	--	--	--
Metals	Molybdenum	7439-98-7	ug/kg	23	0	0	33	**56**	60.7%	2,284	3,409	96	2,000	2,000	4,055	23,200	--
Metals	Nickel	7440-02-0	ug/kg	23	72	99	0	**194**	99.5%	9,465	15,219	1,670	209,000	20,953	350	350	350
Metals	Potassium	7440-09-7	ug/kg	23	0	0	0	**23**	91.3%	784,707	436,782	235,500	1,830,000	--	496,500	580,000	--
Metals	Selenium	7782-49-2	ug/kg	23	72	99	33	**227**	33.5%	375	578	120	5,720	5,720	80	1,180	1,180
Metals	Silver	7440-22-4	ug/kg	23	72	99	33	**227**	13.7%	64.2	131.0	25	1,680	1,680	50.8	580	132
Metals	Sodium	7440-23-5	ug/kg	23	0	0	33	**56**	60.7%	203,987	290,770	42,000	1,940,000	220,000	101,000	600,000	600,000
Metals	Strontium	7440-24-6	ug/kg	23	0	99	33	**155**	100.0%	32,451	39,291	2,100	201,919	201,919	--	--	--
Metals	Thallium	7440-28-0	ug/kg	23	72	99	33	**227**	15.4%	162	148	35	230	230	101	4,360	990
Metals	Thorium	7440-29-1	ug/kg	0	0	0	33	**33**	93.9%	2,072	1,926	440	3,300	3,300	17,000	19,000	19,000
Metals	Tin	7440-31-5	ug/kg	0	72	99	0	**171**	6.4%	1,511	12,254	532	158,000	158,000	484	2,610	2,610
Metals	Titanium	7440-32-6	ug/kg	23	0	0	0	**23**	100.0%	129,535	75,383	48,700	427,000	--	--	--	--
Metals	Vanadium	7440-62-2	ug/kg	23	72	0	33	**128**	100.0%	11,856	7,319	2,250	74,000	74,000	--	--	--
Metals	Zinc	7440-66-6	ug/kg	23	72	0	33	**128**	83.6%	60,643	97,091	4,800	798,500	190,000	56.1	165.9	165.9
PCBs	PCBs, Total	1336-36-3	ug/kg	23	72	0	33	**128**	57.8%	482	3,189	38	2,240	1,236	170	72,000	370
Pesticides	4,4'-DDD	72-54-8	ug/kg	23	72	0	33	**128**	30.5%	10.9	38.9	0.77575	345	345	0.631	180	180
Pesticides	4,4'-DDE	72-55-9	ug/kg	23	72	0	33	**128**	57.0%	51.9	238.0	1.115	2,400	2,400	0.829	28	12
Pesticides	4,4'-DDT	50-29-3	ug/kg	23	72	0	33	**128**	51.6%	45.6	213.1	1.04	1,741	1,741	0.957	28	12
Pesticides	Aldrin	309-00-2	ug/kg	23	72	0	33	**128**	3.1%	4.34	8.67	0.799	3.04	3.04	0.638	180	180
Pesticides	alpha-BHC	319-84-6	ug/kg	23	72	99	33	**227**	4.8%	5.05	12.75	0.909	150	11	0.808	180	180
Pesticides	Beta BHC	319-85-7	ug/kg	23	72	0	33	**128**	3.9%	4.94	9.15	1.55	29.7	29.7	0.872	180	180
Pesticides	Chlordane, Total	57-74-9	ug/kg	23	72	99	33	**227**	6.2%	18.9	37.8	2.49	327	327	0.851	180	180
Pesticides	Delta BHC	319-86-8	ug/kg	23	72	0	33	**128**	4.7%	5.97	18.61	0.995	190	4	0.787	180	180
Pesticides	Dieldrin	60-57-1	ug/kg	23	72	0	33	**128**	10.2%	4.71	8.75	1.01	21.3	21.3	0.638	180	180
Pesticides	Endosulfan sulfate	1031-07-8	ug/kg	23	72	0	33	**128**	7.8%	6.10	11.24	1.8	46.6	46.6	0.777	180	180
Pesticides	Endosulfan, Total	115-29-7	ug/kg	23	72	0	33	**128**	58.6%	7.31	11.79	0.522	53.5	42.01	8.9	180	180
Pesticides	Endrin	72-20-8	ug/kg	23	72	0	33	**128**	2.3%	4.68	8.78	7.1	12.1	12.1	0.776	180	180
Pesticides	Endrin aldehyde	7421-93-4	ug/kg	23	72	0	33	**128**	1.6%	4.51	8.76	1.51	9.88	9.88	0.797	180	180
Pesticides	Endrin ketone	53494-70-5	ug/kg	23	0	0	33	**56**	0.0%	--	--	--	--	--	8.9	180	180
Pesticides	Gamma BHC (Lindane)	58-89-9	ug/kg	23	72	0	33	**128**	2.3%	4.49	9.02	3.2	33	5.93	0.626	180	180
Pesticides	Heptachlor	76-44-8	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	0.638	180	180
Pesticides	Heptachlor epoxide	1024-57-3	ug/kg	23	72	0	33	**128**	15.6%	5.62	10.71	0.795	67	67	0.882	180	180
Pesticides	Methoxychlor	72-43-5	ug/kg	23	72	0	33	**128**	10.2%	9.86	17.75	2.94	48	13	1.06	350	350
Pesticides	Mirex	2385-85-5	ug/kg	23	0	0	33	**56**	3.6%	14.6	16.0	37	53	--	8.9	180	180
Pesticides	Toxaphene	8001-35-2	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	10	7,200	7,200
Pesticides	Tris(2,3-dibromopropyl)phosphate	126-72-7	ug/kg	0	0	0	33	**33**	0.0%	--	--	--	--	--	730	15,000	15,000
Sulfide	Sulfide	18496-25-8	ug/kg	0	72	0	0	**72**	5.6%	52,740	18,882	79,250	157,750	157,750	86,000	226,000	226,000
SVOCs	(E)-alpha,beta-2,3,4,5,6-Heptachlorostyrene	29086-38-2	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	30	60	60
SVOCs	(E)-beta-2,3,4,5,6-Hexachlorostyrene	90301-92-1	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	30	60	60
SVOCs	(Z)-alpha,beta-2,3,4,5,6-Heptachlorostyrene	29086-39-3	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	30	60	60
SVOCs	(Z)-beta-2,3,4,5,6-Hexachlorostyrene	90301-93-2	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	30	60	60
SVOCs	1,2,3,4-Tetrachlorobenzene	634-66-2	ug/kg	0	0	99	0	**99**	11.1%	11.7	4.4	10	30	30	19.8	39.6	39.6
SVOCs	1,2,3-Trichlorobenzene	87-61-6	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	26.4	52.8	52.8
SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	8	22	22
SVOCs	1,2,4-Trichlorobenzene	120-82-1	ug/kg	23	0	99	28	**150**	4.0%	127	254	24.5	3,000	56	157	2,067	480
SVOCs	1,2-Diphenyl-hydrazine	122-66-7	ug/kg	0	0	0	33	**33**	0.0%	--	--	--	--	--	330	470	470
SVOCs	1,3-Dinitrobenzene	99-65-0	ug/kg	0	72	99	33	**204**	0.0%	--	--	--	--	--	7.87	470	470
SVOCs	1,4-Naphthoquinone	130-15-4	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	12	31	31
SVOCs	1-Naphthylamine	134-32-7	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	352	919	919
SVOCs	2,2'-Oxybis(1-Chloropropane)	108-60-1	ug/kg	0	72	0	33	**105**	0.0%	--	--	--	--	--	35	470	470

Table 5-1
Summary Statistics and Comparison with Ecological Screening Criteria of Combined Results -- 2005/6 Dow On-site, 2006 CH2M Hill Data, 2010 Dow and MDEQ Split Data
The Dow Chemical Company, Michigan Operations

Analyte Group	Analyte	CAS Number	Unit	Number of Samples					Summary Statistics								
				No. of Samples from 2005/6 Dow On-Site	No. of Samples from 2006 COM Blind	No. of Samples from 2010 Dow	No. of Samples from 2010 MDEQ	Total No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Max Detected Value (Off-site)	Min RL of NDs	Max RL of NDs	Max RL of NDs (Off-site)
SVOCs	2,3,4,5,6-Pentachlorostyrene	14992-81-5	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	30	60	60
SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	ug/kg	0	72	0	0	**72**	8.3%	21.5	71.9	16	450	450	14	38	38
SVOCs	2,4,5-Trichlorophenol	95-95-4	ug/kg	23	72	0	33	**128**	3.9%	101	216	20	140	37	8	4,100	470
SVOCs	2,4,6-Trichlorophenol	88-06-2	ug/kg	23	72	0	33	**128**	2.3%	105	217	17	29	29	6	4,100	470
SVOCs	2,4-Dichlorophenol	120-83-2	ug/kg	23	72	0	0	**95**	0.0%	--	--	--	--	--	27	4,100	69
SVOCs	2,4-Dimethylphenol	105-67-9	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	58	4,100	470
SVOCs	2,4-Dinitrophenol	51-28-5	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	20	21,000	2,300
SVOCs	2,4-Dinitrotoluene	121-14-2	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	29	4,100	470
SVOCs	2,6-Dichlorophenol	87-65-0	ug/kg	0	72	0	33	**105**	0.0%	--	--	--	--	--	14	470	470
SVOCs	2,6-Dimethylphenol	576-26-1	ug/kg	0	0	0	33	**33**	0.0%	--	--	--	--	--	330	470	470
SVOCs	2,6-Dinitrotoluene	606-20-2	ug/kg	23	72	99	33	**227**	0.0%	--	--	--	--	--	6.08	4,100	470
SVOCs	2-Acetylaminofluorene	53-96-3	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	14	36	36
SVOCs	2-Chloronaphthalene	91-58-7	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	26	4,100	470
SVOCs	2-Chlorophenol	95-57-8	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	27	4,100	470
SVOCs	2-Methylnaphthalene	91-57-6	ug/kg	23	72	0	33	**128**	32.8%	82.3	144.8	6.0725	1,066	259	8	470	470
SVOCs	2-Naphthylamine	91-59-8	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	352	919	919
SVOCs	2-Nitroaniline	88-74-4	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	8	4,100	2,300
SVOCs	2-Nitrophenol	88-75-5	ug/kg	0	72	0	33	**105**	0.0%	--	--	--	--	--	10	470	470
SVOCs	3,3'-Dichlorobenzidine	91-94-1	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	60	156	156
SVOCs	3,3'-Dimethylbenzidine	119-93-7	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	352	919	919
SVOCs	3-Methylcholanthrene	56-49-5	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	19	49	49
SVOCs	3-Nitroaniline	99-09-2	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	7	4,100	2,300
SVOCs	4,4'-Methylene bis(2-chloroaniline)	101-14-4	ug/kg	0	0	0	33	**33**	0.0%	--	--	--	--	--	330	470	470
SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	13	21,000	2,300
SVOCs	4-Aminobiphenyl	92-67-1	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	10	26	26
SVOCs	4-Bromophenyl phenyl ether	101-55-3	ug/kg	23	72	0	33	**128**	0.8%	107	216	45	45	--	13	4,100	470
SVOCs	4-Chloro-3-methylphenol	59-50-7	ug/kg	0	72	0	33	**105**	0.0%	--	--	--	--	--	11	470	470
SVOCs	4-Chloroaniline	106-47-8	ug/kg	0	72	0	33	**105**	0.0%	--	--	--	--	--	44	470	470
SVOCs	4-Chlorophenyl phenyl ether	7005-72-3	ug/kg	23	72	0	33	**128**	0.8%	105	217	131	131	--	5	4,100	470
SVOCs	4-Nitroaniline	100-01-6	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	41	4,100	2,300
SVOCs	4-Nitrophenol	100-02-7	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	9	21,000	2,300
SVOCs	4-Nitroquinoline-1-oxide	56-57-5	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	9	22	22
SVOCs	4-tert-Butylphenol	98-54-4	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	86.658	173	173
SVOCs	5-Nitro-o-toluidine	99-55-8	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	11	29	29
SVOCs	7,12-Dimethylbenz(a)anthracene	57-97-6	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	14	36	36
SVOCs	Acenaphthene	83-32-9	ug/kg	23	72	0	33	**128**	13.3%	79.0	129.5	11	290	134	8	2,300	440
SVOCs	Acenaphthylene	208-96-8	ug/kg	23	72	0	33	**128**	21.9%	106	250	10	1,600	1,600	8	4,100	470
SVOCs	Acetophenone	98-86-2	ug/kg	0	72	0	33	**105**	8.6%	60.3	93.8	30	560	560	9	470	470
SVOCs	Alpha, Alpha Dimethylphenethylamine	122-09-8	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	352	919	919
SVOCs	alpha-2,3,4,5,6-Hexachlorostyrene	68705-15-7	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	30	60	60
SVOCs	Aniline	62-53-3	ug/kg	0	72	0	33	**105**	0.0%	--	--	--	--	--	46	470	470
SVOCs	Anthracene	120-12-7	ug/kg	23	72	0	33	**128**	48.4%	96.9	150.1	7.8	810	770	5	440	440
SVOCs	Aramite (Total)	140-57-8	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	73	190	190
SVOCs	Azobenzene	103-33-3	ug/kg	23	0	0	33	**56**	3.6%	246	292	18	860	--	330	4,100	470
SVOCs	Benzidine	92-87-5	ug/kg	0	0	99	0	**99**	7.1%	427	134	239	936	936	770	1,540	1,540
SVOCs	Benzo(a)anthracene	56-55-3	ug/kg	23	72	0	33	**128**	37.5%	159	423	19	3,105	3,105	6	410	410
SVOCs	Benzo(b)fluoranthene	205-99-2	ug/kg	23	72	0	33	**128**	87.5%	248	554	20	4,300	4,300	7	410	410
SVOCs	Benzo(g,h,i)perylene	191-24-2	ug/kg	23	72	0	33	**128**	79.7%	197	339	20	2,490	2,490	30	4,100	410
SVOCs	Benzo(k)fluoranthene	207-08-9	ug/kg	23	72	0	33	**128**	53.9%	159	337	8.6	2,600	1,453	10	470	470
SVOCs	Benzo[a]pyrene	50-32-8	ug/kg	23	72	99	33	**227**	52.4%	205	471	8.1	3,661	3,661	9	410	410
SVOCs	Benzoic acid	65-85-0	ug/kg	0	0	0	33	**33**	15.2%	895	184	430	1,500	1,500	1,600	2,300	2,300
SVOCs	Benzyl alcohol	100-51-6	ug/kg	0	72	0	33	**105**	1.9%	60.0	85.6	22	50	50	8	470	470
SVOCs	Benzyl Butyl Phthalate	85-68-7	ug/kg	23	72	0	33	**128**	15.6%	105	207	9.59	815	317	8	4,100	470
SVOCs	Benzyl dichloride	98-87-3	ug/kg	0	0	0	33	**33**	0.0%	--	--	--	--	--	2,700	3,800	3,800
SVOCs	beta,beta-2,3,4,5,6-Heptachlorostyrene	29082-75-5	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	30	60	60
SVOCs	Bis(2-Chloroethoxy) methane	111-91-1	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	5	4,100	470
SVOCs	Bis(2-Chloroethyl) ether	111-44-4	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	38	4,100	470
SVOCs	bis(2-Chloroisopropyl)ether	39638-32-9	ug/kg	23	0	0	0	**23**	0.0%	--	--	--	--	--	330	4,100	--
SVOCs	bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	23	72	0	33	**128**	62.5%	370	1,317	22.175	11,000	3,080	17	410	410
SVOCs	Bisphenol-A	80-05-7	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	160	320	320
SVOCs	Caprolactam	105-60-2	ug/kg	0	0	0	33	**33**	0.0%	--	--	--	--	--	1,600	2,300	2,300
SVOCs	Carbazole	86-74-8	ug/kg	0	0	99	33	**132**	17.4%	61.5	82.3	8	343	343	19.998	470	470
SVOCs	Chlorobenzilate	510-15-6	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	20	52	52
SVOCs	Chlorpyrifos	2921-88-2	ug/kg	0	0	99	33	**132**	0.0%	--	--	--	--	--	8.9	180	180
SVOCs	Chrysene	218-01-9	ug/kg	23	72	0	33	**128**	71.1%	229	543	17.3	3,905	3,905	12	410	410
SVOCs	cis-Nonachlor	5103-73-1	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	16.665	33.33	33.33
SVOCs	Cresol, Total	MEPH1314	ug/kg	23	72	99	33	**227**	33.0%	201	352	14	237	237	210	8,200	1,410
SVOCs	Diallate (total of cis and trans isomers)	2303-16-4	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	29	77	77
SVOCs	Dibenz(a,h)anthracene	53-70-3	ug/kg	23	72	0	33	**128**	18.0%	124	220	15	745	745	33	4,100	470
SVOCs	Dibenzofuran	132-64-9	ug/kg	23	72	99	33	**227**	10.6%	89.3	154.0	8.47	1,800	240	5	2,300	470
SVOCs	Diethyl phthalate	84-66-2	ug/kg	23	72	0	33	**128**	2.3%	156	251	13.2	250	13	6	4,100	930

Table 5-1
Summary Statistics and Comparison with Ecological Screening Criteria of Combined Results -- 2005/6 Dow On-site, 2006 CH2M Hill Data, 2010 Dow and MDEQ Split Data
The Dow Chemical Company, Michigan Operations

Analyte Group	Analyte	CAS Number	Unit	Number of Samples					Summary Statistics								
				No. of Samples from 2005/6 Dow On-Site	No. of Samples from 2006 COM Blind	No. of Samples from 2010 Dow	No. of Samples from 2010 MDEQ	Total No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Max Detected Value (Off-site)	Min RL of NDs	Max RL of NDs	Max RL of NDs (Off-site)
SVOCs	Dimethoate	60-51-5	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	55	143	143
SVOCs	Dimethyl phthalate	131-11-3	ug/kg	23	72	0	33	**128**	0.8%	109	215	66	66	--	21	4,100	470
SVOCs	Di-n-butyl phthalate	84-74-2	ug/kg	23	72	0	33	**128**	26.6%	121	240	6.9575	750	59	7	4,100	470
SVOCs	Di-n-octylphthalate	117-84-0	ug/kg	23	72	0	0	**95**	0.0%	--	--	--	--	--	7	4,100	19
SVOCs	Dinoseb	88-85-7	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	56	146	146
SVOCs	Diphenylamine	122-39-4	ug/kg	15	72	0	0	**87**	0.0%	--	--	--	--	--	29	4,100	75
SVOCs	Disulfoton	298-04-4	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	9	24	24
SVOCs	Ethyl methanesulfonate	62-50-0	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	13	33	33
SVOCs	Famphur	52-85-7	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	30	78	78
SVOCs	Fluoranthene	206-44-0	ug/kg	23	72	99	33	**227**	81.9%	401	1,075	13.525	9,270	9,270	10	410	410
SVOCs	Fluorene	86-73-7	ug/kg	23	72	0	33	**128**	16.4%	92.1	134.6	6.325	320	320	6	2,300	460
SVOCs	Hexabromobenzene	87-82-1	ug/kg	8	0	0	0	**8**	0.0%	--	--	--	--	--	330	330	--
SVOCs	Hexabromobiphenyl	HEX - varies	ug/kg	8	0	0	0	**8**	0.0%	--	--	--	--	--	330	330	--
SVOCs	Hexachlorobenzene	118-74-1	ug/kg	23	72	99	33	**227**	15.4%	229	2,156	10	32,000	193	10.3	2,300	470
SVOCs	Hexachlorobutadiene	87-68-3	ug/kg	23	72	99	33	**227**	1.3%	78.4	170.0	29	640	29	34.3	4,100	470
SVOCs	Hexachlorocyclopentadiene	77-47-4	ug/kg	23	71	0	33	**127**	0.0%	--	--	--	--	--	26	21,000	2,300
SVOCs	Hexachloroethane	67-72-1	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	47	4,100	470
SVOCs	Hexachlorophene	70-30-4	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	704	1,840	1,840
SVOCs	Hexachloropropene	1888-71-7	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	47	122	122
SVOCs	Indeno(1,2,3-c,d)Pyrene	193-39-5	ug/kg	23	72	0	33	**128**	52.3%	181	368	20	3,110	3,110	25	2,300	440
SVOCs	Isodrin	465-73-6	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	20	51	51
SVOCs	Isophorone	78-59-1	ug/kg	23	72	0	33	**128**	0.8%	105	217	120	120	--	5	4,100	470
SVOCs	Isosafrole	120-58-1	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	17	45	45
SVOCs	Kepone	143-50-0	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	1,760	4,590	4,590
SVOCs	Methapyrilene	91-80-5	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	41	107	107
SVOCs	Methyl chlorpyrifos	5598-13-0	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	33	66	66
SVOCs	Methyl methanesulfonate	66-27-3	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	20	52	52
SVOCs	Nitrobenzene	98-95-3	ug/kg	23	72	99	33	**227**	0.9%	75.8	165.7	34	69	69	36.3	4,100	470
SVOCs	n-Nitrosodiethylamine	55-18-5	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	19	49	49
SVOCs	n-Nitrosodimethylamine	62-75-9	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	42	4,100	470
SVOCs	N-Nitroso-di-n-butylamine	924-16-3	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	10	27	27
SVOCs	n-Nitrosodi-n-propylamine	621-64-7	ug/kg	23	72	0	33	**128**	0.0%	--	--	--	--	--	8	4,100	470
SVOCs	n-Nitrosodiphenylamine	86-30-6	ug/kg	23	72	0	33	**128**	1.6%	107	216	130	160	130	12	4,100	470
SVOCs	n-Nitrosomethylethylamine	10595-95-6	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	16	42	42
SVOCs	n-Nitrosomorpholine	59-89-2	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	19	49	49
SVOCs	n-Nitrosopiperidine	100-75-4	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	11	30	30
SVOCs	n-Nitrosopyrrolidine	930-55-2	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	352	919	919
SVOCs	O,O,O-Triethyl Phosphorothioate	126-68-1	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	10	26	26
SVOCs	O,O-Diethyl O-2-Pyrazinyl Phosphorothioate (Thionazin)	297-97-2	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	18	48	48
SVOCs	o,p'-DDD	53-19-0	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	17.6	35.2	35.2
SVOCs	Octachlorostyrene	29082-74-4	ug/kg	0	0	99	0	**99**	3.0%	9.32	2.61	12	14	14	16.665	33.33	33.33
SVOCs	o-Phenylphenol	90-43-7	ug/kg	0	0	99	0	**99**	6.1%	48.1	21.6	31	215	215	83.325	167	167
SVOCs	o-Toluidine	95-53-4	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	352	919	919
SVOCs	Parathion, Ethyl (Parathion)	56-38-2	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	18	47	47
SVOCs	Parathion, Methyl	298-00-0	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	12	31	31
SVOCs	p-Dimethylaminoazobenzene	60-11-7	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	13	33	33
SVOCs	Pentachlorobenzene	608-93-5	ug/kg	0	72	0	33	**105**	0.0%	--	--	--	--	--	28	470	470
SVOCs	Pentachloronitrobenzene	82-68-8	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	20	51	51
SVOCs	Pentachlorophenol	87-86-5	ug/kg	23	72	99	33	**227**	15.0%	283	863	3	755	404	17	21,000	2,300
SVOCs	Pentochlorethane	76-01-7	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	12	31	31
SVOCs	Phenacetin	62-44-2	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	12	32	32
SVOCs	Phenanthrene	85-01-8	ug/kg	23	72	99	33	**227**	52.4%	298	971	8.86	8,938	8,938	6	420	420
SVOCs	Phenol	108-95-2	ug/kg	23	72	0	33	**128**	21.9%	70.2	147.6	21	1,200	121	7	460	460
SVOCs	Phorate	298-02-2	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	9	24	24
SVOCs	p-Phenylenediamine	106-50-3	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	29	75	75
SVOCs	Pronamide	23950-58-5	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	11	29	29
SVOCs	Propachlor	1918-16-7	ug/kg	0	0	99	0	**99**	1.0%	14.7	4.0	16.166	16.166	16.166	26.664	53.328	53.328
SVOCs	Pyrene	129-00-0	ug/kg	15	72	0	33	**120**	85.8%	289	891	15	7,985	7,985	17	360	350
SVOCs	Pyridine	110-86-1	ug/kg	0	72	0	33	**105**	0.0%	--	--	--	--	--	53	930	930
SVOCs	Ronnel	299-84-3	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	37.4	74.8	74.8
SVOCs	Safrole	94-59-7	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	15	39	39
SVOCs	Sym-Trinitrobenzene	99-35-4	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	352	919	919
SVOCs	Tetraethyl Dithiopyrophosphate (Sulfotepp)	3689-24-5	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	704	1,840	1,840
SVOCs	trans-Nonachlor	39765-80-5	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	23.331	46.662	46.662
VOCs	1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	1,1,1-Trichloroethane	71-55-6	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	1,1,2-Trichloroethane	79-00-5	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	1,1,2-Trichlorotrifluoroethane	76-13-1	ug/kg	0	0	0	28	**28**	0.0%	--	--	--	--	--	720	1,900	1,900
VOCs	1,1-Dichloroethane	75-34-3	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	1,1-Dichloroethene	75-35-4	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480

Table 5-1
Summary Statistics and Comparison with Ecological Screening Criteria of Combined Results -- 2005/6 Dow On-site, 2006 CH2M Hill Data, 2010 Dow and MDEQ Split Data
The Dow Chemical Company, Michigan Operations

Analyte Group	Analyte	CAS Number	Unit	Number of Samples					Summary Statistics								
				No. of Samples from 2005/6 Dow On-Site	No. of Samples from 2006 COM Blind	No. of Samples from 2010 Dow	No. of Samples from 2010 MDEQ	Total No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Max Detected Value (Off-site)	Min RL of NDs	Max RL of NDs	Max RL of NDs (Off-site)
VOCs	1,1-Dichloropropene	563-58-6	ug/kg	0	0	99	28	**127**	0.8%	39.1	57.5	9	9	9	20	480	480
VOCs	1,2,3-Trichloropropane	96-18-4	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	1,2,3-Trimethylbenzene	526-73-8	ug/kg	0	0	99	0	**99**	13.1%	7.96	5.38	5	45	45	14	14	14
VOCs	1,2,4-Trimethylbenzene	95-63-6	ug/kg	23	0	0	28	**51**	17.6%	89.5	76.3	34	300	250	0.5	480	480
VOCs	1,2-Dibromo-3-chloropropane	96-12-8	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	970	970
VOCs	1,2-Dibromoethane (EDB)	106-93-4	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	1,2-Dichlorobenzene	95-50-1	ug/kg	23	72	99	28	**222**	3.2%	35.5	49.7	5	370	14	0.5	480	480
VOCs	1,2-Dichloroethane	107-06-2	ug/kg	23	72	0	28	**123**	0.8%	36.7	60.1	40	40	--	0.5	480	480
VOCs	1,2-Dichloropropane	78-87-5	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	1,3,5-Trimethylbenzene	108-67-8	ug/kg	23	0	0	28	**51**	3.9%	82.2	69.0	74	81	74	0.5	480	480
VOCs	1,3-Dichlorobenzene	541-73-1	ug/kg	23	72	99	28	**222**	11.3%	34.1	51.0	4	380	32	0.5	480	480
VOCs	1,3-Dichloropropane	142-28-9	ug/kg	0	0	0	28	**28**	0.0%	--	--	--	--	--	180	480	480
VOCs	1,3-Dichloropropene, Total	542-75-6	ug/kg	0	0	0	28	**28**	0.0%	--	--	--	--	--	180	480	480
VOCs	1,4-Dichlorobenzene	106-46-7	ug/kg	23	72	99	28	**222**	8.6%	39.3	95.9	5	1,300	27	0.5	480	480
VOCs	1,4-Dioxane	123-91-1	ug/kg	0	72	0	28	**100**	0.0%	--	--	--	--	--	352	48,000	48,000
VOCs	2,2-Dichloropropane	594-20-7	ug/kg	0	0	99	28	**127**	0.0%	--	--	--	--	--	10	480	480
VOCs	2-Chloroethyl vinyl ether	110-75-8	ug/kg	0	0	0	28	**28**	0.0%	--	--	--	--	--	1,800	4,800	4,800
VOCs	2-Chlorotoluene	95-49-8	ug/kg	0	0	99	28	**127**	0.8%	36.3	60.2	144	144	144	10	480	480
VOCs	2-Hexanone	591-78-6	ug/kg	23	72	0	28	**123**	0.8%	152	240	470	470	--	1	1,900	1,900
VOCs	2-Propanol	67-63-0	ug/kg	0	0	0	28	**28**	0.0%	--	--	--	--	--	7,200	19,000	19,000
VOCs	4-Chlorotoluene	106-43-4	ug/kg	0	0	99	28	**127**	0.0%	--	--	--	--	--	20	480	480
VOCs	Acetone	67-64-1	ug/kg	23	72	0	28	**123**	6.5%	192	294	127	1,880	1,880	5	1,900	1,900
VOCs	Acetonitrile	75-05-8	ug/kg	0	72	0	28	**100**	0.0%	--	--	--	--	--	197	9,700	9,700
VOCs	Acrolein	107-02-8	ug/kg	0	72	0	28	**100**	0.0%	--	--	--	--	--	102	9,700	9,700
VOCs	Acrylonitrile	107-13-1	ug/kg	23	72	99	28	**222**	1.8%	377	975	103	563	563	0.5	9,700	9,700
VOCs	Allyl Chloride (3-Chloropropene)	107-05-1	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	43.6	309	309
VOCs	Benzene	71-43-2	ug/kg	23	72	99	28	**222**	18.9%	26.2	48.1	10.5	200	150	0.5	480	480
VOCs	Bromobenzene	108-86-1	ug/kg	23	0	0	28	**51**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	Bromodichloromethane	75-27-4	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	Bromoform	75-25-2	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	Bromomethane	74-83-9	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	1	970	970
VOCs	Carbon disulfide	75-15-0	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	Carbon tetrachloride	56-23-5	ug/kg	23	72	0	28	**123**	1.6%	37.1	60.2	17	71	--	0.5	480	480
VOCs	Chlorobenzene	108-90-7	ug/kg	23	72	99	28	**222**	0.5%	32.4	147.2	2,100	2,100	--	0.5	480	480
VOCs	Chlorobromomethane	74-97-5	ug/kg	23	0	0	28	**51**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	Chloroethane	75-00-3	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	970	970
VOCs	Chloroform	67-66-3	ug/kg	23	72	0	28	**123**	4.1%	38.3	59.8	19.26	88	28.8	0.5	480	480
VOCs	Chloromethane	74-87-3	ug/kg	23	72	0	28	**123**	1.6%	76.7	119.1	87	113	113	1	970	970
VOCs	Chloroprene (2-Chloro-1,3-Butadiene)	126-99-8	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	44	309	309
VOCs	cis-1,2-Dichloroethene	156-59-2	ug/kg	23	0	0	28	**51**	0.0%	--	--	--	--	--	0.5	240	240
VOCs	cis-1,3-Dichloropropene	10061-01-5	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	Cyclohexane	110-82-7	ug/kg	0	0	99	0	**99**	3.0%	7.16	15.24	11	137	137	10	10	10
VOCs	Cyclohexanone	108-94-1	ug/kg	0	0	0	28	**28**	0.0%	--	--	--	--	--	2,900	7,800	7,800
VOCs	Dibromochloromethane	124-48-1	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	Dibromomethane	74-95-3	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	Dichlorodifluoromethane	75-71-8	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	970	970
VOCs	Ethyl Benzene	100-41-4	ug/kg	23	72	0	28	**123**	9.8%	45.8	63.5	25.6	229	229	0.5	480	480
VOCs	Ethyl ether	60-29-7	ug/kg	23	0	0	28	**51**	0.0%	--	--	--	--	--	0.5	970	970
VOCs	Ethyl methacrylate	97-63-2	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	43.6	309	309
VOCs	Ethyl tert-Butyl Ether	637-92-3	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	10	10	10
VOCs	Ethylene oxide	75-21-8	ug/kg	0	0	0	28	**28**	0.0%	--	--	--	--	--	110,000	290,000	290,000
VOCs	Isobutanol	78-83-1	ug/kg	0	72	0	28	**100**	0.0%	--	--	--	--	--	44	19,000	19,000
VOCs	Isopropyl Ether	108-20-3	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	30	30	30
VOCs	Isopropylbenzene	98-82-8	ug/kg	23	0	0	28	**51**	7.8%	85.9	69.7	8.6	110	--	0.5	480	480
VOCs	Methyl Ethyl Ketone (2-Butanone)	78-93-3	ug/kg	23	72	0	28	**123**	0.8%	139	243	39	39	--	5	1,900	1,900
VOCs	Methyl Iodide (Iodomethane)	74-88-4	ug/kg	23	72	0	28	**123**	12.2%	47.9	48.6	52	210	210	0.5	480	480
VOCs	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	ug/kg	23	72	0	28	**123**	3.3%	143	251	56	750	--	0.5	1,900	1,900
VOCs	Methyl methacrylate	80-62-6	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	43.6	309	309
VOCs	Methylacrylonitrile	126-98-7	ug/kg	0	72	0	0	**72**	0.0%	--	--	--	--	--	218	1,540	1,540
VOCs	Methylene Chloride	75-09-2	ug/kg	23	72	99	28	**222**	52.7%	211	335	6	2,175	2,175	0.5	480	480
VOCs	Methyl-t-butyl ether	1634-04-4	ug/kg	23	0	0	0	**23**	0.0%	--	--	--	--	--	0.5	42	--
VOCs	Naphthalene	91-20-3	ug/kg	23	72	99	28	**222**	26.6%	151	500	26.7	7,200	1,314	28	2,300	970
VOCs	n-Butanol	71-36-3	ug/kg	0	0	0	28	**28**	0.0%	--	--	--	--	--	7,200	19,000	19,000
VOCs	n-Butylbenzene	104-51-8	ug/kg	23	0	0	28	**51**	3.9%	86.0	69.8	84	99	--	0.5	480	480
VOCs	N-Propylbenzene	103-65-1	ug/kg	23	0	0	28	**51**	9.8%	87.2	70.3	6.3	170	--	0.5	480	480
VOCs	p-Isopropyltoluene	99-87-6	ug/kg	23	0	0	0	**23**	17.4%	16.2	14.3	8.6	53	--	0.5	42	--
VOCs	Propionitrile, Ethyl Cyanide	107-12-0	ug/kg	0	72	0	0	**72**	1.4%	38.2	58.5	506	506	506	44	309	309
VOCs	sec-Butylbenzene	135-98-8	ug/kg	23	0	0	28	**51**	5.9%	84.8	69.7	6.3	58	--	0.5	480	480
VOCs	Styrene	100-42-5	ug/kg	23	72	0	28	**123**	4.9%	41.6	61.6	17	157	157	0.5	480	480
VOCs	t-Butanol	75-65-0	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	110	110	110
VOCs	tert-Amyl Methyl Ether	994-05-8	ug/kg	0	0	99	0	**99**	0.0%	--	--	--	--	--	30	30	30
VOCs	tert-Butylbenzene	98-06-6	ug/kg	23	0	0	28	**51**	2.0%	83.5	70.8	37	37	--	0.5	480	480

Table 5-1
Summary Statistics and Comparison with Ecological Screening Criteria of Combined Results -- 2005/6 Dow On-site, 2006 CH2M Hill Data, 2010 Dow and MDEQ Split Data
The Dow Chemical Company, Michigan Operations

Analyte Group	Analyte	CAS Number	Unit	Number of Samples					Summary Statistics								
				No. of Samples from 2005/6 Dow On-Site	No. of Samples from 2006 COM Blind	No. of Samples from 2010 Dow	No. of Samples from 2010 MDEQ	Total No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Max Detected Value (Off-site)	Min RL of NDs	Max RL of NDs	Max RL of NDs (Off-site)
VOCs	Tetrachloroethene	127-18-4	ug/kg	23	72	99	28	**222**	4.5%	37.7	147.7	5	2,100	13	0.5	480	480
VOCs	Tetrahydrofuran	109-99-9	ug/kg	23	0	0	28	**51**	15.7%	332	284	78	180	--	25.5	1,900	1,900
VOCs	Toluene	108-88-3	ug/kg	23	72	99	28	**222**	74.3%	430	1,182	4	7,010	7,010	25.5	480	480
VOCs	trans-1,2-Dichloroethene	156-60-5	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	240	240
VOCs	trans-1,3-Dichloropropene	10061-02-6	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	trans-1,4-Dichloro-2-butene	110-57-6	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	480	480
VOCs	Trichloroethene (TCE)	79-01-6	ug/kg	23	72	0	28	**123**	2.4%	38.3	59.4	11	51	--	0.5	480	480
VOCs	Trichlorofluoromethane	75-69-4	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	970	970
VOCs	Trihalomethanes, Total	STL00209	ug/kg	0	0	0	28	**28**	0.0%	--	--	--	--	--	180	480	480
VOCs	Vinyl acetate	108-05-4	ug/kg	0	72	0	28	**100**	0.0%	--	--	--	--	--	42.7	970	970
VOCs	Vinyl chloride	75-01-4	ug/kg	23	72	0	28	**123**	0.0%	--	--	--	--	--	0.5	970	970
VOCs	Xylenes, Total	1330-20-7	ug/kg	23	72	99	28	**222**	23.9%	72.4	160.8	10.05	1,470	1,470	1.5	480	480
Total	HPAHs		ug/kg	23	72	99	33	**227**	88.5%	1,498	3,764	138	39,931	39,931	194	3,600	3,500
Total	LPAHs		ug/kg	23	72	99	33	**227**	64.8%	769	1,458	63	10,530	9,065	111	3,350	3,350
Total	Total DDT		ug/kg	23	72	0	33	**128**	70.3%	108	418	1.9685	2,630	2,630	2.436	84	36

Notes:

If duplicates exist, the average of the duplicate results was used as a single data point.

Nondetects were substituted by half of reporting limit (RL) for the computation of summary statistics.

Laboratory QAQC results were not included.

Isomer:

When lab reports a total for an "isomer" group, use that value. If lab reports only the individual isomer, total them for criteria comparison (use 1/2 RL for NDs in the summation; unless otherwise noted).

Xylenes	Total Xylenes is the total of o-Xylene, p-Xylene, and m-Xylene. m and p-Xylenes are usually grouped together.
Endosulfan	Total Endosulfan is composed of Endosulfan I and Endosulfan II.
Cresol	Total Cresol or Methylphenol is composed of 2-Methylphenol (2-Cresol), 3-Methylphenol (3-Cresol, and 4-Methylphenol (4-Cresol). 3 and 4-Methylphenol are sometimes grouped together.
Chlordane	Total Chlordane is the sum of alpha-Chlordane and gamma-Chlordane (also called trans-Chlordane), as well as oxychlordane if such data are present.
PCBs	Total PCBs is the sum of all individual PCBs. (ND aroclors are substituted by zero in the summation.)

Table 5-2
Summary Statistics and Comparison with Background Data of Combined Results -- 2005/6 Dow On-site, 2006 CH2M Hill Data, 2010 Dow and MDEQ Split Data
The Dow Chemical Company, Michigan Operations

Analyte Group	Analyte	CAS	Unit	Number of Samples					Summary Statistics on Site Samples							(eBKG1) Statewide Default Background [1]			(eBKG2) Modified Urban Background [2]		
				No. of Samples from 2005/6 Dow On-Site	No. of Samples from 2006 COM Blind	No. of Samples from 2010 Dow	No. of Samples from 2010 MDEQ	Total No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Min RL of NDs	Max RL of NDs	Mean + 1 Std Dev	Percent Exceed (Detect)	Percent Exceed (Non-detect)	Mean + 1 Std Dev (Except As, Use Mean + 2 SD)	Percent Exceed (Detect)	Percent Exceed (Non-detect)
Mercury	Mercury	7439-97-6	ug/kg	23	72	99	33	**227**	85.5%	72.5	245.6	9.4	3,440	3.9	62.4	130	5.7%	0.0%	180	4.0%	0.0%
Metals	Aluminum	7429-90-5	ug/kg	23	0	99	33	**155**	100.0%	3,091,331	2,486,965	416,874	14,200,000	--	--	6,900,000	10.3%	0.0%	11,673,000	1.3%	0.0%
Metals	Antimony	7440-36-0	ug/kg	0	72	99	33	**204**	23.0%	263	604	14	4,530	150	1,470						
Metals	Arsenic	7440-38-2	ug/kg	23	72	99	33	**227**	97.4%	4,614	5,647	195	59,200	194	785	5,800	20.7%	0.0%	11,290	7.0%	0.0%
Metals	Barium	7440-39-3	ug/kg	23	72	0	33	**128**	100.0%	38,856	22,224	7,620	137,000	--	--	75,000	6.3%	0.0%	178,000	0.0%	0.0%
Metals	Beryllium	7440-41-7	ug/kg	23	72	0	33	**128**	92.2%	293	196	42.625	1,170	35	580				430	18.0%	4.7%
Metals	Boron	7440-42-8	ug/kg	0	0	99	33	**132**	99.2%	8,986	3,728	970	22,627	9,200	9,200						
Metals	Cadmium	7440-43-9	ug/kg	23	72	0	33	**128**	75.8%	282	276	32.6	1,570	15	872	1,200	2.3%	0.0%	2,000	0.0%	0.0%
Metals	Calcium	7440-70-2	ug/kg	23	0	0	0	**23**	100.0%	97,044,130	80,734,405	4,140,000	269,000,000	--	--						
Metals	Chromium	7440-47-3	ug/kg	23	72	99	33	**227**	100.0%	9,614	7,351	783	60,700	--	--	18,000	6.2%	0.0%	21,930	4.4%	0.0%
Metals	Chromium VI	18540-29-9	ug/kg	23	0	0	0	**23**	13.0%	711	889	863	4,610	810	1,100						
Metals	Cobalt	7440-48-4	ug/kg	23	72	99	33	**227**	100.0%	2,385	1,190	402	7,420	--	--	6,800	0.9%	0.0%	5,900	2.2%	0.0%
Metals	Copper	7440-50-8	ug/kg	23	72	0	33	**128**	100.0%	18,330	19,492	2,000	183,000	--	--	32,000	12.5%	0.0%	38,080	7.8%	0.0%
Metals	Iron	7439-89-6	ug/kg	23	0	0	33	**56**	100.0%	8,036,518	5,803,437	2,100,000	30,200,000	--	--	12,000,000	12.5%	0.0%	21,916,000	5.4%	0.0%
Metals	Lead	7439-92-1	ug/kg	23	72	99	33	**227**	100.0%	29,563	53,681	1,483	666,000	--	--	21,000	34.4%	0.0%	114,220	5.3%	0.0%
Metals	Lithium	7439-93-2	ug/kg	23	0	99	33	**155**	100.0%	6,075	3,423	1,040	16,570	--	--	9,800	16.1%	0.0%	12,500	5.2%	0.0%
Metals	Magnesium	7439-95-4	ug/kg	23	0	99	33	**155**	100.0%	3,142,780	2,943,442	177,576	15,521,500	--	--				29,875,000	0.0%	0.0%
Metals	Manganese	7439-96-5	ug/kg	23	0	99	33	**155**	100.0%	88,932	69,842	10,091	547,757	--	--	440,000	0.6%	0.0%	1,298,000	0.0%	0.0%
Metals	Molybdenum	7439-98-7	ug/kg	23	0	0	33	**56**	60.7%	2,284	3,409	96	2,000	4,055	23,200						
Metals	Nickel	7440-02-0	ug/kg	23	72	99	0	**194**	99.5%	9,465	15,219	1,670	209,000	350	350	20,000	3.1%	0.0%			
Metals	Potassium	7440-09-7	ug/kg	23	0	0	0	**23**	91.3%	784,707	436,782	235,500	1,830,000	496,500	580,000						
Metals	Selenium	7782-49-2	ug/kg	23	72	99	33	**227**	33.5%	375	578	120	5,720	80	1,180	410	23.8%	31.7%	770	11.0%	2.2%
Metals	Silver	7440-22-4	ug/kg	23	72	99	33	**227**	13.7%	64.2	131.0	25	1,680	50.8	580	1,000	0.4%	0.0%			
Metals	Sodium	7440-23-5	ug/kg	23	0	0	33	**56**	60.7%	203,987	290,770	42,000	1,940,000	101,000	600,000						
Metals	Strontium	7440-24-6	ug/kg	23	0	99	33	**155**	100.0%	32,451	39,291	2,100	201,919	--	--						
Metals	Thallium	7440-28-0	ug/kg	23	72	99	33	**227**	15.4%	162	148	35	230	101	4,360						
Metals	Thorium	7440-29-1	ug/kg	0	0	0	33	**33**	93.9%	2,072	1,926	440	3,300	17,000	19,000						
Metals	Tin	7440-31-5	ug/kg	0	72	99	0	**171**	6.4%	1,511	12,254	532	158,000	484	2,610						
Metals	Titanium	7440-32-6	ug/kg	23	0	0	0	**23**	100.0%	129,535	75,383	48,700	427,000	--	--						
Metals	Vanadium	7440-62-2	ug/kg	23	72	0	33	**128**	100.0%	11,856	7,319	2,250	74,000	--	--				21,980	3.1%	0.0%
Metals	Zinc	7440-66-6	ug/kg	23	72	0	33	**128**	83.6%	60,643	97,091	4,800	798,500	56	166	47,000	35.2%	0.0%	139,650	10.9%	0.0%

Notes:

If duplicates exist, the average of the duplicate results was used as a single data point.

Nondetects were substituted by half of reporting limit (RL) for the computation of summary statistics.

Laboratory QAQC results are not included.

Sources:

(1) Michigan Statewide Default Background Levels.

(2) Communication with Al Taylor, MDEQ (August 12, 2011)

Table 5-3
Classes of Analytes Totaled for Ecological Criteria Comparison
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Analyte	CAS Number	Unit	Total No. of Samples	Detection Rate	Number of Detected Samples	ESLB	Source of ESLB	% of Detects > ESLB?	Number of samples with Detects > ESLB	% of ND RLs > ESLB?	Number of samples with RLs > ESLB	Min RL of NDs	Max RL of NDs	Max RL of NDs (Off-site)	Max Detected Off-site (ug/kg)	Hazard Quotient (HQ), based on Off-site Data	Recommend	Decision	Notes
BHC, Total	--	ug/kg	**227**	8.4%	**19**	99.4	USEPA Region 5 ESL (alpha-BHC)	0.9%	2	0.9%	2	3.15	720	720	30.9	0.3	Eliminate	**Eliminated in 21 August 2014 Meeting**	Total BHCs were detected in 19 out of 227 total samples collected (6 on-site samples and 13 off-site samples). Of these 19 detections, only 2 on-site samples had detections that exceeded the ESLB at DOS-8 (214.5 ug/kg) and DOS-21 (286 ug/kg). The highest off-site detections occurred at L-01 (0-1"). The screening level HQ based on the off-site maximum is less than 1. Recommend elimination.
DDx, Total	--	ug/kg	**128**	70.3%	**90**	93	Avian EPA EcoSSL	9%	11	0%	0	2.44	84	36	2630	28.3			Total DDx (4,4'-DDD, 4,4'-DDE, 4,4'-DDT) was detected in 90 out of 128 total samples. The detected concentration exceeded the Avian EPA EcoSSL in only 11 samples. 2 of the samples were on-site (DOS-1 (152.55 ug/kg) and DOS-20 (101.5 ug/kg). The remaining 9 samples were off-site and are all associated with an off-site sources other than MAS historical release: A-02 (725.4 ug/kg), C-02 0-1" (2,576.1 ug/kg) and C-02 1-6" (2,558.5 ug/kg), O-01 1-6" (98.62 ug/kg), W-03 0-1" (1,059.6 ug/kg) and W-03 1-6" (1,319.1 ug/kg), B1-01 6-12" (2,630 ug/kg) and B1-03 0-1" (94 ug/kg). **If these are removed from the data set, the next highest off-site concentration is 90.85 ug/kg at W1-02 1-6". Using this concentration, the screening HQ is 1.**
Endosulfan and Endosulfan sulfate, Totals	115-26-7 1031-07-8	ug/kg	**128**	60.9%	**78**	35.8	US EPA Region 5 ESL	5%	6	4%	5	17.8	360	360	73.5	2			Total Endosulfans were detected in 78 out of 128 total samples. The detected concentrations in 6 samples exceed the US EPA Region 5 ESL. 3 of the samples are on-site (DOS-20 (65 ug/kg), DOS-21 (69 ug/kg), and DOS-8 (66 ug/kg)) and 3 are off-site samples. The three off-site samples are as follows: C-02 1-6" (54.685 ug/kg), K-01 1-6" (73.51 ug/kg) and O-01 1-6" (49.545 ug/kg). C-02 and O-01 are off-site sample locations associated with an off-site source other than MAS historical release. This leaves the one isolated maximum detected off-site concentration at K-02 1-6", demonstrating this is not a widespread issue. There are 5 RLs that exceed the ESLB. 4 of them are on-site and the one off-site is at B1-01 (180 ug/kg). **LANL has endosulfan ESLs for the robin (as an herbivore, omnivore and invertivore), the most conservative of which (the invertivore) is 40,000 ug/kg. The maximum detected concentration is well below the LANL robin ESL.**
Endrin, Total	72-20-8	ug/kg	**128**	3.9%	**5**	2.62	USEPA Eco SSL (Endrin aldehyde)	3%	4	52%	64	1.57	540	540	16.5	6	Eliminate (with map review); **Endrins were not produced by Dow**		Total endrins were detected in only 5 out of 128 total samples collected (all off-site). 4 of these samples had detected concentrations that were greater than the ESLB. They are as follows: J-02 0-1" (9.79 ug/kg), O-01 1-6" (10.9 ug/kg), L-02 0-1" (12.59 ug/kg), and I1a-02 6-12" (16.5 ug/kg). 59 samples had reporting limits that met the ESLB from the 2006 COM sampling effort providing adequate sample coverage across the area of interest. 64 samples had reporting limits that exceeded the ESLB. These samples included all of the Dow On Site samples, all of the 2010 MDEQ samples and 9 out of a total of 68 samples from the 2006 COM data set. Recommend elimination based on frequency of detection and spatial distribution.
Heptachlor, Total	76-44-8	ug/kg	**128**	15.6%	**20**	152	USEPA Region 5 ESL (Heptachlor epoxide)	0%	0	0.8%	1	1.52	360	360	77.6	0.5	Eliminate	**Eliminated in 21 August 2014 Meeting**	Total heptachlors were detected in 20 samples out of 128 total samples collected. These 20 detections were all off-site. There are no detected concentrations that exceed the ESLB. Only 1 reporting limit exceeds the ESLB at B1-01 6-12" (180 ug/kg), which is a sample that commonly has reporting limits that exceed. Recommend elimination.
Parathion, Total	56-38-2	ug/kg	**72**	0.0%	**0**	0.292	US EPA Region 5 ESL	0%	--	100%	72	29.9	78.3	78.3	ND	--			Total parathions were never detected and all reporting limits were higher than the US EPA Region 5 ESL (0.292 ug/kg). Our calculated NOAEL ESLB for the robin was 398 ug/kg (based on parathion; for methyl parathion it was 4,000 ug/kg). All reporting limits were below the calculated robin NOAEL ESLB.
HMW PAHs, Total	--	ug/kg	**227**	67.8%	**154**	18,000	EcoSSL (Invertebrates)	0.9%	2	0%	0	75.1	1620	1575	30,627	2			Summed concentrations of HMW PAHs exceeded the Invertebrate EcoSSL (18,000 ug/kg) in two samples - 1 on-site and 1 off-site. The on-site sample was at DOS-20 (18,800 ug/kg) and the off-site samples was from the COM Blinded Sampling effort at C-02 0-1" (30,627 ug/kg). There are no reporting limits that exceed this ESLB. D6 analytes were ultimately eliminated based on a Total PAH and spatial distribution evaluation.
						1,100	EcoSSL (Mammals)	19%	43	2%	5					28			Summed concentrations of HMW PAHs exceeded the Mammal EcoSSL (1,100 ug/kg) in 43 samples located both on- and off-site. 14 of the detections are on-site and 29 of the detections are off-site. The maximum detected concentration is off-site at C-02 0-1" (30,627 ug/kg) from the COM Blinded Sampling effort, which is a sample location associated with an off-site source not related to the MAS historical release. Based on a review of the sample locations associated with off-site source not related to the MAS historical release, only 9 detected concentrations that exceed 1,100 ug/kg off-site are not associated with one of those sample locations. Of these 9 sample locations, the max detections is 4,471 ug/kg at J-02 0-1". Based on this detected concentration, the screening HQ is 4.
LMW PAHs, Total	--	ug/kg	**227**	86.8%	**197**	29,000	EcoSSL (Invertebrates)	0%	0	0%	0	40.3	1675	1675	17,881	0.6			There are no summed concentrations of LMW PAHs or RLs that exceed the Invertebrate EcoSSL (29,000 ug/kg). D6 analytes were ultimately eliminated based on a Total PAH and spatial distribution evaluation.
						100,000	EcoSSL (Mammals)	0%	0	0%	0					0.2			There are no summed concentrations of LMW PAHs or RLs that exceed the Mammal EcoSSL (100,000 ug/kg).

Notes:
If duplicates exist, the average of the duplicate results was used as a single data point.
Nondetects were substituted by half of reporting limit (RL) for the computation of summary statistics.
Laboratory QAQC results were not included.

BHC, Total:
- Alpha-BHC
- Beta BHC
- Delta BHC
- Gamma BHC (Lindane)

Total DDx:
- 4,4'-DDD
- 4,4'-DDE
- 4,4'-DDT

Endrin, Total:
- Endrin
- Endrin aldehyde
- Endrin ketone

Total Endosulfan and Endosulfan sulfate:
- Endosulfan sulfate
- Endosulfan, Total

Heptachlor, Total:
- Heptachlor
- Heptachlor epoxide

Total Parathion:
- Parathion, Ethyl (Parathion)
- Parathion, Methyl

Table 5-4
Summary of Current Ecological Screening Categories Based on L. Williams (FWS) Memorandum Dated September 23, 2013
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Category	Definition
1	If screened out of HHRA and HHRA threshold is less than ESLB, screen out of ERA, documenting reasons for screening out of HHRA.
2	If maximum concentration is less than background, screen out of ERA
3	If all concentrations are < RL and RL is less than background, screen out of ERA
4	eA1 (Analyte not detected; no ESLB): Compare RL to ESLB for similar compound or to HHRA for same or similar compound then add reasons for exposure/toxicity differences and/or add safety factors.
5	eA2 (Analyte detected; no ESLB): Compare maximum concentration to ESLB for similar compound or to HHRA for same or similar compound then add reasons for exposure/toxicity differences and/or add safety factors.
6	eB1 (Analyte not detected; 95% or more RLs met ESLB): Probably OK to screen out, spatial distribution if seems too many.
7	eC1 (Detected < or = to 5%; 95% or more RLs met ESLB): Probably Ok to screen out, spatial distribution if seems too many or maximum concentration > ESLB
8	eD1 (Detected > 5%; HQ (based on off-site data) < or = to 1); Probably OK to screen out.
9	eB2 (Analyte not detected; More than 5% RLs did not meet ESLB); see if screened out of HHRA and if same reasoning can be used, e.g. #1-3 above, spatial distribution indicates not Dow or SWAC of RLs in 5 acre worst case homerange circles less than ESLB.
10	eC2 (Detected < or = to 5%; More than 5% RLs did not meet ESLB): see if screened out of HHRA and if same reasoning can be used, e.g. #1-3 above, spatial distribution indicates not Dow or SWAC of RLs, and detections in 5 acre worst case homerange circles less than ESLB.
11	eD2 (Detected > 5%; HQ (based on off-site data) > 1): see if screened out of HHRA and if same reasoning can be used, e.g. #2 above, spatial distribution indicates not Dow, or SWAC of RLs and detections in 5 acre worst case homerange circles less than ESLB.
12	For remaining contaminants - move beyond SLERA, e.g. consider geometric mean of NOAEL and LOAEL instead of just the NOAEL that was used to develop the ESLB, consider LOAEL, develop and ESLB, calculate % of homeranges at risk after cleanup using SWACs.

HHRA	Human Health Risk Assessment
ERA	Ecological Risk Assessment
ESLB	Ecological Screening Level Benchmark
NOAEL	No Observable Adverse Effect Level
RL	Reporting Limit
SLERA	Screening Level ERA
LOAEL	Lowest Observable Adverse Effect Level

Table 5-5
Ecological Screeening Results - Category 1
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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
Metals	Barium[1]	7440-39-3	A2	eBKG2	HH	#1	100%	128	300,000	0%	0%	330,000	0%	0%	Metals Screen-out by Regional Background Screening Levels	Metals Screen-out by Modified Urban Background	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Background.
Metals	Boron[1]	7440-42-8	D6, E2	eD1	HH	#1, #8	99%	132	10,000	38%	0%	52,100	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based on leach testing results	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Background.
Metals	Chromium[1]	7440-47-3	D6, E1	eD2	HH	#1, #11	100%	227	3,300	94%	0%	26,000	4%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) > 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Background.
Metals	Cobalt[1]	7440-48-4	D6, E1	eD1	HH	#1, #8	100%	227	800	96%	0%	13,000	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Background.
SVOCs	Fluoranthene[1]	206-44-0	D6, E2	eD1	HH	#1, #8	82%	227	5,500	0.9%	0%	381,000	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based on leach testing results	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on the LMW PAH Totals evaluation.
SVOCs	Hexachlorobutadiene[1]	87-68-3	D5, E2	eC1	HH	#1, #7	1%	227	91	0.9%	60%	984	0%	1%	Detected ≤ 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based onm leach testing results	Detected ≤ 5%; 99% RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
Metals	Selenium[1]	7782-49-2	D6, E3	eD2	HH	#1, #11	34%	227	400	25%	32%	1,830	3%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based on shallow groundwater sampling leach study results (3/13/14 meeting)	Detected > 5%; HQ (based on off-site data) > 1	Eliminated in 5 September 2014 Eco Working Meeting #5 based on all presented lines of justification. See Comment Response Table.
Metals	Manganese	7439-96-5	A2	eBKG2	HH	#1	100%	155	1,000	100%	0%	220,000	4%	0%	Metals Screen-out by Regional Background Screening Levels	Metals Screen-out by Modified Urban Background	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,1,1,2-Tetrachloroethane	630-20-6	B3	eB1	HH	#1, #6	0%	123	1,500	0%	0%	225,000	0%	0%	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,1,1-Trichloroethane	71-55-6	B3	eB1	HH	#1, #6	0%	123	1,800	0%	0%	29,800	0%	0%	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,1-Dichloroethane	75-34-3	B3	eB1	HH	#1, #6	0%	123	15,000	0%	0%	20,100	0%	0%	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,2,3-Trichloropropane	96-18-4	B3	eB1	HH	#1, #6	0%	123	840	0%	0%	3,360	0%	0%	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Bromoform	75-25-2	B3	eB1	HH	#1, #6	0%	123	1,600	0%	0%	15,900	0%	0%	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Dibromochloromethane	124-48-1	B3	eB1	HH	#1, #6	0%	123	1,600	0%	0%	2,050	0%	0%	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Dibromomethane	74-95-3	B3	eB1	HH	#1, #6	0%	123	1,600	0%	0%	65,000	0%	0%	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Ethyl methacrylate	97-63-2	B3	eB1	HH	#1, #6	0%	72	770	0%	0%	30,000	0%	0%	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	p-Phenylenediamine	106-50-3	B3	eB1	HH	#1, #6	0%	72	1,900	0%	0%	6,160	0%	0%	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	1,2,4-Trichlorobenzene	120-82-1	D2	eC1	HH	#1, #7	4%	150	4,200	0%	0%	11,100	0%	0%	Detected <5%: screen-out by Part 201/EPA criteria	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.

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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
Herbicides	2,4,5-T (Trichlorophenoxyacetic Acid)	93-76-5	D2	eC1	HH	#1, #7	1%	72	150	0%	0%	596	0%	0%	Detected <5%: screen-out by Part 201/EPA criteria	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Chloromethane	74-87-3	D2	eC1	HH	#1, #7	2%	123	2,300	0%	0%	10,400	0%	0%	Detected <5%: screen-out by Part 201/EPA criteria	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Isophorone	78-59-1	D2	eC1	HH	#1, #7	0.8%	128	15,000	0%	0%	139,000	0%	0%	Detected <5%: screen-out by Part 201/EPA criteria	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Methyl Ethyl Ketone (2-Butanone)	78-93-3	D2	eC1	HH	#1, #7	0.8%	123	44,000	0%	0%	89,600	0%	0%	Detected <5%: screen-out by Part 201/EPA criteria	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	D2	eC1	HH	#1, #7	3%	123	36,000	0%	0%	443,000	0%	0%	Detected <5%: screen-out by Part 201/EPA criteria	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Styrene	100-42-5	D2	eC1	HH	#1, #7	5%	123	2,100	0%	0%	4,690	0%	0%	Detected <5%: screen-out by Part 201/EPA criteria	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Acenaphthene	83-32-9	D3	eD1	HH	#1, #8	13%	128	8,700	0%	0%	682,000	0%	0%	Detected > 5%; screen-out by Part 201/EPA criteria	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Acenaphthylene	208-96-8	D3	eD1	HH	#1, #8	22%	128	5,900	0%	0%	682,000	0%	0%	Detected > 5%; screen-out by Part 201/EPA criteria	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Acetophenone	98-86-2	D3	eD1	HH	#1, #8	9%	105	30,000	0%	0%	300,000	0%	0%	Detected > 5%; screen-out by Part 201/EPA criteria	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Anthracene	120-12-7	D3	eD1	HH	#1, #8	48%	128	41,000	0%	0%	1,480,000	0%	0%	Detected > 5%; screen-out by Part 201/EPA criteria	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Benzo(b)fluoranthene	205-99-2	D3	eD1	HH	#1, #8	88%	128	20,000	0%	0%	59,800	0%	0%	Detected > 5%; screen-out by Part 201/EPA criteria	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Fluorene	86-73-7	D3	eD1	HH	#1, #8	16%	128	5,300	0%	0%	122,000	0%	0%	Detected > 5%; screen-out by Part 201/EPA criteria	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Indeno(1,2,3-c,d)Pyrene	193-39-5	D3	eD1	HH	#1, #8	52%	128	20,000	0%	0%	109,000	0%	0%	Detected > 5%; screen-out by Part 201/EPA criteria	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Phenol	108-95-2	D3	eD1	HH	#1, #8	22%	128	9,000	0%	0%	120,000	0%	0%	Detected > 5%; screen-out by Part 201/EPA criteria	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,2-Dichlorobenzene	95-50-1	D5, E1	eC1	HH	#1, #7	3%	222	280	0.5%	37%	2,960	0%	0%	Detected ≤ 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected ≤ 5%; All RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
Pesticides	alpha-BHC	319-84-6	D5, E1	eC1	HH	#1, #7	5%	227	18	1%	30%	99.4	0%	0%	Detected ≤ 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected ≤ 5%; 99% RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Chlorobenzene	108-90-7	D5, E1	eC1	HH	#1, #7	0.5%	222	500	0.5%	0%	13,100	0%	0%	Detected ≤ 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected ≤ 5%; All RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Tetrachloroethene	127-18-4	D5, E1	eC1	HH	#1, #7	5%	222	100	2%	14%	9,920	0%	0%	Detected ≤ 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected ≤ 5%; All RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.

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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
VOCs	1,1,2-Trichloroethane	79-00-5	D4, E1	eB1	HH	#1, #6	0%	123	100	0%	26%	28,600	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,1-Dichloroethene	75-35-4	D4, E1	eB1	HH	#1, #6	0%	123	62	0%	38%	8,280	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,2-Dibromo-3-chloropropane	96-12-8	D4, E1	eB2	HH	#1, #9	0%	123	10	0%	93%	35.2	0%	93%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,2-Dibromoethane (EDB)	106-93-4	D4, E1	eB1	HH	#1, #6	0%	123	20	0%	93%	1,230	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,2-Dichloroethane	107-06-2	D4, E1	eC1	HH	#1, #7	0.8%	123	100	0%	26%	21,200	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,2-Dichloropropane	78-87-5	D4, E1	eB1	HH	#1, #6	0%	123	100	0%	26%	32,700	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,3-Dichloropropene, Total	542-75-6	D4, E1	eB2	HH	#1, #9	0%	28	170	0%	100%	398	0%	11%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	1,3-Dinitrobenzene	99-65-0	D4, E1	eB1	HH	#1, #6	0%	204	3.3	0%	100%	655	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,4-Dioxane	123-91-1	D4, E1	eB2	HH	#1, #9	0%	100	1,700	0%	28%	2,050	0%	28%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	2,2'-Oxybis (1-Chloropropane)	108-60-1	D4, E1	eB1	HH	#1, #6	0%	105	0.12	0%	100%	19,900	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	2,4,6-Trichlorophenol	88-06-2	D4, E1	eC1	HH	#1, #7	2%	128	330	0%	90%	9,940	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Detected ≤ 5%; All RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	2,4-Dichlorophenol	120-83-2	D4, E1	eB1	HH	#1, #6	0%	95	330	0%	91%	87,500	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.

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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
SVOCs	2,4-Dinitrotoluene	121-14-2	D4, E1	eB1	HH	#1, #6	0%	128	430	0%	12%	1,280	0%	2%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; 98% RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	2-Naphthylamine	91-59-8	D4, E1	eB1	HH	#1, #6	0%	72	0.19	0%	100%	3,030	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	2-Nitroaniline	88-74-4	D4, E1	eB1	HH	#1, #6	0%	128	150	0%	100%	74,100	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	2-Nitrophenol	88-75-5	D4, E1	eB1	HH	#1, #6	0%	105	400	0%	32%	1,600	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	3,3'-Dimethylbenzidine	119-93-7	D4, E1	eB2	HH	#1, #9	0%	72	0.04	0%	100%	104	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	3-Methylcholanthrene	56-49-5	D4, E1	eB1	HH	#1, #6	0%	72	5.9	0%	100%	77.9	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	4-Aminobiphenyl	92-67-1	D4, E1	eB2	HH	#1, #9	0%	72	0.016	0%	100%	3.05	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	4-Chloro-3-methylphenol	59-50-7	D4, E1	eB1	HH	#1, #6	0%	105	280	0%	100%	7,950	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	4-Chloroaniline	106-47-8	D4, E1	eB1	HH	#1, #6	0%	105	0.14	0%	100%	1,100	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	4-Nitroaniline	100-01-6	D4, E1	eB1	HH	#1, #6	0%	128	1.4	0%	100%	21,900	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	5-Nitro-o-toluidine	99-55-8	D4, E1	eB1	HH	#1, #6	0%	72	1.1	0%	100%	8,730	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	7,12-Dimethylbenz(a) anthracene	57-97-6	D4, E1	eB1	HH	#1, #6	0%	72	0.27	0%	100%	16,300	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.

Table 5-5
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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
VOCs	Acrolein	107-02-8	D4, E1	eB2	HH	#1, #9	0%	100	310	0%	100%	5,270	0%	13%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Allyl Chloride (3-Chloropropene)	107-05-1	D4, E1	eB2	HH	#1, #9	0%	72	0.21	0%	100%	13.4	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Aramite (Total)	140-57-8	D4, E1	eB1	HH	#1, #6	0%	72	30	0%	100%	166,000	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Bis(2-Chloroethoxy) methane	111-91-1	D4, E1	eB2	HH	#1, #9	0%	128	25	0%	100%	302	0%	44%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Bis(2-Chloroethyl) ether	111-44-4	D4, E1	eB1	HH	#1, #6	0%	128	100	0%	100%	23,700	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Bromomethane	74-83-9	D6, E1	eB2	HH	#1, #9	0%	123	200	0.0%	25%	235	0%	24%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; 23.6% RLs did not meet ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Carbon tetrachloride	56-23-5	D4, E1	eC1	HH	#1, #7	2%	123	100	0%	26%	2,980	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Chlorobenzilate	510-15-6	D4, E1	eB1	HH	#1, #6	0%	72	2	0%	100%	5,050	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Chloroprene (2-Chloro-1,3-Butadiene)	126-99-8	D4, E1	eB2	HH	#1, #9	0%	72	0.0085	0%	100%	2.9	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Diallate (total of cis and trans isomers)	2303-16-4	D4, E1	eB1	HH	#1, #6	0%	72	1.6	0%	100%	452	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Dibenz(a,h)anthracene	53-70-3	D4, E1	eD1	HH	#1, #8	18%	128	2,000	0%	2%	18,400	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Diethyl phthalate	84-66-2	D4, E1	eC1	HH	#1, #7	2%	128	2,200	0%	2%	24,800	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.

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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
SVOCs	Dimethoate	60-51-5	D4, E1	eB1	HH	#1, #6	0%	72	1.6	0%	100%	218	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Ethyl Benzene	100-41-4	D4, E1	eD1	HH	#1, #8	10%	123	360	0%	3%	5,160	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Hexachloroethane	67-72-1	D4, E1	eB1	HH	#1, #6	0%	128	430	0%	12%	596	0%	2%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; 98% RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Kepone	143-50-0	D4, E1	eB2	HH	#1, #9	0%	72	0.24	0%	100%	32.7	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Methyl methacrylate	80-62-6	D4, E1	eB1	HH	#1, #6	0%	72	310	0%	1%	984,000	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Methyl methanesulfonate	66-27-3	D4, E1	eB1	HH	#1, #6	0%	72	0.14	0%	100%	315	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Methylacrylonitrile	126-98-7	D4, E1	eB2	HH	#1, #9	0%	72	0.24	0%	100%	57	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Nitrobenzene	98-95-3	D4, E1	eC1	HH	#1, #7	0.9%	227	330	0%	52%	1,310	0%	1%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	n-Nitrosodiethylamine	55-18-5	D4, E1	eB1	HH	#1, #6	0%	72	0.000053	0%	100%	69.3	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	n-Nitrosodimethylamine	62-75-9	D4, E1	eB2	HH	#1, #9	0%	128	0.0001	0%	100%	0.0321	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	N-Nitroso-di-n-butylamine	924-16-3	D4, E1	eB1	HH	#1, #6	0%	72	0.005	0%	100%	267	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	n-Nitrosodi-n-propylamine	621-64-7	D4, E1	eB1	HH	#1, #6	0%	128	330	0%	92%	544	0%	2%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; 98% RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.

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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
SVOCs	n-Nitrosomethylethylamine	10595-95-6	D4, E1	eB2	HH	#1, #9	0%	72	0.00088	0%	100%	1.66	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	n-Nitrosomorpholine	59-89-2	D4, E1	eB1	HH	#1, #6	0%	72	0.0025	0%	100%	70.6	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	n-Nitrosopiperidine	100-75-4	D4, E1	eB2	HH	#1, #9	0%	72	0.0038	0%	100%	6.65	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	n-Nitrosopyrrolidine	930-55-2	D4, E1	eB2	HH	#1, #9	0%	72	0.012	0%	100%	12.6	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	p-Dimethylaminoazobenzene	60-11-7	D4, E1	eB1	HH	#1, #6	0%	72	0.062	0%	100%	40	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Phenacetin	62-44-2	D4, E1	eB1	HH	#1, #6	0%	72	8.6	0%	100%	11,700	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Pyridine	110-86-1	D4, E1	eB1	HH	#1, #6	0%	105	400	0%	57%	1,030	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Safrole	94-59-7	D4, E1	eB1	HH	#1, #6	0%	72	0.19	0%	100%	404	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Tetraethyl Dithiopyrophosphate (Sulfotepp)	3689-24-5	D4, E1	eB2	HH	#1, #9	0%	72	13	0%	100%	596	0%	100%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; some or all RLs did not meet ESLB; HHRA criteria lower and screened out of HHRA	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Trichloroethene (TCE)	79-01-6	D4, E1	eC1	HH	#1, #7	2%	123	100	0%	26%	12,400	0%	0%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Detected ≤ 5%; all RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Vinyl chloride	75-01-4	D4, E1	eB1	HH	#1, #6	0%	123	40	0%	83%	646	0%	5%	Not detected above Part 201/EPA criteria, but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Analyte not detected; 95% RLs met ESLB	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.

Table 5-5
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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
Metals	Arsenic	7440-38-2	D6, E3	eD1	HH	#1, #8	97%	227	4,600	33%	0%	106,000	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based on shallow groundwater sampling leach study results (3/13/14 meeting)	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
Metals	Chromium VI	18540-29-9	D6, E3	eD1	HH	#1, #8	13%	23	3,300	4%	0%	537,000	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based on shallow groundwater sampling leach study results (3/13/14 meeting)	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Methylene Chloride	75-09-2	D6, E3	eD1	HH	#1, #8	53%	222	100	58%	21%	4,050	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based on shallow groundwater sampling leach study results (3/13/14 meeting)	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
SVOCs	Pentachlorophenol	87-86-5	D6, E3	eD1	HH	#1, #8	15%	227	22	8%	58%	2,480	0%	1%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based on shallow groundwater sampling leach study results (3/13/14 meeting)	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Toluene	108-88-3	D6, E3	eD2	HH	#1, #11	74%	222	5,400	2%	0%	5,450	2%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based on shallow groundwater sampling leach study results (3/13/14 meeting)	Detected > 5%; HQ (based on off-site data) > 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Xylenes, Total	1330-20-7	D6, E3	eD1	HH	#1, #8	24%	222	820	1%	0.5%	70,100	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated based on shallow groundwater sampling leach study results (3/13/14 meeting)	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,3-Dichlorobenzene	541-73-1	D6, E1	eD1	HH	#1, #8	11%	222	170	0.5%	45%	37,700	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	1,4-Dichlorobenzene	106-46-7	D6, E1	eD1	HH	#1, #8	9%	222	360	0.5%	33%	546	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
VOCs	Benzene	71-43-2	D6, E1	eD1	HH	#1, #8	19%	222	100	0.9%	14%	255	0%	6%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
Mercury	Mercury	7439-97-6	D6, E1	eD2	HH	#1, #11	86%	227	50	29%	2%	100	8%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) > 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.

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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
SVOCs	Phenanthrene	85-01-8	D6, E1	eD1	HH	#1, #8	52%	227	2,100	3%	0%	45,700	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.
Metals	Silver	7440-22-4	D6, E1	eD1	HH	#1, #8	14%	227	100	3%	41%	4,200	0%	0%	Detected > 5%; one or more detected concentrations > Part 201/EPA criteria; Eliminated through a review of spatial distribution	Detected > 5%; HQ (based on off-site data) ≤ 1	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Category 1 Justification.

[1] See RTC table (Table 5-6) for more information

Table 5-6
Ecological Screening Results - Category 1 Response to Comments
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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Off-site Max	Original Dow ESLB Used in 2011 (ug/kg)	Source	% Detects Exceed Original ESLB	% RLs Exceed Original ESLB	Current Dow ESLB (ug/kg)	Current ESLB Source	% Detects Exceed Current ESLB	% RLs Exceed Current ESLB	Calculated LOAEL-Based Dow ESLB (ug/kg)	Calculated LOAEL based ESLB Source	% Detects Exceed LOAEL ESLB	% RLs Exceed LOAEL ESLB	Dow Further Evaluation	Decision
Analytes Identified for Further Evaluation																							
Metals	Barium	7440-39-3	A2	eBKG2	HH	#1	100%	128	120,000	1,040	USEPA Region 5 ESL	100%	0%	330,000	USEPA Eco SSL (Soil Inverts)	0%	0%	3,932,000	Calculated LOAEL-based ESLB for Northern Cardinal	0%	0%	Barium was 100% detected. In both the human health evaluation and the original ecological screening, barium was eliminated through a comparison to background, which is discussed below. The original ecological screening performed in 2011 compared detected concentrations of barium to the US EPA Region 5 ESL. Later in 2011, Dow performed further evaluation that included a review of available US EPA Eco SSLs and for some analytes, barium included, a screening was performed using those values. The detected results for all 128 samples exceed the 1,040 ug/kg benchmark identified by the MDEQ that was developed based on soil invertebrates. These detections occur both on- and off-site. Statewide background (mean + 1 std dev) is 75,000 ug/kg and and only 6.3% (8 samples) of the total 128 samples collected exceed this background level. 3 of the 8 samples are on-site (DOS-1, DOS-2, DOS-8); the remaining 5 samples are off-site (3 from the City of Midland Blinded Sampling effort at U-02 0-1" and W-03 at both 0-1" and 1-6"; and 2 from the 2010 MDEQ sampling effort at B1-01 6-12" and Site2-03-1-6"). Modified urban background is 178,000 ug/kg (mean + 1 std dev) and there are no exceedances of this value. When a LOAEL-based ESLB is calculated based on the Northern Cardinal, there are no detected concentrations that exceed the ESLB.	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Background.
SVOCs	Hexachlorobutadiene	87-68-3	D5, E2	eC1	HH	#1, #7	1%	227	29	40	USEPA Region 5 ESL	1%	0%	1,013	Calculated NOAEL-based ESLB for American Robin	0%	1%	5,060	Calculated LOAEL-based ESLB for American Robin	0%	0%	Hexachlorobutadiene was only detected in 3 samples out of 227 total samples collected. 2 of the 3 samples were located on-site at DOS-5 (250 ug/kg) and DOS-8 (640 ug/kg). The 1 detected concentration offsite occurred at O1-02 6-12" for a result of 29 ug/kg, which is less than the MDEQ identified ESLB of 40 ug/kg for the masked shrew and less than the calculated NOAEL-based ESLB for the American Robin. Based on the MDEQ recommended 40 ug/kg ESLB, all of the 2010 MDEQ samples, 2010 Dow samples, and Dow On-Site sample RLs exceed the ESLB. 22 of the COM Blinded sampling effort sample RLs exceed. 50 of the COM Blinded sampling effort meet the ESLB for off-site non-detected samples. In comparison to the calculated ESLB for the American Robin, there are no detected concentrations that exceed the ESLB and only 2 reporting limits (1%) exceed the ESLB, both of which were on-site at DOS-17 (RL = 2,300 ug/kg) and DOS-20 (RL = 4,100 ug/kg). When a LOAEL-based ESLB is calculated based on the American Robin, there are no detected concentraitons or reporting limits that exceed the ESLB.	Eliminated in 27 June 2014 Eco Working Meeting #3 based on clarification provided and Category 1 justification.
Metals	Cobalt	7440-48-4	D6, E1	eD1	HH	#1, #8	100%	227	7,420	140	USEPA Region 5 ESL	100%	0%	13,000	USEPA Eco SSL (Plants)	0%	0%	371,000	Calculated LOAEL-based ESLB for American Robin	0%	0%	Cobalt was detected in 100% of the 227 total samples collected. All of the detected concentrations exceed the MDEQ-recommended ESLB of 140 ug/kg. Statewide background (mean + 1 std dev) is 6,800 and only 2 samples have detected concentrations that exceed this background value. Modified Urban background (mean + 1 std dev) is less than the Statewide background value at 5,900 ug/kg and 5 samples have detected concentrations that exceed this value. 2 detected concentrations are on-site at DOS-1 (6,010 ug/kg) and DOS-2 (5,940 ug/kg); 2 detected concentrations are off-site at the L-02 sample location of the COM Blinded Sampling effort (0-1" = 6,830 ug/kg; 1-6" = 7,420 ug/kg); and 1 detected concentration also from the COM Blinded Sampling effort is at U-02 0-1" (5,980 ug/kg). All other detected concentrations are below background values. When a LOAEL-based ESLB is calculated for the American Robin, there are no detected concentrations that exceed the ESLB.	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Background.
Metals	Chromium	7440-47-3	D6, E1	eD2	HH	#1, #11	100%	227	46,700	400	USEPA Region 5 ESL	100%	--	26,000	USEPA Eco SSL (Birds)	4%	0%	43,900	Calculated LOAEL-based ESLB for American Robin	1%	0%	The original eco screening performed in 2011 used the US EPA Region 5 ESLB for comparison. Dow performed further evaluation on eD1 and eD2 analytes, including chromium. Since the endpoint is avian receptors, the US EPA Eco SSL for birds was utilized for the screening moving forward. 100% of detects exceed the soil invert benchmark recommended by MDEQ. Statewide background is 18,000 ug/kg and 6% (14 samples) of the detected results exceed that value. A comparison of detected concentrations to the current avian screening level (US EPA Eco SSL of 26,000 ug/kg) only 8 samples exceed the benchmark (no RLs exceed). Of the 8 samples that exceed the ESLB, 6 of those samples are on-site, leaving 2 off-site samples that occured in the COM Blinded Sampling Effort and the sample location was L-01 (0-1" and 1-6" depths). Modified Urban Background is 21,930 ug/kg and 9 samples exceed that value (the 8 discussed previously and 1 additional sample on-site). When a LOAEL-based ESLB is calculated for an American Robin, only 2 detections exceed the calculated criteria: one on-site DOS-11 (60,700 ug/kg) and one off-site at L-01 0-1" (46,700 ug/kg).	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Background.
Metals	Boron	7440-42-8	D6, E2	eD1	HH	#1, #8	99%	132	22,627	--	--	--	--	52,900	Calculated NOAEL-based ESLB for Northern Cardinal	0%	0%	172,000	Calculated LOAEL-based ESLB for Northern Cardinal	0%	0%	Boron was detected in 99% of 132 total samples collected. 38% of those samples have detected concentrations that exceed the MDEQ-recommended avian benchmark of 10,000 ug/kg (50 samples). There is no on-site data for Boron. The maximum detected concentration is 22,627 ug/kg at F1-02 0-1" from the COM Blinded Sampling Effort. There is no background information for Boron. It was eliminated from HH based on leach testing results. When Boron was identified as a Leach Study Analyte, Dow performed further evaluation including the calculation of a NOAEL-based ESLB for the Northern Cardinal and this is the screening value used in this comparison. When compared to a calculated NOAEL-based ESLB for the Northern Cardinal, all detected concentrations and all reporting limits are lower than the calculated NOAEL-based ESLB. When a LOAEL-based ESLB is calculated, all detected concentrations and reporting limits are below the LOAEL-based ESLB.	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Background.
SVOCs	Fluoranthene	206-44-0	D6, E2	eD1	HH	#1, #8	82%	227	9,270	122,000	USEPA Region 5 ESL	0%	67%	398,000	Calculated NOAEL-based ESLB for American Robin	0%	0%	1,989,000	Calculated LOAEL-based ESLB for American Robin	0%	0%	There are no exceedances of the US EPA Region 5 ESL of 122,000 ug/kg. Fluoranthene was identified as a Leach Study Analyte and Dow completed further evaluation of those analytes in 2013, which included calculating a NOAEL-based ESLB for the American Robin (398,000 ug/kg). This is the value that was used in the screening comparison. When comparing to the NOEAL-based calculated ESLB for the American Robin, all detected concentrations and reporting limits are less than the calculated ESLB. Further evaluation was completed for Low Molecular Weight (LMW) and High Molecular Weight (HMW) PAHs (Fluoranthene is a LMW PAH). When concentrations of LMW PAHs are summed together for each sample and compared to the LMW ESLB for mammals (100,000 ug/kg), there are no detected concentrations or RLs that exceed the LMW ESLB. When a LOAEL-based ESLB is calculated for an American Robin, there are no detected concentrations or reporting limits that exceed this calculated ESLB.	Eliminated in 27 June 2014 Eco Working Meeting #3 based on the LMW PAHs totals evaluation.
Metals	Selenium	7782-49-2	D6, E3	eD2	HH	#1, #11	34%	227	5,720	28	USEPA Region 5 ESL	33%	0%	1,930	Calculated NOAEL-based ESLB for American Robin	2%	0%	4,190	Calculated LOAEL-based ESLB for Northern Cardinal	1%	0%	100% of all detections and reporting limits exceed the MDEQ-recommended ESLB of 28 ug/kg. The maximum detected concentration from selenium was detected off-site in the COM Blinded Sampling effort at F-01 0-1" (5,720 ug/kg). Detected concentrations on-site range from 196-950 ug/kg. Statewide background is 410 ug/kg (mean + 1 std dev). 54 detected results exceed the Statewide background value and are located both on- and off-site. Modified Urban background is 770 ug/kg (mean + 1 std dev). 27 detected results exceed the Modified Urban Background value and only one of those detections is on-site (DOS-1 = 950 ug/kg). Selenium was identified as a Leach Study Analyte and in 2013, Dow completed further evaluation for the Leach Study Analytes, including calculating a NOAEL-based ESLB for the American Robin, which is the screening value used in this comparison. When compared to the calculated NOAEL-based ESLB, only 5 detected results exceed the benchmark (no RLs exceed the benchmark). Two of the detected results that exceed the ESLB were in the COM Blinded Sampling effort at C-02 1-6" (3,540.5 ug/kg) and F-01 1-1" (5,720 ug/kg). The remaining three detected results that exceed the ESLB were in the 2010 MDEQ sampling effort at the following locations: F1-02 0-1" (2,182.52 ug/kg), F1-02 1-6" (2,409.3 ug/kg), and Site2-03 1-6" (2,100 ug/kg). When a LOAEL-based ESLB is calculated based on the Northern Cardinal, only 1 detected concentration exceeds the calculated ESLB: F-01 0-1" (5,720 ug/kg) from the COM data set. There are no reporting limits that exceed the calculated ESLB.	Eliminated in 5 September 2014 Meeting based on lines of justification included spatial distribution

Table 5-7
Ecological Screening Results - Category 2 and 3
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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	Human Health Lines of Justification	Eco Lines of Justification	Decision
Metals	Cadmium	7440-43-9	A2	eBKG2	Eco	#2	92%	128	2,800	0%	0%	360	21%	5%	Metals Screen-out by Regional Background Screening Levels	Metals Screen-out by Modified Urban Background	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Modified Urban Background
Metals	Magnesium	7439-95-4	A2	eBKG2	HH, no Eco	#2	100%	155	8,000,000	8%	0%	--	--	--	Metals Screen-out by Regional Background Screening Levels	Metals Screen-out by Modified Urban Background	Eliminated in 27 June 2014 Eco Working Meeting #3 based on Modified Urban Background

Note: There are no analytes in Category 3

Table 5-8
Ecological Screening Results - Category 4
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										NOAEL-based ESLB Evaluation			LOAEL-based ESLB Evaluation						
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	NOAEL-based ESLB ug/kg	Source of NOAEL ESLB	% RLs Exceed NOAEL ESLB	LOAEL-based ESLB ug/kg	Source of LOAEL ESLB	% RLs Exceed LOAEL ESLB	New Category Assignment	Human Health Lines of Justification	Eco Lines of Justification	Notes - Detection Evaluation	Recommendation	Decision
SVOCs	1,2,3-Trichlorobenzene	87-61-6	B3	eA1	HH, no Eco	99	87	0%	0%	NA	--	--	11,100	USEPA Region 5 ESL (Updated)	0%	#1,6	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Not detected; 100% RLs meet the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 4 to Category 1.	1,2,3-Trichlorobenzene was only analyzed for in the 2010 Dow samples. The updated US EPA Region 5 ESLs included an ESL for 1,2,3-trichlorobenzene. All RLs are less than the US EPA Region 5 ESL. The ESL is higher than the lowest HH criteria. This analyte now meets the Category 1 criteria. Recommend elimination.	Eliminate based on US EPA Region 5 ESL	Eliminate based on 4 September 2014 MDEQ Email
VOCs	cis-1,2-Dichloroethene	156-59-2	B3	eA1	HH, no Eco	51	1,400	0%	0%	NA	--	--	8,280	USEPA Region 5 ESL	0%	#1,6	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	1,1-Dichloroethene used as surrogate. Not detected; 100% RLs meet the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 4 to Category 1.	cis-1,2-Dichloroethene was included in the 2005 Dow On-Site sampling effort and in the 2010 MDEQ samples. Further review identified a US EPA Region 5 ESL for cis-1,2-dichloroethene. All RLs are less than the US EPA Region 5 ESL. The ESL is higher than the lowest HH criteria. This analyte now meets the Category 1 criteria. Recommend elimination.	Eliminate based on US EPA Region 5 ESL	Eliminate based on 4 September 2014 MDEQ Email
SVOCs	Chlorpyrifos	2921-88-2	D4, E1	eA1	HH, no Eco	132	130	0%	1%	145	NOAEL American Robin	1%	1,450	LOAEL American Robin	0%	#1,6	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Not detected; 100% RLs meet the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 4 to Category 1.	Chlorpyrifos was only analyzed for in the 2010 Dow and MDEQ samples. Analyte was eliminated in part because Dow 2010 sample RLs were < HH criteria and 80% of total samples had RLs < criteria. There is no ESLB for chlorpyrifos available. A NOAEL-based ESLB was calculated for the American Robin (145 ug/kg) and all but 1 sample have RLs that meet the NOAEL ESLB. When a LOAEL-based ESLB is calculated for the American Robin (1,450 ug/kg), all RLs are below this criteria. Recommend elimination based on the NOAEL-based ESLB, which moves this analyte to Category 1.	Eliminate based on the NOAEL-based ESLB	Eliminate based on 4 September 2014 MDEQ Email
SVOCs	Disulfoton	298-04-4	D4, E1	eA1	HH, no Eco	72	2.7	0%	100%	10.2	NOAEL American Robin	53%	102	LOAEL American Robin	0%	#1,6	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Not detected; 100% RLs meet the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 4 to Category 1.	Disulfoton was only analyzed for in the 2006 COM Blinded Sampling effort. There was no MDEQ criteria and the EPA RSLs were used. For this analyte, the RLs only exceeded the EPA Protection of GW SSL and not the Residential Soil RSL. There is no ESLB for disulfoton available. A NOAEL-based ESLB was calculated for an American Robin (10.2 ug/kg) and 47% of samples have RLs that meet the NOAEL-based ESLB. The RLs fall within a range of 9.21 ug/kg - 24 ug/kg. When a LOAEL-based ESLB is calculated for the American Robin (102 ug/kg), all RLs meet the ESLB. Recommend elimination based on the LOAEL-based ESLB, which will result in this analyte moving to Category 1 for elimination.	Eliminate based on the LOAEL-based ESLB	Eliminate based on 4 September 2014 MDEQ Email
SVOCs	Methyl chlorpyrifos	5598-13-0	B3	eA1	HH, no Eco	99	1,700	0%	0%	145	NOAEL American Robin	0%	1,450	LOAEL American Robin	0%	#6	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Chloropyrifos used as surrogate. Not detected; 100% RLs meet the ESLB. This analyte moves from Category 4 to Category 6.	Methyl chlorpyrifos was only analyzed for in the 2010 Dow samples. There is no ESLB for methyl chlorpyrifos available. Using chlorpyrifos as a surrogate, a NOAEL-based ESLB was calculated and all RLs meet this NOAEL-based value. Recommend elimination based on the NOAEL-based ESLB.	Eliminate based on the NOAEL-based ESLB	Eliminate based on 4 September 2014 MDEQ Email
SVOCs	4-Nitroquinoline-1-oxide	56-57-5	B3	eA1	--	72	--	--	--	NA	--	--	122	USEPA Region 5 ESL	0%	#6	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Not detected; 100% RLs meet the ESLB. This analyte moves from Category 4 to Category 6.	4-Nitroquinoline-1-oxide was only analyzed for in the 2006 COM Blinded Sampling effort. This analyte was not carried forward into the 2010 sampling campaign.	Eliminate based on US EPA Region 5 ESL	Eliminate based on 4 September 2014 MDEQ Email
SVOCs	cis-Nonachlor	5103-73-1	B3	eA1	--	99	--	--	--	NA	--	--	1,400	LANL LOAEL American Robin	0%	#6	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Chlordane used a surrogate. Not detected; 100% RLs meet the ESLB. This analyte moves from Category 4 to Category 6.	cis-Nonachlor was only analyzed for in the 2010 Dow samples. When compared to the LANL LOAEL ESLB for the American Robin (1,450 ug/kg), all RLs meet the ESLB. Recommend elimination based on the LANL LOAEL, which will result in this analyte moving to Category 1 for elimination.	Eliminate based on LANL LOAEL American Robin	Eliminate based on 4 September 2014 MDEQ Email
SVOCs	o,p'-DDD	53-19-0	B3	eA1	--	99	--	--	--	NA	--	--	93	USEPA Eco SSL	0%	#6	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	DDT and metabolites used as surrogate. Not detected; 100% RLs meet the ESLB. This analyte moves from Category 4 to Category 6.	o,p'-DDD was only analyzed for in the 2010 Dow samples.	Eliminate based on USEPA EcoSSL	Eliminate based on 4 September 2014 MDEQ Email
SVOCs	trans-Nonachlor	39765-80-5	B3	eA1	--	99	--	--	--	NA	--	--	1,400	LANL LOAEL American Robin	0%	#6	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Chlordane used as surrogate. Not detected; 100% RLs meet the ESLB. This analyte moves from Category 4 to Category 6.	trans-Nonachlor was only analyzed for in the 2010 Dow samples.	Eliminate based on LANL LOAEL American Robin	Eliminate based on 4 September 2014 MDEQ Email
VOCs	2,2-Dichloropropane	594-20-7	B3	eA1	--	127	--	--	--	NA	--	--	32,700	USEPA Region 5 ESL	0%	#6	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	1,2-Dichloropropane used as surrogate. Not detected; 100% RLs meet the ESLB. This analyte moves from Category 4 to Category 6.	2,2-Dichloropropane was only analyzed for in the 2010 Dow and MDEQ samples.	Eliminate based on US EPA Region 5 ESL	Eliminate based on 4 September 2014 MDEQ Email
Pesticides	Endrin ketone	53494-70-5	B3	eA1	--	56	--	--	--	NA	--	--	14	LANL LOAEL Mammals	36%	#9	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Endrin used as surrogate. Not detected; 64% RLs meet the ESLB. This analyte moves from Category 4 to Category 9.	Endrin ketone was only analyzed for in the 2005 Dow On-Site sampling effort and in the 2010 MDEQ samples. Out of 56 total samples collected, 20 samples (36%) have reporting limits that exceed the ESLB. Of those 20 samples, only 2 of them are off-site: O1-02 6-12" (18 ug/kg) and B1-01 6-12" (180 ug/kg). Both of these sample locations are associated with an off-site source not related to the MAS historical release. The location of this maximum RL is in the area where a removal action was completed for the rail spur.	Eliminate based on LANL LOAEL Mammals	Based on 5 September 2014 Eco Working Meeting #5, total endrins will be discussed in the Uncertainty Analysis
VOCs	1,1,2-Trichlorotrifluoroethane	76-13-1	D4, E1	eA1	HH, no Eco	28	1,700	0%	4%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	1,1,2-Trichlorotrifluoroethane was only analyzed for in the 2010 MDEQ samples. This analyte was also eliminated for HH in part based on 80% of total samples having RLs < criteria and it was only analyzed for in the 2010 MDEQ samples with elevated RLs.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)

Table 5-8
Ecological Screening Results - Category 4
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										NOAEL-based ESLB Evaluation			LOAEL-based ESLB Evaluation							
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	NOAEL-based ESLB ug/kg	Source of NOAEL ESLB	% RLs Exceed NOAEL ESLB	LOAEL-based ESLB ug/kg	Source of LOAEL ESLB	% RLs Exceed LOAEL ESLB	New Category Assignment	Human Health Lines of Justification	Eco Lines of Justification	Notes - Detection Evaluation	Recommendation	Decision
SVOCs	1,2-Diphenyl-hydrazine	122-66-7	D4, E1	eA1	HH, no Eco	33	0.27	0%	100%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	1,2-Diphenyl-hydrazine was only analyzed for in the 2010 MDEQ samples. Analyte was eliminated for HH in part because it was only analyzed for in the 2010 MDEQ samples with elevated RLs. There was no MDEQ criteria and the EPA RSLs were used. For this analyte, the RLs only exceeded the EPA Protection of GW SSL and not the Residential Soil RSL.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	1,3-Dichloropropane	142-28-9	D4, E1	eA1	HH, no Eco	28	250	0%	50%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	1,3-Dichloropropane was only analyzed for in the 2010 MDEQ samples. Analyte was eliminated for HH in part because it was only analyzed for in the 2010 MDEQ samples with elevated RLs. There was no MDEQ criteria and the EPA RSLs were used. For this analyte, the RLs only exceeded the EPA Protection of GW SSL and not the Residential Soil RSL.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	2,6-Dimethylphenol	576-26-1	D4, E1	eA1	HH, no Eco	33	330	0%	97%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	2,6-Dimethylphenol was only analyzed for in the 2010 MDEQ samples. Eliminated for HH in part because it was an analyte only analyzed for in the 2010 MDEQ samples and it had elevated RLs.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	2-Propanol	67-63-0	D4, E1	eA1	HH, no Eco	28	9,400	0%	82%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	2-Propanol was only analyzed for in the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Ethyl ether	60-29-7	D4, E1	eA1	HH, no Eco	51	200	0%	55%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Ethyl ether was only analyzed for in the 2005 Dow On-Site sampling effort and in the 2010 MDEQ samples. This analyte was eliminated for HH in part based on the 2005/2006 RLs < criteria and the MDEQ 2010 RLs were > criteria.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Ethylene oxide	75-21-8	D4, E1	eA1	HH, no Eco	28	0.0091	0%	100%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Ethylene oxide was only analyzed for in the 2010 MDEQ samples. Analyte was eliminated for HH in part based on that it was only analyzed for in the 2010 MDEQ samples with elevated RLs. There was no MDEQ criteria and the EPA RSLs were used.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	Pentochlorethane	76-01-7	D4, E1	eA1	HH, no Eco	72	0.36	0%	100%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Pentochlorethane was only analyzed for in the 2006 COM Blinded Sampling effort. This analyte was eliminated for HH in part because it was a 2005/2006 analyte that was eliminated from all 2010 sampling. Additionally, there was no MDEQ criteria and the EPA RSLs were used. For this analyte, the RLs only exceeded the EPA Protection of GW SSL and not the Residential Soil RSL.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	trans-1,4-Dichloro-2-butene	110-57-6	D4, E1	eA1	HH, no Eco	123	0.00054	0%	100%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	trans-1,4-Dichloro-2-butene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and in the 2010 MDEQ samples. There was no MDEQ criteria and the EPA RSLs were used.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
Pesticides	Tris(2,3-dibromopropyl)phosphate	126-72-7	D4, E1	eA1	HH, no Eco	33	930	0%	18%	NA	--	--	--	--	--	Uncertainty Analysis	Not detected above Part 201/EPA criteria but have elevated RLs for NDs; Eliminated through a review of spatial distribution	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Tris(2,3-dibromopropyl)phosphate was only analyzed for in the 2010 MDEQ samples. This analyte was also eliminated for HH in part based on 80% of total samples having RLs < criteria and it was only analyzed for in the 2010 MDEQ samples with elevated RLs.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)

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										NOAEL-based ESLB Evaluation			LOAEL-based ESLB Evaluation							
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	NOAEL-based ESLB ug/kg	Source of NOAEL ESLB	% RLs Exceed NOAEL ESLB	LOAEL-based ESLB ug/kg	Source of LOAEL ESLB	% RLs Exceed LOAEL ESLB	New Category Assignment	Human Health Lines of Justification	Eco Lines of Justification	Notes - Detection Evaluation	Recommendation	Decision
SVOCs	(E)-alpha,beta-2,3,4,5,6-Heptachlorostyrene	29086-38-2	B3	eA1	--	99	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	(E)-alpha,beta-2,3,4,5,6-Heptachlorostyrene was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	(E)-beta-2,3,4,5,6-Hexachlorostyrene	90301-92-1	B3	eA1	--	99	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	(E)-beta-2,3,4,5,6-Hexachlorostyrene was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	(Z)-alpha,beta-2,3,4,5,6-Heptachlorostyrene	29086-39-3	B3	eA1	--	99	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	(Z)-alpha,beta-2,3,4,5,6-Heptachlorostyrene was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	(Z)-beta-2,3,4,5,6-Hexachlorostyrene	90301-93-2	B3	eA1	--	99	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	(Z)-beta-2,3,4,5,6-Hexachlorostyrene was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	2,3,4,5,6-Pentachlorostyrene	14992-81-5	B3	eA1	--	99	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	2,3,4,5,6-Pentachlorostyrene was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	4-Chlorotoluene	106-43-4	B3	eA1	HH, no Eco	127	2,500	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	4-Chlorotoluene was only analyzed for in the 2010 Dow and MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	4-tert-Butylphenol	98-54-4	B3	eA1	--	99	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	4-tert-Butylphenol was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	alpha-2,3,4,5,6-Hexachlorostyrene	68705-15-7	B3	eA1	--	99	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	alpha-2,3,4,5,6-Hexachlorostyrene was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	Benzyl dichloride	98-87-3	B3	eA1	--	33	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Benzyl dichloride was only analyzed for in the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)

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										NOAEL-based ESLB Evaluation			LOAEL-based ESLB Evaluation							
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	NOAEL-based ESLB ug/kg	Source of NOAEL ESLB	% RLs Exceed NOAEL ESLB	LOAEL-based ESLB ug/kg	Source of LOAEL ESLB	% RLs Exceed LOAEL ESLB	New Category Assignment	Human Health Lines of Justification	Eco Lines of Justification	Notes - Detection Evaluation	Recommendation	Decision
SVOCs	beta,beta-2,3,4,5,6-Heptachlorostyrene	29082-75-5	B3	eA1	--	99	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	beta,beta-2,3,4,5,6-Heptachlorostyrene was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	Bisphenol-A	80-05-7	B3	eA1	HH, no Eco	99	140,000	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Bisphenol-A was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Bromobenzene	108-86-1	B3	eA1	HH, no Eco	51	550	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Bromobenzene was only analyzed for in the 2005 Dow On-Site samples and the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	Caprolactam	105-60-2	B3	eA1	HH, no Eco	33	120,000	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Caprolactam was only analyzed for in the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Chlorobromomethane	74-97-5	B3	eA1	--	51	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Chlorobromomethane was only analyzed for in the 2005 Dow On-Site sampling effort and the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Chloroethane	75-00-3	B3	eA1	HH, no Eco	123	8,600	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Chloroethane was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and in the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Cyclohexanone	108-94-1	B3	eA1	HH, no Eco	28	17,000	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Cyclohexanone was only analyzed for in the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	Ethyl methanesulfonate	62-50-0	B3	eA1	--	72	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Ethyl methanesulfonate was only analyzed for in the 2006 COM Blinded Sampling effort. This analyte was not carried forward into the 2010 sampling campaign.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	Hexachloropropene	1888-71-7	B3	eA1	--	72	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Hexachloropropene was only analyzed for in the 2006 COM Blinded Sampling effort. This analyte was not carried forward into the 2010 sampling campaign.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)

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										NOAEL-based ESLB Evaluation			LOAEL-based ESLB Evaluation							
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	NOAEL-based ESLB ug/kg	Source of NOAEL ESLB	% RLs Exceed NOAEL ESLB	LOAEL-based ESLB ug/kg	Source of LOAEL ESLB	% RLs Exceed LOAEL ESLB	New Category Assignment	Human Health Lines of Justification	Eco Lines of Justification	Notes - Detection Evaluation	Recommendation	Decision
VOCs	n-Butanol	71-36-3	B3	eA1	HH, no Eco	28	19,000	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	n-Butanol was only analyzed for in the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	Ronnel	299-84-3	B3	eA1	HH, no Eco	99	17,000	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Ronnel was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Trihalomethanes, Total	STL00209	B3	eA1	--	28	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Trihalomethanes, Total were only analyzed for in the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	2-Chloroethyl vinyl ether	110-75-8	B1	eA1	HH, no Eco	28	1,900,000	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	2-Chloroethyl vinyl ether was only analyzed for in the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	4,4'-Methylene bis(2-chloroaniline)	101-14-4	B1	eA1	HH, no Eco	33	6,800	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	4,4'-Methylene bis(2-chloroaniline) was only analyzed for in the 2010 MDEQ samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Ethyl tert-Butyl Ether	637-92-3	B1	eA1	HH, no Eco	99	980	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Ethyl tert-Butyl Ether was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Isopropyl Ether	108-20-3	B1	eA1	HH, no Eco	99	600	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Isopropyl Ether was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	Methyl-t-butyl ether	1634-04-4	B1	eA1	HH, no Eco	23	800	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Methyl-t-butyl ether was only analyzed for in the 2005 Dow On-site sampling effort. This analyte was not carried forward into the 2010 sampling campaign.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
VOCs	t-Butanol	75-65-0	B1	eA1	HH, no Eco	99	78,000	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	t-Butanol was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)

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										NOAEL-based ESLB Evaluation			LOAEL-based ESLB Evaluation							
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	NOAEL-based ESLB ug/kg	Source of NOAEL ESLB	% RLs Exceed NOAEL ESLB	LOAEL-based ESLB ug/kg	Source of LOAEL ESLB	% RLs Exceed LOAEL ESLB	New Category Assignment	Human Health Lines of Justification	Eco Lines of Justification	Notes - Detection Evaluation	Recommendation	Decision
VOCs	tert-Amyl Methyl Ether	994-05-8	B1	eA1	HH, no Eco	99	3,900	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by all NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	tert-Amyl Methyl Ether was only analyzed for in the 2010 Dow samples.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	bis(2-Chloroisopropyl)ether	39638-32-9	B2	eA1	--	23	--	--	--	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by off-site NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	bis(2-Chloroisopropyl)ether was only analyzed for in the 2005 Dow On-Site Sampling effort. This analyte was not carried forward into the 2010 sampling campaign.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	Hexabromobenzene	87-82-1	B2	eA1	HH, no Eco	8	5,400	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by off-site NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Hexabromobenzene was only analyzed for in 8 samples of the 2005 Dow On-site sampling effort. This analyte was not carried forward into the 2010 sampling campaign.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)
SVOCs	Hexabromobiphenyl	HEX - varies	B2	eA1	HH, no Eco	8	1,200	0%	0%	NA	--	--	--	--	--	Uncertainty Analysis	Screen-out by off-site NDs; RLs met MDEQ target detection levels	Uncertainty Discussion: Analyte was not detected; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Hexabromobiphenyl was only analyzed for in 8 samples of the 2005 Dow On-site sampling effort. This analyte was not carried forward into the 2010 sampling campaign.	Discuss in Uncertainty Analysis	MDEQ Agrees with addressing this analyte in Uncertainty Analysis (4 September 2014 MDEQ Email and 5 September 2014 Meeting)

Table 5-9
Ecological Screening Results - Category 5
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													NOAEL-based ESLB Evaluation					LOAEL-based ESLB Evaluation									
Analyte Group	**Analyte**	**CAS Number**	**Screened Out HH**	**Screened Out Eco**	**Lower criteria**	**FWS Email**	**Detection Frequency**	**No. Samples Detected**	**Total # Samples**	**Lowest HH Criteria**	**% Detects Exceed HH Criteria**	**% RLs Exceed HH Criteria**	**NOAEL-based ESLB ug/kg**	**Source of NOAEL ESLB**	**% Detects Exceed NOAEL ESLB**	**% RLs Exceed NOAEL ESLB**	**Max Detected Off-site (ug/kg)**	**LOAEL-based ESLB (ug/kg)**	**Source of LOAEL ESLB**	**% Detects Exceed LOAEL ESLB**	**% RLs Exceed LOAEL ESLB**	**Max Detected Off-site (ug/kg)**	**New LOAEL-based HQ**	**New Category Assignment**	**Human Health Lines of Justification**	**Eco Lines of Justification**	**Notes - Detection Evaluation**	**Recommendation**	**Decision**
VOCs	2-Chlorotoluene	95-49-8	D2	eA2	HH, no Eco	#5	1%	1	127	3,300	0%	0%	9,955	NOAEL American Robin	0%	0%	143.5	100,000	LOAEL American Robin	0%	0%	143.5	0.001	#1,7	All results meet HHRA criteria	Detected in only 1 sample out of 127 total samples collected; All detects < ESLB; 100% RLs meet ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	2-Chlorotoluene was detected in only 1 sample out of 127 total samples collected. The one off-site sample was from the 2010 Dow sampling effort (F1-01 at a concentration of 143.5 ug/kg). There have been no on-site samples analyzed for 2-chlorotoluene. There is no ESLB. When a NOAEL-based ESLB is calculated, all detected concentrations and RLs are less than the NOAEL-based ESLB . Recommend elimination based on the NOAEL-based ESLB evaluation. When a LOAEL-based ESLB is calculated, all RLs meet the value. Screening HQ based on the LOAEL is 0.001.	Recommend elimination based on NOAEL-based ESLB.	Eliminated based on 4 September 2014 MDEQ Email
SVOCs	Propachlor	1918-16-7	D2	eA2	HH, no Eco	#5	1%	1	99	1,900	0%	0%	691	NOAEL Northern Cardinal	0%	0%	16.66	6,910	LOAEL Northern Cardinal	0%	0%	16.66	0.002	#1,7	All results meet HHRA criteria	Detected in only 1 sample out of 99 total samples collected; All detects < ESLB; 100% RLs meet ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Propachlor was only detected in 1 sample out of 99 total samples collected. This 1 sample was from the 2010 Dow sampling effort (F1-01 at 16.166 ug/kg). There have been no on-site samples analyzed for propachlor. There is no ESLB for propachlor. When a NOAEL-based ESLB is calculated for Propachlor, all detected concentrations and RLs are less than the NOAEL-based value. Recommend elimination based on the NOAEL-based ESLB. When a LOAEL-based ESLB is calculated, the detected result and the RLs all meet this level. The LOAEL-based screening HQ is 0.002.	Recommend elimination based on NOAEL-based ESLB.	Eliminated based on 4 September 2014 MDEQ Email
Pesticides	Azobenzene	103-33-3	D2	eA2	HH, no Eco	#5	4%	2	56	4,200	0%	0%	1,574	NOAEL American Robin	0%	4%	No off-site detections	15,700	LOAEL American Robin	0%	0%	No off-site detections	--	#1,7	All results meet HHRA criteria	Detected in 2 samples out of 56 total samples collected; All detects < ESLB; 100% RLs meet ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Azobenzene was detected in 2 samples out of 56 total samples. Both detections were on-site in DOS-22 and DOS-8. There is no ESLB for azobenzene. When a NOAEL-based ESLB is calculated, both detections and 96% of RLs are less than this value. The 2 RLs that exceed the NOAEL-based ESLB are located on-site at DOS-17 and DOS-20. Recommend elimination based on NOAEL-based ESLB. When a LOAEL-based ESLB is calculated, both detections and all RLs are less than this LOAEL-based value. Azobenzene was never detected off-site.	Recommend elimination based on detection frequency and NOAEL-based ESLB.	Eliminated based on 4 September 2014 MDEQ Email
SVOCs	1,3,5-Trimethylbenzene	108-67-8	D2	eA2	HH, no Eco	#5	4%	2	51	1,100	0%	0%	12,912	NOAEL American Robin	0%	0%	74	129,000	LOAEL American Robin	0%	0%	74	0.0006	#1,7	All results meet HHRA criteria	Detected in 2 samples out of 51 total samples collected; All detects < ESLB; 100% RLs meet ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	1,3,5-Trimethylbenzene was detected 2 times out of 51 total samples. It was detected one time on-site in DOS-2 (81 ug/kg) and one time off-site at B1-01 (74 ug/kg). B1-01 is a sample location associated with an off-site source not related to the MAS historical release. There are no other off-site detections. There is no ESLB available for 1,3,5-trimethylbenzene. When a NOAEL-based ESLB is calculated, both detections and all RLs are less than this value. Recommend elimination based on the NOAEL-based ESLB. When a LOAEL-based ESLB is calculated, both detected concentrations and all of the RLs are less than this LOAEL-based value. The LOAEL-based screening HQ is 0.0006.	Recommend elimination based on NOAEL-based ESLB.	Eliminated based on 4 September 2014 MDEQ Email
VOCs	Cresol, Total	MEPH1314	D4, E1	eA2	HH, no Eco	#5	33%	75	227	1,000	0%	16%	675	NOAEL Northern Cardinal	0%	27%	237	6,750	LOAEL Northern Cardinal	0%	0.4%	237	0.04	#1,7	All results meet HHRA criteria; 16% of RLs exceed HHRA criteria; Eliminated based on spatial distribution	Detected in 75 samples out of 227 total samples collected; All detects < ESLB; 99.6% RLs meet ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Total cresol was detected in 75 of 227 total samples. All of the detections occurred off-site. It was detected in 3 of the 2010 Dow samples and all remaining detections were in the 2006 COM Blinded Sampling effort. The maximum detected off-site concentration was found at I1a-02 1-6" (237 ug/kg). It was not detected on-site. There is no ESLB for total cresol. When a NOAEL-based ESLB is calculated, all detections and 73% of RLs are less than this level, all originating from the 2006 COM data set demonstrating adequate off-site sampling density to demonstrate that total cresol is not a COC. The 27% of RLs that exceed the NOAEL-based ESLB are from the on-site DOS sampling and all of the 2010 MDEQ samples. When a LOAEL-based ESLB is calculated, all detections and all RLs, with one exception of the maximum reporting limit (on-site at DOS-20 at 8,200 ug/kg), meeting this LOAEL-based level. Recommend elimination based on the LOAEL-based ESLB. The LOAEL-based screening HQ is 0.04.	Recommend elimination based on LOAEL-based ESLB.	Eliminated based on 4 September 2014 MDEQ Email
SVOCs	o-Phenylphenol	90-43-7	D3	eA2	HH, no Eco	#5	6%	6	99	470	0%	0%	452,119	NOAEL Northern Cardinal	0%	0%	215	2,261,000	LOAEL Northern Cardinal	0%	0%	215	0.0005	#1,8	All results meet HHRA criteria	No detects or RLs exceed the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	o-Phenylphenol was detected in only 6 samples out of 99 total samples collected. All sample locations were off-site. No on-site samples have been analyzed for this constituent. The off-site maximum detected concentration was detected in the 2010 Dow Sampling effort at F1-01 0-1" (214.5 ug/kg). There is no ESLB for o-phenylphenol. When a NOAEL-based ESLB is calculated, all 6 detected concentrations and RLs meet this NOAEL-based value. Recommend elimination based on the NOAEL-based value.	Recommend elimination based on NOAEL-based ESLB.	Eliminated based on 4 September 2014 MDEQ Email
VOCs	Isopropylbenzene	98-82-8	D3	eA2	HH, no Eco	#5	8%	4	51	3,200	0%	0%	406	NOAEL American Robin	0%	6%	No off-site detections	4,060	LOAEL American Robin	0%	0%	No off-site detections	NA	#1,8	All results meet HHRA criteria	No detects or RLs exceed the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Isopropylbenzene was detected a total of 4 times out of 51 total samples. The 4 detections were all on-site at DOS-2, DOS-4, DOS-11 and DOS-21. There were no detections off-site. There is no ESLB for isopropylbenzene. When a NOAEL-based ESLB is calculated, all detected concentrations and 94% of RLs are less than this value. The three samples with RLs that exceed the NOAEL-based ESLB are found at I1a-03 0-1" (410 ug/kg), N1-02 0-1" (480 ug/kg) and Site2-02 0-1" (430 ug/kg). When a LOAEL-based ESLB is calculated, all detected concentrations and RLs are less than this value. Recommend eliminating this analyte ba sed on the fact that there were no detections off-site and all reporting limits meet the LOAEL-based ESLB.	Recommend elimination based on no off-site detections and NOAEL-based ESLB.	Eliminated based on 4 September 2014 MDEQ Email
SVOCs	1,2,4-Trimethylbenzene	95-63-6	D3	eA2	HH, no Eco	#5	18%	9	51	570	0%	0%	8,714	NOAEL American Robin	0%	0%	250	87,100	LOAEL American Robin	0%	0%	250	0.003	#1,8	All results meet HHRA criteria	No detects or RLs exceed the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	1,2,4-Trimethylbenzene was detected in 9 out of 51 total samples. It was detected in 6 on-site samples: DOS-1, DOS-2, DOS-12, DOS-14, DOS-20 and DOS-21; and 3 detections were off-site at B1-01 6-12" (250 ug/kg), B1-03 1-6" (80 ug/kg), O1-02 6-12" (54 ug/kg). The off-site detections are found at sample locations associated with an off-site source not related to the MAS historical release. There is no ESLB for 1,2,4-Trimethylbenzene. When a NOAEL-based ESLB is calculated, all detected concentrations and RLs are less than this value. Recommend elimination based on the NOAEL-based ESLB. When a LOAEL-based ESLB is calculated, 100% of detected concentrations and RLs meet this value. The LOAEL-based screening HQ is less than 1 (0.003).	Recommend elimination based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
VOCs	Dibenzofuran	132-64-9	D6, E1	eA2	HH, no Eco	#5	43%	24	227	1,700	0.4%	0.4%	2,134	NOAEL American Robin	0%	0%	240	21,300	LOAEL American Robin	0%	0%	240	0.01	#1,8	Dibenzofuran was eliminated based on a review of spatial distribution.	No detects or RLs exceed the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Dibenzofuran was detected in 24 samples out of 227 total samples. 7 of the detections occurred on-site with concentrations ranging from 15 ug/kg - 1,800 ug/kg (this one detection at DOS-20 was an order of magnitude greater than the next highest detection of 570 at DOS-2). The remainder of the detections were off-site with concentrations ranging from 8.47 to 240 ug/kg. The maximum detected off-site concentration (240 ug/kg) was located at B1-02 1-6" from the 2010 Dow sampling effort. Many of the off-site detections were from sample locations at areas with known off-site issues, including: B1, C-02, H-02, O-01, W-03, A2, F1, and O1. The maximum detected concentration from a sample that is not associated with a known off-site issue is 69 ug/kg from Site2-02 0-6". There is no ESLB for dibenzofuran. When a NOAEL-based ESLB is calculated, 100% of detected concentrations and RLs are less than this value . When a LOAEL-based ESLB is calculated, all detected concentrations and RLs meet this value. Recommend eliminate based on the NOAEL-based ESLB.	Eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email

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Ecological Screening Results - Category 5
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													NOAEL-based ESLB Evaluation					LOAEL-based ESLB Evaluation									
Analyte Group	**Analyte**	**CAS Number**	**Screened Out HH**	**Screened Out Eco**	**Lower criteria**	**FWS Email**	**Detection Frequency**	**No. Samples Detected**	**Total # Samples**	**Lowest HH Criteria**	**% Detects Exceed HH Criteria**	**% RLs Exceed HH Criteria**	**NOAEL-based ESLB ug/kg**	**Source of NOAEL ESLB**	**% Detects Exceed NOAEL ESLB**	**% RLs Exceed NOAEL ESLB**	**Max Detected Off-site (ug/kg)**	**LOAEL-based ESLB (ug/kg)**	**Source of LOAEL ESLB**	**% Detects Exceed LOAEL ESLB**	**% RLs Exceed LOAEL ESLB**	**Max Detected Off-site (ug/kg)**	**New LOAEL-based HQ**	**New Category Assignment**	**Human Health Lines of Justification**	**Eco Lines of Justification**	**Notes - Detection Evaluation**	**Recommendation**	**Decision**
VOCs	Molybdenum	7439-98-7	D6, E1	eA2	HH, no Eco	#5	61%	30	56	1,500	2%	39%	71,073	NOAEL Northern Cardinal	0%	0%	2000	355,000	LOAEL Northern Cardinal	0%	0%	2000	0.01	#1,8	Molybdenum was eliminated based on a review of spatial distribution.	No detects or RLs exceed the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Molybdenum was detected in 30 out of 56 total samples. Only 1 detection was on-site at DOS-10 (390 ug/kg). The remaining detections were off-site and ranged in concentration from 96 - 2,000 ug/kg. The maximum detected off-site concentration was located at B1-03 0-1" (2,000 ug/kg) in the 2010 MDEQ sampling effort. Many of the detections occurred in sample locations associated with an off-site source not related to the MAS historical release, including: A2, B1, F1, I1a, O1, and W1. The maximum detected concentration from a sample that is not associated with an off-site source not related to the MAS historical release is 640 ug/kg from Site1-13 0-1". There is no ESLB available for Molybdenum. When a NOAEL-based ESLB is calculated all detected concentrations and RLs are less than this value. Recommend elimination based on the NOAEL-based ESLB. When a LOAEL-based ESLB is calculated, all detected concentrations and RLs are below the LOAEL-based value. LOAEL-based screening HQ is 0.01.	Eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
SVOCs	Lithium	7439-93-2	D6, E2	eA2	HH, no Eco	#5	100%	155	155	3,400	72%	0%	38,640	NOAEL American Robin	0%	0%	16569	386,000	LOAEL American Robin	0%	0%	16569	0.04	#1,8	Lithium was eliminated based on the results of the site-specific leach study.	No detects or RLs exceed the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Lithium was detected in all 155 samples (100% detection frequency). On-site detected concentrations ranged from 2,490 ug/kg (DOS-13) - 12,800 ug/kg (DOS-2). Detected off-site concentrations ranged from 1,040 ug/kg (A2-01 6-12") - 16,569 ug/kg (B1-01 6-12"). There is no ESLB for lithium. When a NOAEL-based ESLB is calculated, all detected concentrations are less than the NOAEL-based value. When a LOAEL-based ESLB is calculated, all detected concentrations are less than the LOAEL-based value. Recommend elimination based on NOAEL-based ESLB.	Eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
SVOCs	Endosulfan, Total	115-29-7	D3	eA2	HH, no Eco	#5	59%	75	128	1,400,000	0%	0%	--	--	--	--	42	150,000	LANL (American Robin)	0%	0%	42	0.0003	#1,8	All results meet HHRA criteria	No detects or RLs exceed the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Endosulfan, Total was detected in 75 of 128 total samples. It was detected in only one sample collected on-site at DOS-21. All other detections were off-site with 2 detections in the 2010 MDEQ data and the remainder in the 2006 COM Blinded Sampling effort. The maximum detected off-site concentration is located at K-01 1-6" (42.01 ug/kg).	Eliminate based on comparison to LANL American Robin criteria and totals evaluation	Eliminated based on 4 September 2014 MDEQ Email
Metals	Strontium	7440-24-6	D6, E2	eA2	HH, no Eco	#5	100%	155	155	92,000	8%	0%	--	--	--	--	190000	960,000	LANL (Deer Mouse)	0%	0%	190000	0.2	#1,8	Strontium was eliminated based on the results of the site-specific leach study.	No detects or RLs exceed the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Strontium was detected in all 155 samples (100% detection frequency). It was detected on-site at concentrations ranging from 7,830 ug/kg (DOS-13) - 181, 000 ug/kg (DOS-18). Off-site detected concentrations ranged from 2,100 ug/kg (Site 1-13 6-12") - 190,000 ug/kg (B1-01 6-12"). After the maximum detected concentration, the next highest concentration is found at G1-02 (113,806 ug/kg) and G1-03 (79,000 ug/kg). **The USGS background value for all data (Mean + 1SD) for strontium is 108,000 ug/kg. There are 10 samples that exceed this value. 8 of those 10 samples are on-site. The 2 samples that are off-site include G1-02 6-12" (113,806 ug/kg) and B1-01 6-12" (190,000 ug/kg). Sample area B1 is associated with an off-site source not related to the MAS historical release. Recommend elimination based on the USGS Background Value.**	Eliminate based on comparison to LANL Deer Mouse criteria and USGS Background	Eliminated based on 5 September 2014 meeting based on USGS background.
Metals	Carbazole	86-74-8	D3	eA2	HH, no Eco	#5	17%	23	132	1,100	0%	0%	--	--	--	--	343	800,000	LANL (Deer Mouse)	0%	0%	343	0.0004	#1,8	All results meet HHRA criteria	No detects or RLs exceed the ESLB. Lowest Human Health criteria is < ESLB and screened out of HHRA. This analyte moves from Category 5 to Category 1.	Carbazole was detected in 23 out of 132 total samples. All detections were off-site. There is no on-site data for carbazole. 22 of the sample detections were in the 2010 Dow data set and 1 was in the 2010 MDEQ data set. The maximum detected off-site concentration was located at B1-03 1-6" (343 ug/kg).	Eliminate based on comparison to LANL Deer Mouse criteria	Eliminated based on 4 September 2014 MDEQ Email
VOCs	Mirex	2385-85-5	D2	eA2	HH, no Eco	#5	4%	2	56	9,600	0%	0%	66	NOAEL American Robin	0%	5%	No off-site detections	330	LOAEL American Robin	0%	0%	No off-site detections	--	#7	All results meet HHRA criteria	Detected in 2 samples out of 56 total samples collected; All detects < ESLB; 100% RLs meet ESLB. This sample moves from Category 5 to Category 7.	Mirex was only detected in 2 samples out of 56 total samples. The two detections were on-site at DOS-1 and DOS-2. There is no ESLB for mirex. When a NOAEL-based ESLB is calculated, all detected concentrations and 95% of RLs are less than this value. The three RLs that exceed the NOAEL-based value are found on-site (DOS-17, DOS-20) and one off-site location (B1-01), which is associated with off-site source not related to the MAS historical release. When a LOAEL-based ESLB is calculated, all detected concentrations and RLs are less than this value. Recommend eliminate based on no-off-site detections and NOAEL-based ESLB.	Eliminate based on not detected off-site and the NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
VOCs	1,1-Dichloropropene	563-58-6	C1, E1	eA2	--	#5	1%	1	127	--	--	--	3,136	NOAEL American Robin	0%	0%	9	31,400	LOAEL Northern Cardinal	0%	0%	9	0.0003	#7	Only detected once off-site. Eliminated on 7/8/11 Con call	Detected in 1 sample out of 127 total samples collected; All detects < ESLB; 100% RLs meet ESLB. This analyte moves from Category 5 to Category 7.	1,1-Dichloropropene was only detected 1 time in 127 total samples. It was detected off-site at O1-03 6-12" at a concentration of 9 ug/kg. It was not detected on-site. There is no ESLB for 1,1-dichloropropene. When a NOAEL-based ESLB is calculated, the one detected concentration and all RLs are less than this value. When a LOAEL-based ESLB is calculated, the one detected concentration and all RLs are less than the value. Recommend elimination based on NOAEL-based ESLB and detection frequency.	Eliminate based on detection frequency and NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
VOCs	Benzoic acid	65-85-0	D3	eA2	HH, no Eco	#5	15%	5	33	640,000	0%	0%	8,680	NOAEL American Robin	0%	0%	1500	86,800	LOAEL American Robin	0%	0%	1500	0.02	#8	All results meet HHRA criteria	No detects or RLs exceed the ESLB. This analyte moves from Category 5 to Category 8.	Benzoic acid was detected in 5 samples out of 33 total samples. It was only analyzed for in the MDEQ 2010 samples and all 5 detections were off-site (I1a-02 1-6", I1a-02 6-12", I1a-03, O1-02, Site 1-13). The maximum detected off-site concentration was found at I1a-02 6-12" (1,500 ug/kg). There is no ESLB for benzoic acid. When a NOAEL-based ESLB is calculated, all detections and reporting limits are less than this value. When a LOAEL-based ESLB is calculated, all detections and reporting limits are below this value. Recommend elimination based on the NOAEL-based ESLB.	Eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
Metals	Tetrahydrofuran	109-99-9	D3	eA2	HH, no Eco	#5	16%	8	51	1,900	0%	0%	180	NOAEL Northern Cardinal	0%	55%	No off-site detections	1,800	LOAEL Northern Cardinal	0%	2%	No off-site detections	NA	#8	All results meet HHRA criteria	No detects exceed the ESLB; 98% RLs meet ESLB. This analyte moves from Category 5 to Category 8.	Tetrahydrofuran was detected in 8 samples of the 51 total samples. All 8 detections were on-site at DOS-1, DOS-2, DOS-3, DOS-4, DOS-5, DOS-6, DOS-7, and DOS-8. It was not detected off-site. There is no ESLB for tetrahydrofuran. If a NOAEL-based ESLB is calculated, all detected concentrations and 45% of RLs are less than this value. The on-site data set had RLs that were less than the NOAEL-based value but the 2010 MDEQ data set RLs all exceed the NOAEL. If a LOAEL-based ESLB is calculated, all detected concentrations are less than this value and one RL exceeds this value (N1-02 0-1" 1,900 ug/kg). The LOAEL-based value is 1,800 ug/kg and the lowest human health criteria is 1,900 ug/kg. Tetrahydrofuran was eliminated because all detected concentrations and RLs met the lowest human health criteria. Recommend elimination based on the LOAEL-based ESLB.	Eliminate based on LOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
Pesticides	1,2,3-Trimethylbenzene	526-73-8	C2, E1	eA2	--	#5	13%	13	99	--	--	--	8,379	NOAEL American Robin	0%	0%	45	83,800	LOAEL American Robin	0%	0%	45	0.001	#8	Eliminated on 10/6/11 Con call	No detects or RLs exceed the ESLB. This analyte moves from Category 5 to Category 8.	1,2,3-Trimethylbenzene was only detected in 13 of 99 total samples. The detections were off-site. The detected concentrations ranged from 5-45 ug/kg. The maximum detected concentration was found at A2-02 6-12". There is no ESLB for 1,2,3-trimethylbenzene. When a NOAEL-based ESLB is calculated, all detected concentrations and RLs are less than the NOAEL-based value. When a LOAEL-based ESLB is calculated, all detected concentrations and RLs are less than the LOAEL-based value. Recommend elimination based on NOAEL-based value.	Eliminate based on spatial distribution and NOAEL-based ESLB.	Eliminated based on 4 September 2014 MDEQ Email

Table 5-9
Ecological Screening Results - Category 5
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													NOAEL-based ESLB Evaluation					LOAEL-based ESLB Evaluation										
Analyte Group	**Analyte**	**CAS Number**	**Screened Out HH**	**Screened Out Eco**	**Lower criteria**	**FWS Email**	**Detection Frequency**	**No. Samples Detected**	**Total # Samples**	**Lowest HH Criteria**	**% Detects Exceed HH Criteria**	**% RLs Exceed HH Criteria**	**NOAEL-based ESLB ug/kg**	**Source of NOAEL ESLB**	**% Detects Exceed NOAEL ESLB**	**% RLs Exceed NOAEL ESLB**	**Max Detected Off-site (ug/kg)**	**LOAEL-based ESLB (ug/kg)**	**Source of LOAEL ESLB**	**% Detects Exceed LOAEL ESLB**	**% RLs Exceed LOAEL ESLB**	**Max Detected Off-site (ug/kg)**	**New LOAEL-based HQ**	**New Category Assignment**	**Human Health Lines of Justification**	**Eco Lines of Justification**	**Notes - Detection Evaluation**	**Recommendation**	**Decision**
Metals	p-Isopropyltoluene	99-87-6	C2, E1	eA2	--	#5	17%	4	23	--	--	--	874	NOAEL American Robin	0%	0%	No off-site detections	8,740	LOAEL American Robin	0%	0%	No off-site detections	NA	#8	Four scattered detections on-site, not sampled off-site. Eliminated on 7/8/11 Con call.	No detects or RLs exceed the ESLB. This analyte moves from Category 5 to Category 8.	p-Isopropyltoluene was only detected in 4 of 23 total on-site samples. The four detections include DOS-1 (8.6 ug/kg), DOS-2 (53 ug/kg), DOS-7 (37 ug/kg), and DOS-20 (52 ug/kg). This analyte was not included in the 2010 sampling campaign. There is no ESLB for p-isopropyltoluene. When a NOAEL-based ESLB is calculated, all detected concentrations and RLs are less than the NOAEL-based value. When a LOAEL-based ESLB is calculated, all detections and RLs are less than this value. Recommend elimination based on the NOAEL-based ESLB.	Eliminate based on spatial distribution and NOAEL-based ESLB.	Eliminated based on 4 September 2014 MDEQ Email
SVOCs	Titanium	7440-32-6	C2, E1	eA2	--	#5	100%	23	23	--	--	--	4,072	NOAEL American Robin	100%	0%	No off-site detections	40,700	LOAEL American Robin	100%	0%	No off-site detections	NA	#8	Not sampled off-site; 100% detection rate; eliminated on 7/8/11 Con call	There is no background concentration for titanium. It was eliminated based on spatial distribution for the human health pathway. This analyte moves from Category 5 to Category 8.	Titanium was detected in all of the 23 samples collected on-site. There is no off-site data. This analyte was not carried forward into the 2010 sampling campaign. There is no ESLB for titanium. When a NOAEL-based ESLB and a LOAEL-based ESLB are calculated, all detections exceed both values. For the human health pathway, there was no criteria for human health and titanium was eliminated based on spatial distribution and even though it was detected in 100% of the on-site samples, it was not included in the TAL for the 2010 samples for either Dow or MDEQ. **The USGS background value for all data (Mean + 1SD) is 2,198,000 ug/kg. There are no detected concentrations that exceed this background value. Recommend elimination based on the USGS Background Value.**	Eliminate based on spatial distribution and USGS Background.	Eliminated based on 5 September 2014 meeting based on USGS background.
Metals	Aluminum	7429-90-5	D6, E1	eA2	HH, no Eco	#5	100%	155	155	1,000	100%	0%	--	--	--	--	--	--	--	--	--	--	--	#8	Aluminum was eliminated based on a review of spatial distribution.	Aluminum is not considered a bioaccumulative chemical of concern, and thus toxicity to birds such as the robin and cardinal are not a concern.	Aluminum was detected in all 155 samples (100% detection frequency). It was detected on-site at concentrations ranging from 1,270,000 ug/kg (DOS-19) - 14,200,000 ug/kg (DOS-1). It was detected off-site at concentrations ranging from 416,874 ug/kg (G1-02 6-12") - 12,000,000 ug/kg (O1-01 1-6"). Statewide Background is 6,900,000 (mean + 1 std dev) and Modified Urban Background is 11,673,000 ug/kg (mean + 1 std dev). While 11 off-site concentrations exceed the Statewide Background value, only 1 off-site detected concentration exceeds the Modified Urban Background (12,000,000 ug/kg at O1-01 1-6"). Sample location O1 is the location of a known off-site issue. Recommend elimination based on background evaluation.	Eliminate based on background evaluation.	Eliminated in 21 August 2014 meeting based on Spatial Distribution and Review of Background
Metals	Sodium	7440-23-5	D3	eA2	HH, no Eco	#5	61%	34	56	2,500,000	0%	0%	--	--	--	--	--	Nutrient	--	--	--	--	--	Uncert	All results meet HHRA criteria	Chemicals that are (1) essential human nutrients, (2) present at low concentrations (i.e., only slightly elevated above naturally occurring levels), and (3) toxic only at very high doses need not be considered further in the quantitative risk assessment. Examples of such chemicals are iron, magnesium, calcium, potassium, and sodium (RAGS Part A).	Sodium was detected in 34 of 56 total samples. It was detected in 10 on-site samples at concentrations ranging from 42,000 to 1,940,000 ug/kg. It was detected in 24 off-site samples at concentrations ranging from 72,000 - 220,000 ug/kg. The maximum off-site detected concentration occurred at B1-01 6-12" (220,000 ug/kg). The highest concentrations are found at sample locations with known off-site issues (B1, I1a, F1, etc). The highest concentration at the remaining off-site sample locations is at Site 2-02 0-1" (150,000 ug/kg). Recommend elimination based on it being an essential nutrient and it will be discussed in the Uncertainty Section.	Essential Nutrient - Discuss in Uncertainty Section and Eliminate.	Eliminated based on 4 September 2014 MDEQ Email; Discuss in Uncertainty Section
Metals	Potassium	7440-09-7	C2, E1	eA2	--	#5	91%	21	23	--	--	--	--	--	--	--	--	Nutrient	--	--	--	--	--	Uncert	Compound not necessarily of concern for human health; Eliminated on 7/8/11 Con call.	Chemicals that are (1) essential human nutrients, (2) present at low concentrations (i.e., only slightly elevated above naturally occurring levels), and (3) toxic only at very high doses need not be considered further in the quantitative risk assessment. Examples of such chemicals are iron, magnesium, calcium, potassium, and sodium (RAGS Part A).	Potassium was detected in 21 of 23 total samples. All detections (and samples collected) for this analyte were on-site. This analyte was not included in the 2010 sampling campaign. The range of detected concentrations was 235,500 ug/kg (DOS-19) - 1,830,000 ug/kg (DOS-10). Recommend elimination based on it being an essential nutrient and it will be discussed in the Uncertainty Section.	Essential Nutrient - Discuss in Uncertainty Section and Eliminate.	Eliminated based on 4 September 2014 MDEQ Email; Discuss in Uncertainty Section
Metals	Calcium	7440-70-2	C2, E1	eA2	--	#5	100%	23	23	NA	--	--	--	--	--	--	--	Nutrient	--	--	--	--	--	Uncert	Calcium was eliminated based on a review of spatial distribution.	Chemicals that are (1) essential human nutrients, (2) present at low concentrations (i.e., only slightly elevated above naturally occurring levels), and (3) toxic only at very high doses need not be considered further in the quantitative risk assessment. Examples of such chemicals are iron, magnesium, calcium, potassium, and sodium (RAGS Part A).	Calcium was detected in all of the 23 samples collected on-site. There is no off-site data. This analyte was not carried forward into the 2010 sampling campaign. Recommend elimination based on it being an essential nutrient and it will be discussed in the Uncertainty Section.	Essential Nutrient - Discuss in Uncertainty Section and Eliminate.	Eliminated based on 4 September 2014 MDEQ Email; Discuss in Uncertainty Section
Metals	Iron	7439-89-6	D6, E1	eA2	HH, no Eco	#5	100%	56	56	6,000	100%	0%	--	--	--	--	--	Nutrient	--	--	--	--	--	Uncert	Iron was eliminated based on a review of spatial distribution.	Iron is not considered a bioaccumulative chemical of concern, and thus toxicity to birds such as the robin and cardinal are not a concern. Iron is also a nutrient.	Iron was detected in all 56 samples (100% detection frequency). It was detected on-site at concentrations ranging from 2,415,000 ug/kg (DOS-19) - 30,200,000 ug/kg (DOS-1). Detected off-site concentrations ranged from 2,100,000 ug/kg (G1-03 6-12") - 14,000,000 ug/kg (O1-02 6-12"). Statewide background (mean + 1 std dev) is 12,000,000 ug/kg and Modified Urban Background (mean + 1 std dev) is 21,916,000 ug/kg. Only 2 detections off-site exceed Statewide Background 14,000,000 ug/kg at O1-02 6-12" and 13,000,000 ug/kg at I1a-03 6-12". All off-site detected concentrations are below the Modified Urban Background value. Recommend elimination based on essential nutrient and background evaluation.	Eliminated based on background evaluation and Essential Nutrient	Eliminated based on 4 September 2014 MDEQ Email; Discuss in Uncertainty Section
VOCs	Cyclohexane	110-82-7	D2	eA2	HH, no Eco	#5	3%	3	99	13,000	0%	0%	--	--	--	--	--	NA	--	--	--	--	--	Eliminate	All results meet HHRA criteria	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Cyclohexane was only detected 3 times out of 99 total samples in the 2010 Dow sampling effort. The three detections were found at the following locations: A2-02 6-12" (137 ug/kg), B1-01 6-12" (81 ug/kg), Site1-07 1-6" (11 ug/kg). The two highest detections were found in sample locations where there are known off-site issues (A2 and B1). The remaining detection is 11 ug/kg.	Eliminate based on detection frequency / spatial distribution	Eliminated in 21 August 2014 meeting based on Spatial Distribution
VOCs	tert-Butylbenzene	98-06-6	D2	eA2	HH, no Eco	#5	2%	1	51	1,600	0%	0%	--	--	--	--	No off-site detections	NA	--	--	--	No off-site detections	--	Eliminate	All results meet HHRA criteria	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	tert-Butylbenzene was detected in only 1 sample out of 55 total samples collected. The one sample was from the 2005 Dow On-Site sampling effort in DOS-2 at 37 ug/kg.	Eliminate based on detection frequency and spatial distribution - no detections off-site.	Eliminated based on 4 September 2014 MDEQ Email
VOCs	n-Butylbenzene	104-51-8	D2	eA2	HH, no Eco	#5	4%	2	51	1,600	0%	0%	--	--	--	--	No off-site detections	NA	--	--	--	No off-site detections	--	Eliminate	All results meet HHRA criteria	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	n-Butylbenzene was detected in only 2 out of 51 total samples. The two detections were on-site in DOS-2 (84 ug/kg) and DOS-21 (99 ug/kg). Therefore, it was never detected off-site.	Eliminate based on detection frequency and spatial distribution - no detections off-site.	Eliminated based on 4 September 2014 MDEQ Email
VOCs	sec-Butylbenzene	135-98-8	D3	eA2	HH, no Eco	#5	6%	3	51	1,600	0%	0%	--	--	--	--	No off-site detections	NA	--	--	--	No off-site detections	--	Eliminate	All results meet HHRA criteria	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	sec-Butylbenzene was detected in only 3 samples out of 51 total samples collected. The three detections were all on-site in DOS-1 (6.3 ug/kg), DOS-2 (58 ug/kg) and DOS-4 (38.5 ug/kg).	Eliminate based on detection frequency and spatial distribution - no detections off-site.	Eliminated based on 4 September 2014 MDEQ Email

Table 5-9
Ecological Screening Results - Category 5
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													NOAEL-based ESLB Evaluation					LOAEL-based ESLB Evaluation									
Analyte Group	**Analyte**	**CAS Number**	**Screened Out HH**	**Screened Out Eco**	**Lower criteria**	**FWS Email**	**Detection Frequency**	**No. Samples Detected**	**Total # Samples**	**Lowest HH Criteria**	**% Detects Exceed HH Criteria**	**% RLs Exceed HH Criteria**	**NOAEL-based ESLB ug/kg**	**Source of NOAEL ESLB**	**% Detects Exceed NOAEL ESLB**	**% RLs Exceed NOAEL ESLB**	**Max Detected Off-site (ug/kg)**	**LOAEL-based ESLB (ug/kg)**	**Source of LOAEL ESLB**	**% Detects Exceed LOAEL ESLB**	**% RLs Exceed LOAEL ESLB**	**Max Detected Off-site (ug/kg)**	**New LOAEL-based HQ**	**New Category Assignment**	**Human Health Lines of Justification**	**Eco Lines of Justification**	**Notes - Detection Evaluation**	**Recommendation**	**Decision**
VOCs	N-Propylbenzene	103-65-1	D3	eA2	HH, no Eco	#5	10%	5	51	1,600	0%	0%	--	--	--	--	No off-site detections	NA	--	--	--	No off-site detections	--	Eliminate	All results meet HHRA criteria	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	N-Propylbenzene was detected a total of 5 times out of 51 total samples. The 5 detections were all on-site at DOS-2, DOS-3, DOS-4, DOS-5, and DOS-7. There were no detections off-site.	Eliminate based on detection frequency and spatial distribution - no detections off-site.	Eliminated based on 4 September 2014 MDEQ Email
SVOCs	Benzidine	92-87-5	D4, E1	eA2	HH, no Eco	#5	7%	7	99	1,000	0%	9%	--	--	--	--	--	NA	--	--	--	--	--	Eliminate	All results meet HHRA criteria; 9% of RLs exceed HHRA criteria; Eliminated based on spatial distribution	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Benzidine was detected in 7 samples out of 99 total samples in the 2010 Dow samples: F1-02 0-1", I1a-01 0-1", I1a-01 1-6", I1a-02 0-1", I1a-02 6-12", I1a-03 0-1", and O1-02 6-12". Concentrations ranged from 239 - 936 ug/kg. The maximum detected concentration was found at I1a-02 6-12". There is no on-site data for benzidine. Each of the off-site detections was at a sample location that is a known off-site issue. Benzidine was eliminated based on spatial distribution for human health. Recommend elimination based on spatial distribution.	Eliminate based on detection frequency and spatial distribution	Eliminated in 21 August 2014 meeting based on Spatial Distribution
SVOCs	4-Bromophenyl phenyl ether	101-55-3	C1, E1	eA2	--	#5	1%	1	128	--	--	--	--	--	--	--	No off-site detections	NA	--	--	--	No off-site detections	--	Eliminate	Only detected once on-site. Eliminated on 7/8/11 Con call	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	4-Bromophenyl phenyl ether was only detected in 1 sample out of 128 total samples. The 1 detection was on-site at DOS-26 at a concentration of 45 ug/kg. There are no detections off-site.	Eliminate based on detection frequency and spatial distribution - no detections off-site.	Eliminated in 21 August 2014 meeting based on Spatial Distribution
SVOCs	4-Chlorophenyl phenyl ether	7005-72-3	C1, E1	eA2	--	#5	1%	1	128	--	--	--	--	--	--	--	No off-site detections	NA	--	--	--	No off-site detections	--	Eliminate	Only detected once on-site. Eliminated on 7/8/11 Con call	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	4-Chlorophenyl phenyl ether was only detected in 1 sample out of 128 total samples. The 1 detection was on-site at DOS-23 at a concentration of 131 ug/kg. There are no detections off-site.	Eliminate based on detection frequency and spatial distribution - no detections off-site.	Eliminated in 21 August 2014 meeting based on Spatial Distribution
SVOCs	Octachlorostyrene	29082-74-4	C1, E1	eA2	--	#5	3%	3	99	--	--	--	--	--	--	--	--	NA	--	--	--	14	--	Eliminate	Eliminated on 10/6/11 Con call	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Octachlorostyrene was detected in 3 of 99 total samples. These 3 detections were off-site at A2-03 0-1" (12 ug/kg), A2-03 1-6" (13 ug/kg), and I1a-01 6-12" (14 ug/kg). There is no on-site data. Octachlorostyrene was eliminated for HH based on a NOAEL comparison of more recent studies performed by MDEQ (2011). The older criterion was lower and was based on older toxicity studies. A comparison of NOAELs from more recent studies yielded a calculated criterion that was higher than the detected concentrations off-site. Each of the three off-site detections were found at sample locations of known off-site issues. Recommend elimination based on detection frequency and spatial distribution.	Eliminate based on detection frequency and spatial distribution.	Eliminated in 21 August 2014 meeting based on Spatial Distribution
SVOCs	1,2,3,4-Tetrachlorobenzene	634-66-2	C2, E1	eA2	--	#5	11%	11	99	--	--	--	--	--	--	--	--	NA	--	--	--	30	--	Eliminate	11% Detection frequency; detections off-site north of the northern facility boundary. Eliminated on 7/8/11 Con call	Uncertainty Discussion: Analyte was detected at a low frequency; ESLB, TRV or surrogate not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	1,2,3,4-Tetrachlorobenzene was detected in 11 of 99 total samples. The detections were off-site around the northern boundary of the facility and the detected concentrations ranged from 10-30 ug/kg. Two sample locations had the maximum detected concentration of 30 ug/kg (A2-01 1-6" and B1-03 ug/kg). There is no on-site data. Four of the detections were found at the A2 sample location area, three of the detections were in the B1 sample area and four more occurred at the O1 sample area. Each of the sample locations has a known off-site issue.	Eliminate based on detection frequency and spatial distribution.	Eliminated in 21 August 2014 meeting based on Spatial Distribution
Metals	Thorium	7440-29-1	C2, E1	eA2	--	#5	94%	31	33	--	--	--	--	--	--	--	--	NA	--	--	--	3,300	--	Eliminate	Eliminated on 10/6/11 Con call	Uncertainty Discussion: ESLB, TRV or surrogate not available.	Thorium was detected in 31 of 33 total samples collected. There are no on-site data for thorium. The off-site detections ranged from 440 ug/kg (Pershing 1-01 1-6") - 3,300 ug/kg (N1-02 0-1"). During evaluation of the human health pathway, thorium was eliminated from further evaluation based on a review of ATSDR and USGS documentation for detected thorium concentrations across the US. Based on these documents, the ranges of concentrations detected in Midland are similar to those seen across the US.	Eliminate based on the same documentation provided for the human health evaluation.	Eliminate based on USGS Background Data (5 September 2014 Meeting)

Table 5-10
Ecological Screening Results - Category 6
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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower Criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Eco Lines of Justification	Notes - Detection Evaluation	Decision
Herbicides	Silvex (2,4,5-TP)	93-72-1	B1	eB1	Eco	#6	0%	72	2,200	0%	0%	109	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Silvex was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
VOCs	Vinyl acetate	108-05-4	B1	eB1	Eco	#6	0%	100	13,000	0%	0%	12,700	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Vinyl acetate was analyzed for in the COM Blinded Sampling effort and the 2010 MDEQ samples. HH criteria and Eco ESLB are in the same order of magnitude.	Category Eliminated in 21 August 2014 meeting
SVOCs	3,3'-Dichlorobenzidine	91-94-1	B1	eB1	Eco	#6	0%	72	2,000	0%	0%	646	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	3,3'-Dichlorobenzidine was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	B3	eB1	Eco	#6	0%	72	3,400	0%	0%	2,020	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	1,2,4,5-Tetrachlorobenzene was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort. HH criteria and Eco ESLB are in the same order of magnitude.	Category Eliminated in 21 August 2014 meeting
SVOCs	1-Naphthylamine	134-32-7	B3	eB1	Eco	#6	0%	72	--	--	--	9,340	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	1-Naphthylamine was only analyzed for in the COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	2,6-Dichlorophenol	87-65-0	B3	eB1	Eco	#6	0%	105	--	--	--	1,170	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	2,6-Dichlorophenol was only analyzed for in the COM Blinded Sampling effort and the MDEQ 2010 sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	Di-n-octylphthalate	117-84-0	B3	eB1	Eco	#6	0%	95	6,900,000	0%	0%	709,000	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Di-n-octylphthalate was analyzed for in the 2005 Dow On-Site sampling and the COM Blinded Sampling Effort. It was not carried forward to the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	Isosafrole	120-58-1	B3	eB1	Eco	#6	0%	72	--	--	--	9,940	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Isosafrole was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	Methapyrilene	91-80-5	B3	eB1	Eco	#6	0%	72	--	--	--	2,780	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Methapyrilene was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	o-Toluidine	95-53-4	B3	eB1	Eco	#6	0%	72	--	--	--	2,970	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	o-Toluidine was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	Pentachloronitrobenzene	82-68-8	B3	eB1	Eco	#6	0%	72	37,000	0%	0%	7,090	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Pentachloronitrobenzene was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
VOCs	Bromodichloromethane	75-27-4	B3	eB1	Eco	#6	0%	123	1,200	0%	0%	540	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Bromodichloromethane was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples.	Category Eliminated in 21 August 2014 meeting
VOCs	trans-1,2-Dichloroethene	156-60-5	B3	eB1	Eco	#6	0%	123	2,000	0%	0%	784	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	trans-1,2-Dichloroethene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples.	Category Eliminated in 21 August 2014 meeting
VOCs	Trichlorofluoromethane	75-69-4	B3	eB1	Eco	#6	0%	123	52,000	0%	0%	16,400	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Trichlorofluoromethane was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. HH criteria and Eco ESLB are in the same order of magnitude.	Category Eliminated in 21 August 2014 meeting
VOCs	Isobutanol	78-83-1	B3	eB1	Eco	#6	0%	100	46,000	0%	0%	20,800	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Isobutanol was analyzed for in the COM Blinded Sampling effort and the 2010 MDEQ samples. HH criteria and Eco ESLB are in the same order of magnitude.	Category Eliminated in 21 August 2014 meeting
SVOCs	1,4-Naphthoquinone	130-15-4	B3	eB1	Eco	#6	0%	72	--	--	--	1,670	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	1,4-Naphthoquinone was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	O,O,O-Triethyl Phosphorothioate	126-68-1	B3	eB1	Eco	#6	0%	72	--	--	--	818	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	O,O,O-Triethyl Phosphorothioate was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	O,O-Diethyl O-2-Pyrazinyl Phosphorothioate (Thionazin)	297-97-2	B3	eB1	Eco	#6	0%	72	--	--	--	799	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	O,O-Diethyl O-2-Pyrazinyl Phosphorothioate (Thionazin) was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	2-Acetylaminofluorene	53-96-3	B3	eB1	Eco	#6	0%	72	--	--	--	596	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	2-Acetylaminofluorene was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort.	Category Eliminated in 21 August 2014 meeting
SVOCs	Pentachlorobenzene	608-93-5	B3	eB1	Eco	#6	0%	105	9,500	0%	0%	497	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Pentachlorobenzene was only analyzed for in the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples.	Category Eliminated in 21 August 2014 meeting
VOCs	Dichlorodifluoromethane	75-71-8	D2	eB1	Eco	#6	0%	123	95,000	0%	0%	39,500	USEPA Region 5 ESL	0%	0%	--	Not detected; 100% RLs meet ESLB	Dichlorodifluoromethane was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. HH criteria and Eco ESLB are in the same order of magnitude.	Category Eliminated in 21 August 2014 meeting

Table 5-10
Ecological Screening Results - Category 6
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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower Criteria	FWS Email	Detection Frequency	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Eco Lines of Justification	Notes - Detection Evaluation	Decision
SVOCs	3-Nitroaniline	99-09-2	B3	eB1	Eco	#6	0%	128	--	--	--	3,160	USEPA Region 5 ESL	0%	1%	1	Not detected; 99% RLs meet ESLB	3-Nitroaniline was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. Only one (1) sample had a RL that exceeded the ESLB. This one (1) sample was on-site at DOS-20 (4,100 ug/kg). All other RLs (127 remaining samples) met the ESLB both on-site and off-site.	Category Eliminated in 21 August 2014 meeting
SVOCs	4-Nitrophenol	100-02-7	B3	eB1	Eco	#6	0%	128	--	--	--	5,120	USEPA Region 5 ESL	0%	2%	2	Not detected; 98% RLs meet ESLB	4-Nitrophenol was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. Only two (2) samples had RLs that exceeded the ESLB. Both samples were on-site: DOS-17 (12,000 ug/kg) and DOS-20 (21,000 ug/kg). All other samples (126 remaining samples) had RLs that met the ESLB.	Category Eliminated in 21 August 2014 meeting
SVOCs	Diphenylamine	122-39-4	D4, E1	eB1	Eco	#6	0%	87	1,700	0%	2%	1,010	USEPA Region 5 ESL	0%	2%	2	Not detected; 98% RLs meet ESLB	Diphenylamine was analyzed for in the 2005 Dow On-Site sampling effort and the COM Blinded Sampling effort but not in the 2010 Dow/MDEQ sampling effort. HH criteria and Eco ESLB are in the same order of magnitude. Only two (2) samples had RLs that exceeded the ESLB. Both samples were on-site: DOS-17 (2,300 ug/kg) and DOS-20 (4,100 ug/kg). All other samples (85 remaining samples) had RLs that met the ESLB.	Category Eliminated in 21 August 2014 meeting
VOCs	cis-1,3-Dichloropropene	10061-01-5	B3	eB1	Eco	#6	0%	123	--	--	--	398	USEPA Region 5 ESL	0%	2%	3	Not detected; 98% RLs meet ESLB	cis-1,3-Dichloropropene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. Only three (3) samples had RLs that exceeded the ESLB and all three samples were in the 2010 MDEQ data set: I1a-03 0-1" (410 ug/kg); N1-02 0-1" (480 ug/kg); and Site2-02 0-1" (430 ug/kg).	Category Eliminated in 21 August 2014 meeting
VOCs	trans-1,3-Dichloropropene	10061-02-6	B3	eB1	Eco	#6	0%	123	--	--	--	398	USEPA Region 5 ESL	0%	2%	3	Not detected; 98% RLs meet ESLB	trans-1,3-Dichloropropene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. Only three (3) samples had RLs that exceeded the ESLB and all three samples were in the 2010 MDEQ data set: I1a-03 0-1" (410 ug/kg); N1-02 0-1" (480 ug/kg); and Site2-02 0-1" (430 ug/kg).	Category Eliminated in 21 August 2014 meeting
SVOCs	Famphur	52-85-7	B3	eB1	Eco	#6	0%	72	--	--	--	49.7	USEPA Region 5 ESL	0%	3%	2	Not detected; 97% RLs meet ESLB	Famphur was only analyzed for in the 2006 COM Blinded Sampling effort and was not carried forward in the 2010 Dow/MDEQ sampling effort. Only two (2) samples had RLs that exceeded the ESLB and both samples were off-site since this analyte was only analyzed for in the one off-site sampling effort: C-02 0-1" (63 ug/kg) and O-01 1-6" (78 ug/kg).	Category Eliminated in 21 August 2014 meeting

Table 5-11
Ecological Screening Results - Category 7
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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower Criteria	FWS Email	Detection Frequency	No. Samples Detected	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Eco Lines of Justification	Notes - Detection Evaluation	Decision
SVOCs	Dimethyl phthalate	131-11-3	D2	eC1	Eco	#7	1%	1	128	790,000	0%	0%	734,000	USEPA Region 5 ESL	0%	0%	0	Detected 1%; 100% RLs meet ESLB	Dimethyl phthalate was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in only 1 out of 128 samples which was on-site at DOS-14 at 66 ug/kg.	Category Eliminated in 21 August 2014 Meeting
VOCs	2-Hexanone	591-78-6	D2	eC1	Eco	#7	1%	1	123	20,000	0%	0%	12,600	USEPA Region 5 ESL	0%	0%	0	Detected 1%; 100% RLs meet ESLB	2-Hexanone was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. HH criteria and Eco ESLB are in the same order of magnitude. It was detected in only 1 out of 123 total samples. The sample was on-site (DOS-2) at a concentration of 470 ug/kg.	Category Eliminated in 21 August 2014 Meeting
SVOCs	n-Nitrosodiphenylamine	86-30-6	D2	eC1	Eco	#7	2%	2	128	5,400	0%	0%	545	USEPA Region 5 ESL	0%	2%	2	Detected 2%; 98% RLs meet ESLB	n-Nitrosodiphenylamine was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in only 2 out of 128 samples. One on-site sample at DOS-16 (160 ug/kg) and one off-site at O1-02 (130 ug/kg) in the 2010 MDEQ data set. Only two (2) samples had RLs that exceeded the ESLB. Both samples were on-site: DOS-17 (2,300 ug/kg) and DOS-20 (4,100 ug/kg). All other samples (85 remaining samples) had RLs that met the ESLB.	Category Eliminated in 21 August 2014 Meeting
SVOCs	Benzyl alcohol	100-51-6	D2	eC1	Eco	#7	2%	2	105	200,000	0%	0%	65,800	USEPA Region 5 ESL	0%	0%	0	Detected 2%; 100% RLs meet ESLB	Benzyl alcohol was only analyzed for in the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in only 2 out of 105 samples. Both detections were off-site and in the 2010 MDEQ data set: I1a-02 (22 ug/kg) and O1-02 (50 ug/kg).	Category Eliminated in 21 August 2014 Meeting
SVOCs	2,4,5-Trichlorophenol	95-95-4	D2	eC1	Eco	#7	4%	5	128	39,000	0%	0%	14,100	USEPA Region 5 ESL	0%	0%	0	Detected 4%; 100% RLs meet ESLB	2,4,5-Trichlorophenol was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected 5 times out of 128 samples. 2 samples were on-site at DOS-21 (140 ug/kg) and DOS-23 (119 ug/kg). 3 samples were off-site in the 2010 MDEQ data set at B1-03 0-1" (20 ug/kg), B1-03 1-6" (23 ug/kg) and O1-02 6-12" (37 ug/kg).	Category Eliminated in 21 August 2014 Meeting
VOCs	Chloroform	67-66-3	D2	eC1	Eco	#7	4%	5	123	1,600	0%	0%	1,190	USEPA Region 5 ESL	0%	0%	0	Detected 4%; 100% RLs meet ESLB	Chloroform was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. HH criteria and Eco ESLB are in the same order of magnitude. It was detected 5 times out of 123 samples. 2 samples were on-site at DOS-11 (88 ug/kg) and DOS-8 (34 ug/kg). 3 samples were off-site from the COM Blinded sampling effort: I-01 (27.5 ug/kg), S-01 (19.26 ug/kg), and U-02 (28.8 ug/kg).	Category Eliminated in 21 August 2014 Meeting
Pesticides	Delta BHC	319-86-8	C1, E1	eC1	Eco	#7	5%	6	128	--	--	--	9,940	USEPA Region 5 ESL	0%	0%	0	Detected 5%; 100% RLs meet ESLB	Delta BHC was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected 6 times out of 128 samples. 2 samples were on-site at DOS-21 (190 ug/kg) and DOS-8 (21 ug/kg). 4 samples were off-site from the COM Blinded sampling effort: F-02 (0.995 ug/kg), I-01 (4.13 ug/kg), I-02 (2.4 ug/kg) and L-02 (3.02 ug/kg).	Category Eliminated in 21 August 2014 Meeting

Table 5-12
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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower Criteria	FWS Email	Detection Frequency	No. Samples Detected	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	No. Samples Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Eco Lines of Justification	Notes - Detection Evaluation	Decision
Pesticides	Heptachlor epoxide	1024-57-3	D3	eD1	Eco	#8	16%	20	128	3,100	0%	0%	152	USEPA Region 5 ESL	0%	--	1%	1	No detects exceed ESLB; 99% RLs meet ESLB	Heptachlor epoxide was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was not detected on-site. The detections were in both the 2006 COM Blinded sampling effort and in the 2010 MDEQ samples. The maximum off-site detected concentration was at C-02 0-1" (67 ug/kg). One sample had a RL that exceeded the ESLB. This sample was in the 2010 MDEQ data set and was collected at B1-01 6-12" (180 ug/kg). The remaining 127 samples had RLs that met the ESLB.	Eliminated in 21 August 2014 Meeting based on totals evaluation.
VOCs	Methyl Iodide (Iodomethane)	74-88-4	C2, E1	eD1	Eco	#8	18%	22	123	--	--	--	1,230	USEPA Region 5 ESL	0%	--	0%	--	No detects or RLs exceed the ESLB	Methyl Iodide (Iodomethane) was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 22 samples out of 123 total samples. It was detected 1 time in the 2006 COM Blinded sampling effort (A-01 at 210 ug/kg); and the remainder of the detections were in the 2010 MDEQ samples with concentrations ranging from 52 ug/kg to 100 ug/kg.	Eliminated in 21 August 2014 Meeting
VOCs	Acetone	67-64-1	D3	eD1	Eco	#8	27%	33	123	15,000	0%	0%	2,500	USEPA Region 5 ESL	0%	--	0%	--	No detects or RLs exceed the ESLB	Acetone was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 3 on-site samples: DOS-1 (320 ug/kg), DOS-2 (420 ug/kg), and DOS-4 (910 ug/kg). It was detected in 5 samples from the 2006 COM Blinded sampling effort with detected concentrations ranging from 127 ug/kg to 1,880 ug/kg (at E-02 which was an order of magnitude higher than any other detection).	Eliminated in 21 August 2014 Meeting
Pesticides	4,4'-DDD	72-54-8	D3	eD1	Eco	#8	30%	39	128	95,000	0%	0%	758	USEPA Region 5 ESL	0%	--	0%	--	No detects or RLs exceed the ESLB	4,4'-DDD was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 38 of 128 total samples. The detections occurred only in the 2006 COM Blinded sampling effort. There were no detections on-site or in the 2010 MDEQ samples. The maximum off-site detection was at C-02 0-1" (345 ug/kg).	Eliminated in 21 August 2014 Meeting based on totals evaluation.
SVOCs	2-Methylnaphthalene	91-57-6	D3	eD1	Eco	#8	33%	42	128	4,200	0%	0%	3,240	USEPA Region 5 ESL	0%	--	0%	--	No detects or RLs exceed the ESLB	2-Methylnaphthalene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. HH criteria and Eco ESLB are in the same order of magnitude. Detections occurred in all three data sets, on-site and off-site. The maximum off-site detection was at M-02 0-1 (259 ug/kg).	Eliminated in 21 August 2014 Meeting
SVOCs	Benzo(a)anthracene	56-55-3	D3	eD1	Eco	#8	38%	48	128	20,000	0%	0%	5,210	USEPA Region 5 ESL	0%	--	0%	--	No detects or RLs exceed the ESLB	Benzo(a)anthracene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. Detections occurred in all three data sets, on-site and off-site. The overall maximum detected concentration was off-site at C-02 0-1" (3,105 ug/kg).	Eliminated in 29 September 2014 email
SVOCs	Benzo(k)fluoranthene	207-08-9	D3	eD1	Eco	#8	54%	69	128	200,000	0%	0%	148,000	USEPA Region 5 ESL	0%	--	0%	--	No detects or RLs exceed the ESLB	Benzo(k)fluoranthene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. HH criteria and Eco ESLB are in the same order of magnitude. Detections occurred in all three data sets, on-site and off-site. The maximum off-site detection was at C-02 0-1" (1,452 ug/kg).	Eliminated in 29 September 2014 email
SVOCs	Chrysene	218-01-9	D3	eD1	Eco	#8	71%	91	128	2,000,000	0%	0%	4,730	USEPA Region 5 ESL	0%	--	0%	--	No detects or RLs exceed the ESLB	Chrysene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. Detections occurred in all three data sets, on-site and off-site. The overall maximum detected concentration was off-site at C-02 0-1" (3,905 ug/kg).	Eliminated in 29 September 2014 email
SVOCs	Benzo(g,h,i)perylene	191-24-2	D3	eD1	Eco	#8	80%	102	128	2,500,000	0%	0%	119,000	USEPA Region 5 ESL	0%	--	0%	--	No detects or RLs exceed the ESLB	Benzo(g,h,i)perylene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. Detections occurred in all three data sets, on-site and off-site. The overall maximum detected concentration was off-site at C-02 0-1" (2,490 ug/kg).	Eliminated in 29 September 2014 email
SVOCs	Pyrene	129-00-0	D3	eD1	Eco	#8	86%	103	120	480,000	0%	0%	78,500	USEPA Region 5 ESL	0%	--	0%	--	No detects or RLs exceed the ESLB	Pyrene was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. Detections occurred in all three data sets, on-site and off-site. The overall maximum detected concentration was off-site at C-02 0-1" (7,985 ug/kg).	Eliminated in 29 September 2014 email
Cyanide	Cyanide, Total	57-12-5	D6, E3	eD1	HH	#1, #8	86%	176	204	100	46%	7%	50,800	Northern Cardinal	0%	--	0%	--	No detects or RLs exceed the ESLB	Cyanide, Total was analyzed for in the 2006 COM Blinded Sampling effort and in the 2010 Dow and MDEQ samples. Detections occurred in all data sets, on-site and off-site. The maximum detected off-site concentration was at G-02 1-6" (863.1 ug/kg).	Eliminated in 21 August 2014 Meeting
Metals	Beryllium	7440-41-7	D3	eD1	Eco	#8	93%	119	128	33,000	0%	0%	21,000	USEPA Eco SSL	0%	--	0%	--	No detects or RLs exceed the ESLB	Beryllium was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. HH criteria and Eco ESLB are in the same order of magnitude. Detections occurred in all three data sets, on-site and off-site. The maximum detected concentration off-site was at U-02 0-1" (1,110 ug/kg).	Eliminated in 21 August 2014 Meeting

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Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower Criteria	FWS Email	Detection Frequency	No. Samples Detected	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	No. Samples Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Eco Lines of Justification	Notes - Detection Evaluation	Decision
Metals	Nickel	7440-02-0	D6, E1	eD1	Eco	#8	99%	193	194	56,000	1%	0%	38,000	USEPA Eco SSL (Plants)	1%	1	0%	--	Less than 1% (0.5%) of detects exceed the ESLB; all RLs meet ESLB	Nickel was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 Dow samples. HH criteria and Eco ESLB are in the same order of magnitude. Detections occurred in all three data sets, on-site and off-site. The maximum detected off-site concentration was at L-02 1-6" (19,400 ug/kg).	Eliminated in 21 August 2014 Meeting
Pesticides	Methoxychlor	72-43-5	D3	eD1	Eco	#8	10%	13	128	16,000	0%	0%	19.9	USEPA Region 5 ESL	1%	1	28%	36	Less than 1% of detects exceed the ESLB; 72% RLs meet ESLB	Methoxychlor was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in only 13 of 128 samples. It was detected on-site only once (DOS 2), which is the one sample that exceeded the ESLB, and then off-site in the 2006 COM Blinded Sampling effort only. It was not detected in the 2010 MDEQ samples. The maximum detected off-site concentration was W-03 0 1" (12.65 ug/kg). The RLs in 36 samples exceeded the ESLB. These samples were both on-site and off-site and occurred in all three data sets. The off-site RLs that exceeded the ESLB ranged from 20 ug/kg - 350 ug/kg. The on-site RLs that exceeded the ESLB ranged from 20 ug/kg -69 ug/kg.	Eliminated in 21 August 2014 Meeting
Pesticides	Endosulfan sulfate	1031-07-8	C2, E1	eD1	Eco	#8	8%	10	128	--	--	--	35.8	USEPA Region 5 ESL	2%	3	2%	2	2% detects exceed the ESLB; 98% RLs meet ESLB	Endosulfan sulfate was analyzed for in the 2005 Dow On-Site sampling effort, the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 10 samples out of 128 total samples. It was detected in only 3 samples on-site and in 7 samples off-site. The maximum detected concentration was off-site. Only three detected concentrations exceeded the ESLB (US EPA Region 5 ESL): 1 off-site sample O-01 1-6" (46.6 ug/kg) and 2 on-site samples at DOS-8 (45 ug/kg) and DOS-20 (45 ug/kg). The RLs exceeded the ESLB in only 2 samples, both off-site: C-02 1-6" (46.9 ug/kg) in the 2006 COM Blinded Sampling effort and B1-01 6-12" (180 ug/kg) in the 2010 MDEQ data set.	Eliminated in 5 September 2014 Meeting based on totals evaluation
SVOCs	Benzyl Butyl Phthalate	85-68-7	D3	eD1	Eco	#8	16%	20	128	120,000	0%	0%	239	USEPA Region 5 ESL	2%	3	36%	46	2% detects exceed the ESLB; 64% RLs meet ESLB	Benzyl butyl phthalate was analyzed for in the 2005 Dow On-Site sampling effort, the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 20 samples out of 128 total samples. Only 3 detected concentrations exceed the ESLB (US EPA Region 5 ESL), 2 on-site and just 1 off-site. The only off-site sample with a detected concentration that exceeds the ESLB is at C-02 0-1" (317 ug/kg). The on-site samples with concentrations that exceed the ESLB are DOS-4 (815 ug/kg) and DOS-22 (290 ug/kg). The RLs exceed the ESLB in 46 samples out of the 128 total samples analyzed for benzyl butyl phthalate. all of the samples in the 2010 MDEQ data set had RLs that exceeded the ESLB. The RLs exceeded the ESLB in all of the on-site samples where benzyl butyl phthalate was not detected (9 samples).	Eliminated in 21 August 2014 Meeting
SVOCs	Hexachlorobenzene	118-74-1	D6, E2	eD1	Eco	#8	15%	34.99999999	227	350	2%	42%	184	Calculated NOAEL American Robin	4%	10	16%	37	4% detects exceed the ESLB; 84% RLs meet ESLB	Hexachlorobenzene was analyzed for in all samples. The US EPA Region 5 ESL for Hexachlorobenzene is 199 ug/kg. There are no off-site exceedances of this ESLB. It was detected in 35 out of 227 total samples. It was detected in both on-site and off-site samples. 10 samples exceeded the ESLB (Calculated ESLB based on the NOAEL for the American Robin): 9 samples were on-site; 1 sample was off-site located at H-02 0-1" (193 ug/kg) from the 2006 COM Blinded Sampling effort. The RLs exceeded the ESLB in 37 samples out of 227 total samples analyzed for this analyte. The RLs exceeded the ESLB in 7 on-site samples (ranging from 330 ug/kg - 2,300 ug/kg) but the remaining 16 on-site samples had adequate RLs. The RLs exceeded the ESLB in 30 of 33 samples in the MDEQ data set (ranging from 330 ug/kg - 470 ug/kg). The 2006 COM Blinded Sampling event and the 2010 Dow data set had RLs that met the ESLB.	Eliminated in 5 September 2014 Meeting based on spatial distribution.
SVOCs	Di-n-butyl phthalate	84-74-2	D3	eD1	Eco	#8	27%	35	128	11,000	0%	0%	150	USEPA Region 5 ESL	7%	9	27%	35	7% detects exceed the ESLB; 73% RLs meet ESLB	Di-n-butyl phthalate was analyzed for in the 2005 Dow On-Site sampling effort, the COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 34 total samples in both on-site and off-site sample locations. It was detected in most of the on-site samples and then in the 2006 COM Blinded sampling effort. It was not detected in the 2010 MDEQ samples. The maximum detected off-site concentration was found at N-01 0-1" (46.5 ug/kg). The RLs exceeded the ESLB in 35 samples: 2 in the Dow On-Site samples and all 33 of the 2010 MDEQ data set.	Eliminated in 5 September 2014 Meeting based on spatial distribution.

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						ESLB Evaluation					NOAEL-based ESLB Evaluation				LOAEL-based ESLB Evaluation						TDL Evaluation				
Analyte Group	Analyte	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	NOAEL-based ESLB ug/kg	Source of NOAEL ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	LOAEL-based ESLB ug/kg	Source of LOAEL ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Min RL of NDs	Max RL of NDs (Off-site)	TDL (ug/kg)	% RLs Exceed TDL	No. Samples RL > TDL	Human Health Lines of Justification	Eco Lines of Justification
SVOCs	Parathion, Methyl	72	46	0%	100%	0.292	USEPA Region 5 ESL	0%	100%	72	1,109	Northern Cardinal	0%	--	1,582	Northern Cardinal	0%	0	12	31	40	0%	0	Methyl parathion was not detected (0%) in 72 samples. All RLs exceeded the lowest HH criteria. Eliminated based on spatial distribution.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based and LOAEL-based ESLB. ESLB < TDL. All RLs meet TDL.
SVOCs	Dinoseb	72	200	0%	100%	21.8	USEPA Region 5 ESL	0%	100%	72	213	Northern Cardinal	0%	--	2,121	Northern Cardinal	0%	0	56	146	200	0%	0	Dinoseb was not detected (0%) in 72 samples. Eliminated based on spatial distribution.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based and LOAEL-based ESLB. ESLB < TDL. All RLs meet TDL.
Pesticides	Heptachlor	128	5,600	0%	0%	5.98	USEPA Region 5 ESL	0%	100%	128	171	American Robin	1%	1	1,713	American Robin	0%	0	0.638	180	20	14%	18	Heptachlor was not detected in a total of 128 samples. No reporting limits exceeded the human health criteria.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based ESLB, with 1 exception at B1-01 6-12" (180 ug/kg). Sample area B1 is associated with an off-site source not related to the MAS historical release. ESLB < TDL. 14% RLs exceed TDL (15 of these exceedances are on-site).
SVOCs	2,6-Dinitrotoluene	227	50	0%	61%	32.8	USEPA Region 5 ESL	0%	100%	227	4,128	Northern Cardinal	0%	--	8,256	Northern Cardinal	0%	0	6.08	470	330	20%	45	2,6-Dinitrotoluene was not detected (0%) out of a total of 227 samples. 100% of RLs exceeded the lowest HH criteria. Eliminated based on spatial distribution.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based and LOAEL-based ESLBs. ESLB < TDL. 20% RLs exceed TDL (14 on-site; 33 off-site [the entire 2010 MDEQ dataset]).
SVOCs	Aniline	105	330	0%	99%	56.8	USEPA Region 5 ESL	0%	100%	105	1,576	Northern Cardinal	0%	--	15,762	Northern Cardinal	0%	0	46	470	330	31%	33	Aniline was not detected (0%) in 105 samples. 99% RLs exceed the lowest HH criteria. Eliminated based on spatial distribution.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based and OAEL-based ESLBs. ESLB < TDL. 31% RLs exceed TDL (all RLs > TDL are from the 2010 MDEQ dataset).
SVOCs	2-Chlorophenol	128	360	0%	76%	243	USEPA Region 5 ESL	0%	100%	128	921	Northern Cardinal	2%	2	9,208	Northern Cardinal	0%	0	27	470	330	36%	45	2-chlorophenol was not detected (0%) out of a total of 128 samples. 76% of the RLs exceed the lowest HH criteria. Eliminated based on spatial distribution.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based ESLB, with 2 exceptions found on-site at DOS-17 and DOS-20. ESLB < TDL. 36% RLs exceed TDL (14 on-site; 33 off-site [the entire 2010 MDEQ dataset]).
Pesticides	Toxaphene	128	8,200	0%	1%	119	USEPA Region 5 ESL	0%	100%	128	5,180	American Robin	1%	1	51,800	American Robin	0%	0	10	7,200	170	44%	56	Toxaphene was not detected (0%) out of a total of 128 samples. Only 0.8% RLs exceeded the lowest HH criteria (1 off-site sample). Eliminated based on spatial distribution.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based ESLB, with 1 exception at B1-01 6-12" (7,200 ug/kg). Sample area B1 is associated with an off-site source not related to the MAS historical release. ESLB < TDL. 44% RLs exceed TDL (21 on-site; 2 COM blind; 33 from 2010 MDEQ dataset).
SVOCs	Isodrin	72	--	--	--	3.32	USEPA Region 5 ESL	0%	100%	72	56	American Robin	0%	--	113	American Robin	0%	0	20	51	NA	--	--	Isodrin was not detected (0%) in 72 samples. There is no HH criteria for this analyte.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based and LOAEL-based ESLBs. No TDL available.
SVOCs	Parathion, Ethyl (Parathion)	72	1,100	0%	0%	0.34	USEPA Region 5 ESL	0%	100%	72	160	American Robin	0%	--	398	American Robin	0%	0	18	47	NA	--	--	Ethyl parathion was not detected (0%) in 72 samples. All RLs met the lowest HH criteria.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based and LOAEL-based ESLBs. No TDL available.
SVOCs	Pronamide	72	2,800	0%	0%	13.6	USEPA Region 5 ESL	0%	100%	72	14,869	American Robin	0%	--	149,000	American Robin	0%	0	11	29	NA	--	--	Pronamide was not detected (0%) in 72 samples. All RLs met the lowest HH critera.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based and LOAEL-based ESLBs. No TDL available.
SVOCs	Phorate	72	8.2	0%	100%	0.496	USEPA Region 5 ESL	0%	100%	72	93	American Robin	0%	--	1,115	American Robin	0%	0	9	24	NA	--	--	Phorate was not detected (0%) in 72 samples. All RLs exceeded the lowest HH criteria. Eliminated based on spatial distribution.	100% RLs exceed ESLB; however, all RLs meet the NOAEL-based and LOAEL-based ESLBs. No TDL available.
Pesticides	Endrin ketone	**56**	--	--	--	14	LANL LOAEL Mammals	0%	36%	20	5.5	American Robin	48%	27	55	American Robin	2%	1	8.9	180	20	29%	16	Screen-out by all NDs; all RLs ≤ all Part 201/EPA criteria	Endrin used as surrogate for ESLB (this analyte moved from Category 4 to Category 9). 64% RLs meet the ESLB. 52% RLs meet the NOAEL-based ESLB. The 52% of samples with acceptable RLs are from the 2006 COM blinded off-site sampling effort, providing adequate sampling density off-site to document that endrin was not detected. 98% of RLs meet the LOAEL-based ESLB with only 1 RL that exceeds the LOAEL-based value (B1-01 6-12" at 180 ug/kg from the 2010 MDEQ dataset). Sample area B1 is the location of an off-site source not related to the MAS historical release. Endrin ketone was only analyzed for in the 2005 Dow On-Site sampling effort and in the 2010 MDEQ samples. 15 TDL exceedances are from the Dow On-Site sampling effort. Only 1 TDL exceedance is off-site found at B1-01 6-12".
SVOCs	Hexachlorophene	72	15,000	0%	0%	199	USEPA Region 5 ESL	0%	100%	72	132	American Robin	100%	72	1,322	American Robin	3%	2	704	1,840	NA	--	--	Hexachlorophene was not detected (0%) in 72 samples. All RLs met the lowest HH criteria.	100% RLs exceed ESLB. 100% RLs exceed the NOAEL-based ESLB, which is lower than the US EPA Region 5 ESLB. However, 97% of RLs meet the LOAEL-based ESLB. The 2 RL exceedances are from the 2006 COM Blinded sampling effort at C-02 01" (1,484 ug/kg) and O-01 1-6" (1,840 ug/kg). Both of these sample locations are associated with an off-site source not related to the MAS historical release. No TDL available.
SVOCs	4,6-Dinitro-2-methylphenol	128	830	0%	94%	144	USEPA Region 5 ESL	0%	100%	128	194	Northern Cardinal	44%	56	1,942	Northern Cardinal	10%	13	13	2,300	830	38%	48	4,6-Dinitro-2-methylphenol was not detected (0%) in 128 samples. 94% RLs exceed the lowest HH criteria. Eliminated based on spatial distribution.	100% RLs exceed ESLB. 66% RLs meet the NOAEL-based ESLB. All of the samples in the 2006 COM off-site data set had acceptable RLs and provide adequate off-site sampling density to demonstrate that this analyte is not detected off-site. 90% RLs meet the LOAEL-based ESLB. Of the 13 RL exceedances, 8 are from the 2010 MDEQ dataset and 5 are from the on-site dataset. ESLB < TDL. 38% RLs > TDL, leaving 62% of RLs that meet the TDL. 15 of the TDL exceedances are on-site; 33 TDL exceedances are from the 2010 MDEQ dataset.
SVOCs	2,4-Dinitrophenol	128	82	0%	100%	60.9	USEPA Region 5 ESL	0%	100%	128	74	Northern Cardinal	44%	56	743	Northern Cardinal	38%	48	20	2,300	830	38%	48	2,4-Dinitrophenol was not detected (0%) out of a total of 128 samples. 100% of RLs exceeded the lowest HH criteria. Eliminated based on spatial distribution.	100% RLs exceed ESLB; 56% RLs meet the NOAEL-based ESLB. All of the samples in the 2006 COM off-site data set had acceptable RLs and provide adequate off-site sampling density to demonstrate that this analyte is not detected off-site. 62% RLs meet the LOAEL-based ESLB. Both ESLBs < TDL. 38% RLs > TDL, leaving 62% of RLs that meet the TDL. 15 of the TDL exceedances are on-site; 33 TDL exceedances are from the 2010 MDEQ dataset. Recommended Uncertainty Discussion: Analyte was not detected. TDL is 13 times higher than the ESLB and 10% higher than the LOAEL-based ESLB, which causes significant RL exceedances. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.

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						ESLB Evaluation					NOAEL-based ESLB Evaluation				LOAEL-based ESLB Evaluation						TDL Evaluation				
Analyte Group	Analyte	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	NOAEL-based ESLB ug/kg	Source of NOAEL ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	LOAEL-based ESLB ug/kg	Source of LOAEL ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Min RL of NDs	Max RL of NDs (Off-site)	TDL (ug/kg)	% RLs Exceed TDL	No. Samples RL > TDL	Human Health Lines of Justification	Eco Lines of Justification
VOCs	Carbon disulfide	123	16,000	0%	0%	94.1	USEPA Region 5 ESL	0%	23%	28	No Avian Data Available	--	--	--	No Avian Data Available	--	--	--	0.5	480	250	11%	14	Carbon disulfide was not detected (0%) in 123 samples. All RLs met the lowest HH criteria.	77% RLs meet ESLB. ESLB < TDL. 89% RLs meet TDL; the 14 RLs that exceed the TDL are from the 2010 MDEQ dataset. Recommended Uncertainty Discussion: Analyte was not detected. Avian benchmark or TRV not available. TDL is 2.5 times higher than the available ESLB, which causes significant RL exceedances. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.
VOCs	Acetonitrile	100	2,800	0%	30%	1,370	USEPA Region 5 ESL	0%	29%	29	No Avian Data Available	--	--	--	No Avian Data Available	--	--	--	197	9700	2,500	28%	28	Acetonitrile was not detected (0%) in 100 samples. 30% of RLs exceeded the lowest HH criteria. Eliminated based on spatial distribution.	71% RLs meet ESLB. ESLB < TDL. 72% RLs meet TDL; all 28 RLs that exceed the TDL are from the 2010 MDEQ dataset. Recommended Uncertainty Discussion: Analyte was not detected. Avian benchmark or TRV not available. TDL is 2 times higher than the available ESLB, which causes significant RL exceedances. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.
SVOCs	2,4-Dimethylphenol	128	7,400	0%	0%	10	USEPA Region 5 ESL	0%	100%	128	No Avian Data Available	--	--	--	No Avian Data Available	--	--	--	58	470	330	36%	46	2,4-Dimethylphenol was not detected (0%) out of a total of 128 samples. No RLs exceeded the lowest HH Criteria.	100% RLs exceed ESLB. ESLB < TDL. 64% RLs meet TDL. Of the 46 total samples with RLs that exceed the TDL, 32 of the RL exceedances are from the 2010 MDEQ dataset; 14 are from the on-site data. This leaves 82 samples, both on- and off-site, that have RLs that meet the TDL. Recommended Uncertainty Discussion: Analyte was not detected. Avian benchmark or TRV not available. TDL is 33 times higher than the available ESLB, which causes significant RL exceedances. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.
SVOCs	2-Chloronaphthalene	128	620,000	0%	0%	12.2	USEPA Region 5 ESL	0%	100%	128	No Avian Data Available	--	--	--	No Avian Data Available	--	--	--	26	470	330	36%	46	2-Chloronaphthalene was not detected (0%) out of a total of 128 samples. All RLs met the lowest HH criteria.	100% RLs exceed ESLB. ESLB < TDL. 64% RLs meet TDL. Of the 46 total samples with RLs that exceed the TDL, 32 of the RL exceedances are from the 2010 MDEQ dataset; 14 are from the on-site data. This leaves 82 samples, both on- and off-site, that have RLs that meet the TDL. Recommended Uncertainty Discussion: Analyte was not detected. Avian benchmark or TRV not available. TDL is 27 times higher than the available ESLB, which causes significant RL exceedances. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.
VOCs	1,1,2,2-Tetrachloroethane	123	170	0%	24%	127	USEPA Region 5 ESL	0%	23%	28	No Avian Data Available	--	--	--	No Avian Data Available	--	--	--	0.5	480	50	--	--	1,1,2,2-Tetrachloroethane was not detected (0%) in 72 samples. 76% RLs met the lowest HH criteria. Eliminated based on spatial distribution.	77% RLs meet the ESLB. All 28 RL exceedances are from the 2010 MDEQ dataset, leaving 95 remaining samples both off-site and on-site with RLs that meet the ESLB. Avian benchmark or TRV not available.
SVOCs	Hexachlorocyclopentadiene	128	30,000	0%	0%	755	USEPA Region 5 ESL	0%	38%	49	No Avian Data Available	--	--	--	No Avian Data Available	--	--	--	26	2,300	330	--	--	Hexachlorocyclopentadiene was not detected (0%) in 72 samples. All RLs met the lowest HH criteria.	62% RLs meet the ESLB. All off-site RL exceedances (33) are from the 2010 MDEQ dataset; 16 RLs exceed on-site. 79 samples both on- and off-site meet the ESLB providing reasonable off-site sampling density with RLs that met the ESLB (primarily from 2006 COM sampling effort). Avian benchmark or TRV not available.
SVOCs	Sym-Trinitrobenzene	72	3,900	0%	0%	376	USEPA Region 5 ESL	0%	76%	55	No Avian Data Available	--	--	--	No Avian Data Available	--	--	--	352	919	NA	--	--	Sym-Trinitrobenzene was not detected (0%) in 72 samples. All RLs met the lowest HH criteria.	No TDL available. 24% RLs meet ESLB. Only analyzed for in the 2006 COM Blinded sampling effort (55 of 72 RLs exceed the ESLB, leaving 17 samples with RLs that meet the ESLB). Recommended Uncertainty Discussion: Analyte was not detected. Avian benchmark or TRV not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.
SVOCs	Alpha, Alpha Dimethylphenethylamine	72	--	--	--	300	USEPA Region 5 ESL	0%	100%	72	No Avian Data Available	--	--	--	No Avian Data Available	--	--	--	352	919	NA	--	--	Alpha, Alpha Dimethylphenethylamine was not detected (0%) in 72 samples. There is no HH criteria for this analyte.	No TDL available. 100% RLs exceed ESLB. Only analyzed for in the 2006 COM Blinded sampling effort. Recommended Uncertainty Discussion: Analyte was not detected. Avian benchmark or TRV not available. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.

Table 5-14
Ecological Screening Results - Category 10
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													ESLB Evaluation					NOAEL-based ESLB Evaluation					LOAEL-based ESLB Evaluation							TDL Evaluation				
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	Total # Samples	No. Samples Detected	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB ug/kg	Source of ESLB	% Detects Exceed ESLB	No. Samples Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	NOAEL-based ESLB ug/kg	Source of NOAEL ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	LOAEL-based ESLB ug/kg	Source of LOAEL ESLB	% Detects Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Min RL of NDs	Max RL of NDs (Off-site)	TDL	% RLs Exceed TDL	No. Samples RL > TDL	Human Health Lines of Justification	Eco Lines of Justification	Recommendation	Decision
Pesticides	Endrin aldehyde	7421-93-4	C1, E1	eC2	Eco	#10	2%	128	2	--	--	--	10.5	USEPA Region 5 ESL	0%	--	23%	30	3	American Robin	1%	50%	66	26.2	American Robin	0%	3%	3	0.797	180	20	14%	17	Eliminated based on spatial distribution.	Endrin aldehyde was only detected in 2 of 128 total samples. No detected concentrations exceed the ESLB. ESLB < TDL. 86% RLs meet the TDL with 14% RLs that exceed TDL (17 samples): 3 off-site samples and 14 on-site samples. 77% RLs meet the ESLB. When a NOAEL-based ESLB is calculated, only 1 of the 2 detected concentrations exceed the value (O-01 1-6" 9.88 ug/kg). 62 samples had RLs that met the NOAEL-based ESLB from the 2006 COM data set, providing reasonable sampling density in the off-site area with RLs that met the NOAEL-based ESLB. When a LOAEL-based ESLB is calculated, both detected concentrations and 97% RLs meet the LOAEL-based value. Of the 3 RLs that exceed the LOAEL-based ESLB, 2 are on-site (DOS-15 [27 ug/kg] and DOS-17 [28 ug/kg]) and 1 is off-site (B1-01 6-12" [180 ug/kg] from the 2010 MDEQ dataset). Sample area B1 is associated with an off-site source not related to the MAS historical release.	Eliminate based on NOAEL-based ESLB	As per 5 September 2014 Eco Working Meeting #5, total endrins will be discussed in the Uncertainty Analysis
Pesticides	Endrin	72-20-8	D2	eC2	Eco	#10	2%	128	3	65,000	0%	0%	10.1	USEPA Region 5 ESL	1%	1	24%	31	5.5	American Robin	2%	48%	61	54.7	American Robin	0%	1%	1	0.776	180	20	15%	19	All detected concentrations and non-detect reporting limits met HH criteria.	Endrin was only detected in 3 out of 128 total samples. 1 detected concentration out of 128 total samples collected exceeds the ESLB: off-site sample location L-02 0-1" (12.1 ug/kg) from the 2006 COM Blinded dataset. 2 samples exceed the NOAEL-based ESLB, which is lower than the US EPA Region 5 ESLB. In addition to the L-02 sample, the detected concentration at J-02 (9.36 ug/kg) also exceeds the NOAEL-based ESLB. 52% of RLs meet the NOAEL-based ESLB. This 52% comes from the 2006 COM data set that had all but 5 RLs meet the NOAEL-based ESLB. No detected results exceed the LOAEL-based ESLB. ESLB < TDL. 85% RLs meet the TDL with 15% RLs that exceed TDL (19 samples): 4 off-site samples and 15 on-site samples. 76% RLs meet the ESLB and 99% RLs meet the LOAEL-based ESLB. The 1 RL that exceeds the LOAEL-based ESLB is at B1-01 6-12' (180 ug/kg). Sample area B1 is associated with an off-site source not related to the MAS historical release.	Eliminate based on NOAEL-based ESLB	Based on 5 September 2014 Eco Working Meeting #5, total endrins will be discussed in the Uncertainty Analysis
Pesticides	Gamma BHC (Lindane)	58-89-9	D5, E1	eC2	Eco	#10	2%	128	3	20	1%	67%	5	USEPA Region 5 ESL	2%	2	46%	59	805	American Robin	0%	0%	--	3,235	American Robin	0%	0%	0	0.626	180	20	13%	16	Eliminated based on spatial distribution.	gamma-BHC was only detected in 3 of 128 total samples. 2 detected concentrations out of a total of 128 samples collected exceed the ESLB: 1 on-site sample collected at DOS-8 (33 ug/kg) and 1 off-site location at D-01 1-6" (5.93 ug/kg). No detected concentrations or RLs exceed the NOAEL-based ESLB. No detected results exceed the LOAEL-based ESLB. ESLB < TDL. 87% RLs meet the TDL with 13% RLs that exceed TDL (16 samples): 2 off-site samples (at C-02 and B1-01, both sample locations are associated with an off-site source not related to the MAS historical release) and 14 on-site samples. 54% RLs meet the ESLB and 100% of RLs meet the LOAEL-based ESLB.	Eliminate based on NOAEL-based ESLB	Eliminated in 21 August 2014 Meeting based on Totals evaluation
Pesticides	Beta BHC	319-85-7	D4, E1	eC2	Eco	#10	4%	128	5	37	0%	9%	3.98	USEPA Region 5 ESL	2%	3	48%	62	49,099	American Robin	0%	0%	--	490,898	American Robin	0%	0%	0	0.872	180	20	14%	18	Eliminated based on spatial distribution.	beta-BHC was only detected in 5 of 128 total samples. 3 samples out of a total of 128 samples collected exceed the ESLB: 1 on-site at DOS-1 (20 ug/kg) and 2 off-site samples collected at the same location at L-01 0-1" (29.7 ug/kg) and L-01 1-6" (8.45 ug/kg). No detected results or RLs exceed the NOAEL-based ESLB. No detected results or RLs exceed the LOAEL-based ESLB. ESLB < TDL. 86% RLs meet the TDL with 14% RLs that exceed TDL. Of these 18 samples with RL exceedances, 3 are off-site (2 samples at C-02 and one at B1-01; both these sample locations are associated with an off-site source not related to the MAS historical release) and 15 are on-site. 52% RLs meet the ESLB and 100% RLs meet the LOAEL-based ESLB.	Eliminate based on NOAEL-based ESLB	Eliminated in 21 August 2014 Meeting based on Totals evaluation
Pesticides	Aldrin	309-00-2	D4, E1	eC2	Eco	#10	3%	128	4	1,000	0%	1%	3.32	USEPA Region 5 ESL	0%	--	49%	63	12	American Robin	0%	20%	26	628	American Robin	0%	0%	0	0.638	180	20	14%	17	Eliminated based on spatial distribution.	Aldrin was detected in only 4 samples out of 128 total samples collected. No detected concentrations exceed the ESLB. No detected results exceed the NOAEL-based ESLB. 80% of RLs meet the NOAEL-based ESLB. All but 2 RLs from each of the 2006 COM data set and 2010 MDEQ data set meet the NOAEL-based ESLB. ESLB < TDL. 86% RLs meet the TDL with 14% RLs that exceed TDL (17 samples: 15 RLs on-site and 2 RLs off-site (at C-02 and B1-01, both sample locations are associated with an off-site source not related to the MAS historical release)). 51% RLs meet the ESLB and 100% RLs meet the LOAEL-based ESLB.	Eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
VOCs	Acrylonitrile	107-13-1	D5, E1	eC2	Eco	#10	2%	222	4	100	2%	43%	23.9	USEPA Region 5 ESL	2%	4	50%	111	No Avian Data Available	--	--	--	--	No Avian Data Available	--	--	--	--	0.5	9,700	100	14%	30	Eliminated based on spatial distribution.	Acrylonitrile was detected in only 4 of 222 total samples collected. All 4 samples that exceed the ESLB and are off-site from the 2006 COM Blinded sampling data set (I-01 0-1" [323 ug/kg], J-02 0-1" [264 ug/kg], N-01 0-1" [563 ug/kg], and S-01 1-6" [102.85 ug/kg]). ESLB < TDL. 86% RLs meet the TDL with 14% RLs that exceed TDL (30 samples). Of these 31 RLs, 3 are off-site from the 2006 Blinded sampling data set (I-01, O-01 and S-01) and the remaining 28 are from the 2010 MDEQ data set. 50% RLs meet the ESLB. Recommended Uncertainty Discussion: Avian benchmark or TRV not available. TDL is 4 times higher than the available ESLB, which causes significant RL exceedances. The likelihood that it might be present at levels of concern is considered low. However, in the event that the analyte is present, the potential risk could be underestimated.	Review spatial distribution. Eliminate and Discuss in Uncertainty	Eliminated in 21 August 2014 Meeting based on Spatial Distribution
VOCs	Propionitrile, Ethyl Cyanide	107-12-0	C1, E1	eC2	Eco	#10	1%	72	1	--	--	--	49.8	USEPA Region 5 ESL	1%	1	74%	53	No Avian Data Available	--	--	--	--	No Avian Data Available	--	--	--	--	44	309	NA	--	--	Eliminated based on spatial distribution.	1 detected concentration out of a total of 72 samples collected exceeds the ESLB. This sample was collected at T-02 0-1" (506 ug/kg) from the 2006 COM Blinded sampling data set. No TDL available. Avian benchmark or TRV not available. 26% RLs meet the ESLB.	Review spatial distribution. Eliminate and Discuss in Uncertainty	Eliminated in 21 August 2014 Meeting based on Spatial Distribution

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													ESLB Evaluation							NOAEL-based ESLB								LOAEL-based ESLB									
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	No. Samples Detected	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	No. Samples Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Maximum Off-site Detected Concentration	Screening Level HQ - Based on Off-site Max Conc	NOAEL-based ESLB	Source of NOAEL ESLB	% Detects Exceed NOAEL ESLB	No. Samples Exceed NOAEL ESLB	% RLs Exceed NOAEL ESLB	No. Samples RL > NOAEL ESLB	Screening Level HQ - Based on Off-site Max Conc and NOAEL ESLB	LOAEL-based ESLB	Source of LOAEL ESLB	% Detects Exceed LOAEL ESLB	No. Samples Exceed LOAEL ESLB	% RLs Exceed LOAEL ESLB	No. Samples RL > LOAEL ESLB	Screening Level HQ - Based on Off-site Max Conc and LOAEL ESLB	Human Health Lines of Justification	Eco Lines of Justification	Recommendation	Decision
Metals	Thallium	7440-28-0	D4, E1	eD2	Eco	#11	15%	35	227	2,300	0%	2%	56.9	USEPA Region 5 ESL	13%	29	85%	192	230	4	1,901	American Robin	0%	0	0.4%	1	0.1	190,053	American Robin	0%	0	0%	0	0.001	All detected concentrations were less than the HH criteria but elevated RLs exceeded HH criteria; eliminated based on spatial distribution.	Thallium was analyzed for in all sampling campaigns. It was detected in 35 of 227 total samples (15% detection frequency). 29 of these detections exceed the ESLB (US EPA Region 5 ESL). It was only detected twice on-site at DOS-20 and DOS 21. The remainder of the detections are off-site and are in the 2010 MDEQ samples. The HQ based on the off-site maximum concentration (B1-03 0-1" 230 ug/kg) is 4. Sample area B1 is associated with an off-site source not related to the MAS historical release. When a NOAEL-based ESLB is calculated, there are no detected concentrations that exceed the NOAEL-based value and only 1 RL exceeds (on-site DOS-7 4,360 ug/kg). The screening HQ based on the maximum off-site concentration and the NOAEL-based ESLB is < 1. Recommend elimination based on the NOAEL-based ESLB. When a LOAEL-based ESLB is calculated for the American Robin, there are no detected concentrations or RLs that exceed the criteria. The screening HQ based on the LOAEL-based ESLB and the maximum detected off-site concentration is 0.001.	Eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
VOCs	Naphthalene	91-20-3	D6, E1	eD2	Eco	#11	27%	59	222	730	0.9%	3%	99.4	USEPA Region 5 ESL	13%	29	46%	103	1,314	13	397,704	American Robin	0%	0	0%	0	0.003	1,988,520	American Robin	0%	0	0%	0	0.001	Detected > 5%; 1 or more exceeded the HH criteria; eliminated based on spatial distribution.	Naphthalene was analyzed for in all sampling campaigns. It was detected in 59 of 222 total samples (27% detection frequency). The detected concentrations in 29 samples exceed the ESLB (US EPA Region 5 ESL), including 9 samples on-site. The remaining 20 samples were off-site. The screening HQ based on the off-site maximum concentration (Ia1-02 6-12" 1,314 ug/kg) is 13. When a NOAEL-based ESLB is calculated, all detected concentrations and RLs meet the NOAEL-based ESLB. The screening HQ based on the NOAEL-based ESLB and the maximum off-site concentration is < 1. Recommend elimination based on the NOAEL-based ESLB. When a LOAEL-based ESLB is calculated for the American Robin, there are no detected concentrations or RLs that exceed the criteria. The screening HQ based on the LOAEL-based ESLB and the maximum detected off-site concentration is <1.	Eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
Pesticides	Dieldrin	60-57-1	D4, E1	eD2	Eco	#11	10%	13	128	1,100	0%	0.8%	4.9	USEPA Eco SSL	3%	4	48%	61	21.3	4	28	American Robin	0%	0	2%	2	1	1,466	American Robin	0%	0	0%	0	0.01	All detected concentrations were less than the HH criteria but elevated RLs exceeded HH criteria; eliminated based on spatial distribution.	Dieldrin was analyzed for in the 2005 Dow On-site Sampling effort, the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. Dieldrin was detected only 13 times out of 128 total samples (10% detection frequency). All detections were off-site in the 2006 COM Blinded Sampling effort. A total of 4 detected concentrations exceed the ESLB (US EPA Eco SSL) (D-02 0-1", D-02 1-6", I-01 1-6", and L-02 0-1"). Using the overall maximum detected concentration which falls off-site, the screening HQ is 4. When a NOAEL-based ESLB is calculated, there are no detected concentrations that exceed this value. Only 2 RLs exceed the NOAEL-based ESLB, located off-site at C-02 and B1-01 and both locations are associated with an off-site source not related to the MAS historical release. The screening HQ using the NOAEL-based ESLB and the maximum off-site concentration is 1. Recommend elimination based on the NOAEL-based ESLB. When a LOAEL-based ESLB is calculated for the American Robin, there are no detected concentrations or RLs that exceed the criteria. The screening HQ based on the maximum off-site detected concentration and the LOAEL-based ESLB is 0.01.	Eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
Herbicides	2,4-D (Dichlorophenoxyacetic Acid)	94-75-7	D3	eD2	Eco	#11	15%	11	72	1,400	0%	0%	27.2	USEPA Region 5 ESL	7%	5	0%	0	83.8	3	34	American Robin	4%	3	0%	0	2	67.7	American Robin	0%	0	0%	0	0.01	Detected > 5% but all detections were less than HH criteria.	2,4-D was only analyzed for in the 2006 COM Blinded Sampling effort. It was only detected in 11 samples out of 72 total samples (15% detection frequency). Only 5 samples had detected concentrations that exceeded the ESLB (US EPA Region 5 ESL): I-01 0-1", I-01 1-6", I-02 0-1", I-02 1-6", and H-02 1-6". The screening HQ based on the off-site maximum detected concentration is 3. When a NOAEL-based ESLB is calculated, 8 detected concentrations are less than the NOAEL-based ESLB and only 3 samples from the same sample area (I-01 and I-02) exceed the NOAEL ESLB (I-01 0-1" 83.8 ug/kg; I-01 1-6" 71.7 ug/kg; I-02 1-6" 64.5 ug/kg). All RLs meet the NOAEL ESLB. While the screening HQ based on the NOAEL-based ESLB and the maximum off-site detected concentration is 2, the three detections that exceed the ESLB are limited to the I-01 and I-02 sampling area. When a LOAEL-based ESLB is calculated for the American Robin, there are no detected concentrations or RLs that exceed the criteria. The screening HQ based on the LOAEL-based ESLB and the maximum detected off-site concentration is 0.01.	Eliminate based on NOAEL-based ESLB and detections that exceed NOAEL-based ESLB are in an isolated area	Eliminated based on 4 September 2014 MDEQ Email
SVOCs	Benzo[a]pyrene	50-32-8	D6, E1	eD2	Eco	#11	52%	119	227	2,000	2%	0%	1,520	USEPA Region 5 ESL	3%	7	0%	0	3,661	2	4302	American Robin	0%	0	0%	0	0.9	43,048	American Robin	0%	0	0%	0	0.1	Detected > 5%; 1 or more exceeded the HH criteria; eliminated based on spatial distribution.	Benzo(a)pyrene was analyzed for in all sampling campaigns. It was detected in 119 of 227 total samples (52% detection frequency). Only 7 detected concentrations exceed the ESLB (USEPA Region 5 ESL). The overall maximum detected concentration was off-site (3,661 ug/kg). It was detected above the ESLB 3 times on-site (DOS-1, DOS-20, DOS-21) and 4 times off-site (US EPA Region 5 ESL) (2006 COM Blinded Sampling Effort C-02 0-1", 2010 Dow Samples O1-01 6-12", O1-02 6-12" and O1-03 6-12", all sample locations are associated with an off-site source not related to the MAS historical release). The HQ based on the off-site maximum concentration is 2. When a NOAEL-based ESLB is calculated, all detected concentrations and RLs are less than the NOAEL ESLB. The screening HQ based on the NOAEL-based ESLB and the maximum off-site detected concentration is less than 1. Recommend elimination based on the NOAEL-based ESLB. When a LOAEL-based ESLB is calculated for the American Robin, there are no detected concentrations or RLs that exceed the criteria. The screening HQ based on the maximum off-site detected concentration and the LOAEL-based ESLB is 0.1.	Eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
Pesticides	Chlordane, Total	57-74-9	D3	eD2	Eco	#11	6%	14	227	31,000	0%	0%	224	USEPA Region 5 ESL	1%	3	0%	0	327	2	289	American Robin	1%	2	0%	0	1	1,447	American Robin	0%	0	0%	0	0.2	Detected > 5% but all detections were less than HH criteria.	Total chlordane was analyzed for in all sampling campaigns. It was detected in 14 of 227 total samples (6% detection frequency). It was not detected on-site. Of the 14 detections off-site, 8 were in the 2006 COM Blinded sampling effort, 3 detections were in the 2010 Dow samples, and 3 detections were in the 2010 MDEQ samples. Only 3 of the 14 detections exceeded the ESLB (US EPA Region 5 ESL) and they were collected in the 2006 COM Blinded samples: A-02 0-1" (298 ug/kg), K-01 1-6" (327 ug/kg) and O-01 1-6" (296 ug/kg). The screening HQ based on the maximum detected concentration of 327 ug/kg and the USEPA Region 5 ESL is 2. When a NOAEL-based ESLB is calculated for the American Robin, the same three detected concentrations that exceed the US EPA Region 5 ESLB exceed the NOAEL-based ESLB. No RLs exceed the NOAEL-based ESLB. The NOAEL-based screening HQ is 1. Recommend elimination based on the NOAEL-based ESLB and isolated detections across the off-site area. When a LOAEL-based ESLB is calculated for the American Robin, there are no detected concentrations or RLs that exceed the criteria and the screening HQ is 0.2 (based on the maximum detected off-site concentration and the LOAEL-based ESLB).	Eliminate based on NOAEL-based ESLB and isolated detections	Eliminated based on 4 September 2014 MDEQ Email

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													ESLB Evaluation							NOAEL-based ESLB							LOAEL-based ESLB									
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	No. Samples Detected	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	No. Samples Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Maximum Off-site Detected Concentration	Screening Level HQ - Based on Off-site Max Conc	NOAEL-based ESLB	Source of NOAEL ESLB	% Detects Exceed NOAEL ESLB	No. Samples Exceed NOAEL ESLB	% RLs Exceed NOAEL ESLB	No. Samples RL > NOAEL ESLB	Screening Level HQ - Based on Off-site Max Conc and NOAEL ESLB	LOAEL-based ESLB	Source of LOAEL ESLB	% Detects Exceed LOAEL ESLB	No. Samples Exceed LOAEL ESLB	% RLs Exceed LOAEL ESLB	No. Samples RL > LOAEL ESLB	Screening Level HQ - Based on Off-site Max Conc and LOAEL ESLB	Human Health Lines of Justification	Eco Lines of Justification	Recommendation	Decision
Metals	Copper	7440-50-8	D6, E1	eD2	Eco	#11	100%	128	128	54,000	3%	0%	28,000	USEPA Eco SSL (Birds)	16%	21	0%	0	54,900	2	39,977	American Robin	7%	9	0%	0	1	120,483	American Robin	1%	1	0%	0	0.5	Detected > 5%; 1 or more exceeded the HH criteria; eliminated based on spatial distribution.	Copper was analyzed for in the 2005 Dow On-Site Sampling effort, the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in all 128 samples. 21 samples had detected concentrations that exceed the ESLB (US EPA Eco SSL (Birds)). 9 on-site samples had detected concentrations that exceed the ESLB. The remaining 12 exceedances were off-site. The screening HQ based on the off-site maximum concentration (L-01 1-6" 54,900 ug/kg) is 2. When a NOAEL-based ESLB is calculated, all detections except for 9 samples meet the NOAEL-based value. 4 of the 9 detections that exceed the NOAEL ESLB are on-site and 5 are off-site: I-02 1-6" (49,600 ug/kg), L-01 0-1" (43,000 ug/kg), L-01 1-6" (54,900 ug/kg), I1a-03 0-1" (52,000 ug/kg), and I1a-03 1-6" (43,000 ug/kg). While there were 5 detections that exceed, the exceedances are limited to three sampling areas. The screening HQ based on the NOAEL-based ESLB and the maximum off-site detected concentration is 1. Recommend elimination based on the NOAEL-based ESLB and the spatial distribution/limited detections that exceed the ESLB off-site. When a LOAEL-based ESLB is calculated for the American Robin, only 1 sample has a detected concentration that exceeds the criteria (maximum overall detection located on-site at DOS-8 of 183,000 ug/kg). There are no off-site concentrations or RLs that exceed the LOAEL-based criteria. The screening HQ based on the off-site maximum and the LOAEL-based ESLB is less than 1.	Eliminate based on NOAEL-based ESLB and detections that exceed NOAEL-based ESLB are in an isolated area	Eliminated based on 4 September 2014 MDEQ Email
Metals	Zinc	7440-66-6	D6, E2	eD2	Eco	#11	84%	107	128	120,000	12%	0%	80,100	NOAEL-based American Robin	19%	24	0%	0	190,000	2	87,737	American Robin	16%	21	0%	0	2	136,106	American Robin	11%	14	0%	0	1	Detected > 5%; 1 or more exceeded the HH criteria; carried forward to Leach Study and was eliminated based on leach testing results.	Initial ESLB for Zinc was 46,000 ug/kg (US EPA Eco SSL (birds)). Zinc was analyzed for in the 2005 Dow On-Site Sampling effort, the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 107 of 128 total samples (84% detection frequency). Detected concentrations in 24 samples exceed the ESLB (calculated ESLB based on the NOAEL for the American Robin). These detected concentrations were both on- and off-site. The screening HQ using the off-site maximum concentration (L-01 0-1" 190,000 ug/kg) is 2. When a NOAEL-based ESLB is calculated, 107 detections and RLs meet the NOAEL-based ESLB. 21 detections exceed the NOAEL ESLB with 13 of these located on-site. The 8 sample locations off-site include L-01 0-1" (190,000 ug/kg), L-01 1-6" (177,000 ug/kg); W-03 0-1" (162,000 ug/kg) and W-03 1-6" (154,500 ug/kg), L-01 1-6" (177,000 ug/kg), T-01 0-1" (118,000 ug/kg), F-01 1-6" (106,000 ug/kg), B1-03 0-1" (100,000 ug/kg) and T-01 (96,700 ug/kg). Sample locations W-03 and B1-03 are associated with an off-site source not related to the MAS historical release. The screening HQ based on the NOAEL-based ESLB and the maximum off-site concentration is 2. While the NOAEL screening HQ is 2, the detections that exceed the NOAEL ESLB are limited to two areas with known off-site issues and then only 3 additional sampling locations. Recommend elimination based on NOAEL-based ESLB and spatial distribution due to limited instances of exceedances. When a LOAEL-based ESLB is calculated for an American Robin, there are 14 sample locations that exceed the criteria but no RLs exceed. 10 of the 14 exceedances are located on-site and 4 are off-site. All four off-site samples are from 2 sample locations of the COM 2006 data set: L-01 0-1" (190,000 ug/kg), L-01 1-6" (177,000 ug/kg); W-03 0-1" (162,000 ug/kg) and W-03 1-6" (154,500 ug/kg). The screening level HQ is calculated using the LOAEL-based ESLB and the maximum off-site detected concentration is 1.	Eliminate based on NOAEL-based ESLB and detections that exceed NOAEL-based ESLB are in an isolated area	Eliminated based on 4 September 2014 MDEQ Email
Pesticides	4,4'-DDT	50-29-3	D3	eD2	Eco	#11	52%	66	128	57,000	0%	0%	3.5	USEPA Region 5 ESL	46%	59	31%	39	1,741	497	116	American Robin	--	--	--	--	--	1,155	American Robin	2%	2	0%	0	2	Detected > 5% but all detections were less than HH criteria.	4,4'-DDT was analyzed for in the 2005 Dow On-Site Sampling effort, the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 66 of 128 total samples (52% detection frequency). It was only detected on-site in 5 samples. Detected concentrations in 59 samples (both on- and off-site) exceed the ESLB (US EPA Region 5 ESL). The overall maximum concentration and the next two highest concentrations were found off-site (C-02 0-1" (1,512 ug/kg) and C-02 1-6" (1,741 ug/kg) and W-03 1-6" (616.5 ug/kg)). These sample locations are associated with an off-site source not related to the MAS historical release. When a LOAEL-based ESLB is calculated for the American Robin, only 2 samples have detected concentrations that exceed the criteria (C-02 0-1" (1,512 ug/kg) and C-02 1-6" (1,741 ug/kg)). The screening HQ based on the LOAEL-based ESLB and the maximum off-site detected concentration is 2.	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting. NOAEL provided but further evaluation was not performed since analyte is eliminated.	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting. NOAEL provided but further evaluation was not performed since analyte is eliminated. Elimination confirmed by totals evaluation in 5 September 2014
PCBs	PCBs, Total	1336-36-3	D4, E1	eD2	Eco	#11	58%	74	128	1,000	0%	2%	0.332	USEPA Region 5 ESL	58%	74	42%	54	1,234	3723	84	American Robin	--	--	--	--	--	835	American Robin	2%	3	6%	7	2	All detected concentrations were less than the HH criteria but elevated RLs exceeded HH criteria; eliminated based on spatial distribution.	PCBs, Total was analyzed for in the 2005 Dow On-Site Sampling effort, the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 74 of 128 total samples (58% detection frequency) and all 74 detected concentrations exceed the ESLB (US EPA Region 5 ESL). It was detected in only 2 on-site samples, including the overall maximum detected concentration of 2,240 ug/kg at DOS-2. When a NOAEL-based ESLB is calculated for the American Robin, 57 detected concentrations out of 74 detections meet the NOAEL-based ESLB, leaving 17 detections that exceed. Of these 17 detections, 2 are on-site (DOS-2 and DOS-10) and the remaining 15 are off-site: A-02 0-1" (87 ug/kg) and 1-6" (423 ug/kg); B-01 1-6" (117 ug/kg); C-02 0-1" (1,236 ug/kg) and 1-6" (591 ug/kg); F-01 0-1" (411 ug/kg) and 1-6" (1,155 ug/kg); I-01 1-6" (471 ug/kg); K-01 0-1" (146.5 ug/kg) and 1-6" (209 ug/kg); O-01 1-6" (101 ug/kg); U-02 0-1" (211 ug/kg) and 1-6" (97 ug/kg); and W-03 0-1" (437.5 ug/kg) and 1-6" (427 ug/kg). Of these 11 sampling areas, 6 of them are found at sample locations associated with an off-site source not related to the MAS historical release. All ND RLs exceed the NOAEL-based ESLB (total of 54 samples).When a LOAEL-based ESLB is calculated for the American Robin, only three detected concentrations exceed the criteria: the maximum detected concentration located on-site at DOS-2 and two off-site samples C-01 0-1" (1,236 ug/kg) and F-01 1-6" (1,155 ug/kg). The screening HQ based on the LOAEL-based ESLB and the maximum off-site detected concentration is 2.	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting. NOAEL provided but further evaluation was not performed since analyte is eliminated.	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting. NOAEL provided but further evaluation was not performed since analyte is eliminated.
Metals	Vanadium	7440-62-2	D6, E1	eD2	Eco	#11	100%	128	128	72,000	0.8%	0%	7,800	USEPA Eco SSL (Birds)	77%	99	0%	0	74,000	10	20,223	American Robin	6%	8	0%	0		40,446	American Robin	1%	1	0%	0	2	Detected > 5%; 1 or more exceeded the HH criteria; eliminated based on spatial distribution.	Vanadium was analyzed for in the 2005 Dow On-Site Sampling effort, the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in all 128 samples. Detected concentrations in 99 samples exceed the ESLB (US EPA Eco SSL (Bird)). The maximum overall concentration was detected off-site at O1-01 1-6" (74,000 ug/kg). The O1 sample location is associated with an off-site source not related to the MAS historical release. When a NOAEL-based ESLB is calculated, 8 detected concentrations exceed the NOAEL-based value, leaving 120 samples with either detected concentrations or reporting limits less than the benchmark. Of the 8 detected concentrations that exceed, 2 of those are on-site and the remaining 6 are off-site at the following locations: L-02 0-1" (20,800 ug/kg), L-02 1-6" (23,700 ug/kg), O-01 1-6" (21,400 ug/kg), U-02 0-1" (25,100 ug/kg), G1-03 1-6" (21,000 ug/kg), and O1-01 1-6" (74,000 ug/kg). When a LOAEL-based ESLB is calculated for the American Robin, only the maximum detected concentration (74,000 ug/kg) exceeds the criteria. The screening HQ calculated based on the LOAEL-based ESLB and the maximum off-site detected concentration is 2.	Review Spatial Distribution and eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email

Table 5-15
Ecological Screening Results - Category 11
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													ESLB Evaluation							NOAEL-based ESLB							LOAEL-based ESLB									
Analyte Group	Analyte	CAS Number	Screened Out HH	Screened Out Eco	Lower criteria	FWS Email	Detection Frequency	No. Samples Detected	Total # Samples	Lowest HH Criteria	% Detects Exceed HH Criteria	% RLs Exceed HH Criteria	ESLB	Source of ESLB	% Detects Exceed ESLB	No. Samples Exceed ESLB	% RLs Exceed ESLB	No. Samples RL > ESLB	Maximum Off-site Detected Concentration	Screening Level HQ - Based on Off-site Max Conc	NOAEL-based ESLB	Source of NOAEL ESLB	% Detects Exceed NOAEL ESLB	No. Samples Exceed NOAEL ESLB	% RLs Exceed NOAEL ESLB	No. Samples RL > NOAEL ESLB	Screening Level HQ - Based on Off-site Max Conc and NOAEL ESLB	LOAEL-based ESLB	Source of LOAEL ESLB	% Detects Exceed LOAEL ESLB	No. Samples Exceed LOAEL ESLB	% RLs Exceed LOAEL ESLB	No. Samples RL > LOAEL ESLB	Screening Level HQ - Based on Off-site Max Conc and LOAEL ESLB	Human Health Lines of Justification	Eco Lines of Justification	Recommendation	Decision
Pesticides	4,4'-DDE	72-55-9	D3	eD2	Eco	#11	57%	73	128	45,000	0%	0%	596	USEPA Region 5 ESL	2%	3	0%	0	2,400	4	244	American Robin	--	--	--	--	--	1,222	American Robin	1%	1	0%	0	2	Detected > 5% but all detections were less than HH criteria.	4,4'-DDE was analyzed for in the 2005 Dow On-Site sampling effort, the 2006 COM Blinded Sampling Effort, and the 2010 MDEQ samples. It was detected in 73 of 128 total samples (57% detection frequency) and only 3 off-site detections exceed the ESLB (USEPA Region 5 ESL). The maximum detected concentration was in the 2010 MDEQ data set at B1-01 6-12" at 2,400 ug/kg. It was detected in only 3 locations on-site at concentrations that were an order of magnitude below the ESLB. The other 2 off-site detections that exceed the ESLB were also in the 2006 COM Blinded Sampling effort (C-02 0-1" at 719.5 ug/kg and W-03 1-6" at 628 ug/kg). When a LOAEL-based ESLB is developed for the American Robin, only the maximum detected concentration of 2,400 ug/kg at B1-01 6-12" exceeds the benchmark. The screening HQ based on the off-site maximum detected concentration and the LOAEL-based ESLB is 2.	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting. NOAEL provided but further evaluation was not performed since analyte is eliminated.	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting. NOAEL provided but further evaluation was not performed since analyte is eliminated. Elimination confirmed by totals evaluation in 5
SVOCs	bis(2-ethylhexyl) phthalate	117-81-7	D3	eD2	Eco	#11	63%	80	128	2,800,000	0%	0%	925	USEPA Region 5 ESL	7%	9	0%	0	3,080	3	90,300	Northern Cardinal	0%	0	0%	0	0.03	903,000	Northern Cardinal	0%	0	0%	0	0	Detected > 5% but all detections were less than HH criteria.	bis(2-Ethylhexyl)phthalate was analyzed for in the 2005 Dow On-Site sampling effort, the 2006 COM Blinded Sampling effort and the 2010 MDEQ samples. It was detected in 80 of 128 total samples (63% detection frequency). The detected concentrations in 9 samples exceeded the ESLB (US EPA Region 5 ESL). 7 of these exceedances were on-site. The 2 off-site exceedances were from the same sample location in the 2006 COM Blinded Sampling data set (B-01 0-1" and B-01 1-6"). The screening HQ based on the off-site maximum detected concentration (B-01 1-6" 3,080 ug/kg) is 3. When a NOAEL-based ESLB is calculated, all detected concentrations and RLs meet the NOAEL-based ESLB. The screening HQ using the NOAEL-based ESLB and the max off-site detection is less than 1. When a LOAEL-based ESLB is calculated, all detected concentrations and RLs meet the LOAEL-based ESLB. The screening HQ using the LOAEL-based ESLB and the max off-site detection is less than 1.	Review Spatial Distribution and eliminate based on NOAEL-based ESLB	Eliminated based on 4 September 2014 MDEQ Email
Metals	Lead	7439-92-1	D6, E1	eD2	Eco	#11	100%	227	227	400,000	0.4%	0%	11,000	USEPA Eco SSL (Birds)	66%	150	0%	0	666,000	61	17,988	American Robin	42%	95	0%	0	37	41,599	American Robin	16%	37	0%	0	16	Detected > 5%; 1 or more exceeded the HH criteria; eliminated based on spatial distribution.	Lead was analyzed for in all sampling campaigns. It was detected in all 227 samples. Detected concentrations in 150 samples exceed the ESLB (US EPA Eco SSL (Bird)), located both on- and off-site. The overall maximum detected concentration was off-site at D-02 0-1" (666,000 ug/kg). Using Rosner's Outlier Test for lead, for a 1% and 5% significance level, the 666,000 ug/kg is identified as an outlier. The next highest detected concentration found off-site at an area not associated with an off-site source not related to the MAS historical release is A-02 (119,000 ug/kg) which yields a screening HQ of 7. When a NOAEL-based ESLB is calculated for the American Robin, there are 132 samples less than the ESLB and 95 samples with detected concentrations that exceed it. When a LOAEL-based ESLB is calculated for the American Robin, 37 detected concentrations (both on- and off-site) exceed the criteria. Using the maximum off-site detected concentration and the LOAEL-based ESLB and the concentration at A-02, the screening HQ is 3. When compared to Modified Urban Background (114,220 ug/kg), there are only 12 samples that exceed the criteria (5% frequency). This includes 3 on-site locations and 9 off-site locations. All 9 off-site locations are found in samples associated with an off-site source not related to the MAS historical release. Recommended for elimination based on Modified Urban Background.	Review Spatial Distribution and Background Information. Recommend elimination based on background.	Eliminated in 21 August 2014 Meeting Based on Background
Metals	Tin	7440-31-5	D3	eD2	Eco	#11	6%	11	171	5,500,000	0%	0%	7,620	USEPA Region 5 ESL	1%	2	0%	0	158,000	21	No Avian Data Available	--	--	--	--	--	--	No Avian Data Available	--	--	--	--	--	--	Detected > 5% but all detections were less than HH criteria.	Tin was analyzed for in the 2006 COM Blinded Sampling effort and the 2010 Dow samples. Tin was detected in 11 of 171 total samples (6% detection frequency). All detections were off-site and occurred in the COM Blinded samples (2006). There is no on-site data for tin. Only two detected concentrations exceed the ESLB (US EPA Region 5 ESL): A-02 1-6" (30,100 ug/kg) and the maximum detected concentration at D-02 0-1" (158,000 ug/kg). Screening HQ using maximum off-site detection is 21 but using second highest concentration the screening HQ is 4. There was no avian data available to calculate a LOAEL-based ESLB. There is no background information available.	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting
SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	D3	eD2	Eco	#11	8%	6	72	6,700	0%	0%	199	USEPA Region 5 ESL	3%	2	0%	0	450	2	No Avian Data Available	--	--	--	--	--	--	No Avian Data Available	--	--	--	--	--	--	Detected > 5% but all detections were less than HH criteria.	2,3,4,6-Tetrachlorophenol was analyzed for in only the 2006 COM Blinded Sampling effort. It was not carried forward into the 2010 Dow and MDEQ sampling effort. It was only detected in 6 of 72 total samples (8% detection frequency). Only 2 detections exceeded the ESLB (US EPA Region 5 ESL) at the same sample location (H-02 0-1" and 1-6"). These two detections were an order of magnitude higher than the other 4 detections. Using the off-site maximum detected concentration, the screening level HQ is 2. There was no avian data available to calculate a LOAEL-based ESLB.	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting
Sulfide	Sulfide	18496-25-8	C2, E1	eD2	Eco	#11	6%	4	72	--	--	--	3.58	USEPA Region 5 ESL	6%	4	94%	68	157,750	44064	No Avian Data Available	--	--	--	--	--	--	No Avian Data Available	--	--	--	--	--	--	Detected > 5% but there is no HH criteria; Eliminated based on spatial distribution.	Sulfide was only analyzed for in the 2006 COM Blinded Sampling effort. It was detected in 4 or 72 samples (6% detection frequency) and all 4 detected concentrations exceed the ESLB (US EPA Region 5 ESL) (E-02 0-1", H-03 0-1", J-01 0-1" and M-01 0-1"). There is no avian data available to calculate a LOAEL-based ESLB.	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting	Reviewed Spatial Distribution. Eliminated in 27 June 2014 meeting
Metals	Antimony	7440-36-0	D6, E1	eD2	Eco	#11	23%	47	204	4,300	0.5%	1.0%	270	USEPA Eco SSL (Mammals)	7%	14	15%	31	4,530	17	No Avian Data Available	--	--	--	--	--	--	No Avian Data Available	--	--	--	--	--	--	Detected > 5%; 1 or more exceeded the HH criteria; eliminated based on spatial distribution.	Antimony was analyzed for in the 2006 COM Blinded Sampling effort and the 2010 Dow and MDEQ samples. It was detected in 47 of 204 total samples (23% detection frequency). The detected concentrations in 14 samples exceed the ESLB (US EPA Eco SSL [Mammal]). All 14 samples were off-site in the 2006 COM Blinded sampling data set. The screening level HQ based on the off-site maximum detected concentration is 17 (D-02 0-1"). There is no avian data available to calculate a LOAEL-based ESLB. When compared to USGS background information provided by MDEQ (470 ug/kg = Mean + 1 SD of All Data), of the 47 detected concentrations, only 12 concentrations exceed 470 ug/kg. All 12 detections came from the 2006 COM sampling effort. There were no detections or RLs that exceeded the background value in the 2010 sampling effort. 5 of these exceedances are found at sample locations associated with an off-site source not related to the MAS historical release. The remaining 7 detected concentrations that exceed background range from 1,327.5 - 4,530 ug/kg. Recommend elimination based on background.	Review Spatial Distribution and Background Information. Recommend Elimination based on Background.	Eliminated during 21 August 2014 Meeting based on Background.

Table 5-16
USGS Michigan Background Soil Values provided by MDEQ
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Analyte	Number of Samples	Minimum	Maximum	Mean	S.D.	X and 1 SD	X and 2 SD
Antimony[1]	285	0.1	2.35	0.278	1.690	0.470	0.794
Boron[2]	32	Non-detect	70	26	18	44	62
Lead[1]	285	3.8	59.5	12.2	1.644	20.1	33.0
Selenium[1]	285	< 0.2	0.9	< 0.2	--	0.30	0.55
Strontium[1]	285	27.4	198	74.4	1.457	108	158
Thorium[1]	285	0.8	11.6	2.903	1.812	5.26	9.53
Titanium[1]	285	200	5400	1141	1.926	2198	4233

Notes:
All Data in mg/kg
X = geomean
SD = geometric standard deviation

[1] Smith, D.B., Cannon, W.F., Woodruff, L.G., Solano, Federico, Kilburn, J.E., and Fey, D.L., 2013, Geochemical and mineralogical data for soils of the conterminous United States: U.S. Geological Survey Data Series 801, 19 p., http://pubs.usgs.gov/ds/801/

[2] Boerngen, J.G. and Shacklette, H.T., 1981. *Chemical analysis of soils and other surficial materials of the conterminous United States* . U.S. Geological Survey Open-File Report 81-197.

Table 5-17
Off-site Sample Locations with Sources Other than MAS Historical Aerial Release
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Sample Location	Description	Additional Associated Samples
A-02	Pilot Study Area	A2-01, A2-02, A2-03
B1-xx	Site B1 is located near old rail spur and a remedy has been completed to address this site.	B1-01, B1-02, B1-03
C-01	Sample collected in area of a known industrial site near the Midland Resolution Center.	
C-02	Sample collected in area of a known industrial site near the Midland Resolution Center.	
F-01	Washington Street	F1-01, F1-02, F1-03
H-02	Developed Land	
O1-01	Near fuel oil historical release	O1-01, O1-02, O1-03
W-03	Spheric Development property.	
I-xx	Sampling Area "I" is now developed.	I1a-01, I1a-02, I1a-03

Table 8-1
Summary Statistics of Dioxin Results by Data Set and Depth
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			2005/6 Dow On-Site								2006 COM Blind								2010 Dow/MDEQ							
Analyte	Unit	Depth Interval	No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Min RL of NDs	Max RL of NDs	No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Min RL of NDs	Max RL of NDs	No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Min RL of NDs	Max RL of NDs
WHO-TEQ_2005	**ppt**	**(1) 0 in - 1 in**	**28**	**100%**	**23,796**	**60,346**	**7.90**	**299,017**	**-**	**-**	**223**	**100%**	**152**	**145**	**2.5**	**915**	**-**	**-**	**138**	**100%**	**332**	**417**	**9.63**	**2,750**	**-**	**-**
WHO-TEQ_2005	**ppt**	**(2) 1 in - 6 in**	**0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**35**	**100%**	**159**	**150**	**2.9**	**633**	**-**	**-**	**138**	**100%**	**340**	**909**	**7.19**	**10,500**	**-**	**-**
WHO-TEQ_2005	**ppt**	**(3) 6 in - 1 ft**	**0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**138**	**100%**	**196**	**282**	**0.49**	**1,310**	**-**	**-**
WHO-TEQ_2005	**ppt**	**(4) > 1 ft**	**0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**154**	**100%**	**76.8**	**109**	**0.231**	**807**	**-**	**-**
1,2,3,4,6,7,8-HpCDD	ppt	(1) 0 in - 1 in	28	100%	36,582	69,283	88	287,057	-	-	161	100%	1,228	1,434	18.1	10,900	-	-	139	100%	2,646	2,633	67	13,514	-	-
1,2,3,4,6,7,8-HpCDD	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	1,524	1,560	16.9	7,400	-	-	139	100%	2,118	2,175	39	12,382	-	-
1,2,3,4,6,7,8-HpCDD	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	138	100%	1,306	2,304	8.02	12,833	-	-
1,2,3,4,6,7,8-HpCDD	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	153	100%	478	782	0.962	5,051	-	-
1,2,3,4,6,7,8-HpCDF	ppt	(1) 0 in - 1 in	27	100%	28,812	39,979	43	116,877	-	-	161	100%	712	870	5.44	4,980	-	-	139	100%	1,734	2,071	26	13,884	-	-
1,2,3,4,6,7,8-HpCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	927	1,057	5.62	4,770	-	-	139	100%	1,678	2,595	17.5	24,753	-	-
1,2,3,4,6,7,8-HpCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	138	100%	1,203	1,816	6.14	7,892	-	-
1,2,3,4,6,7,8-HpCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	153	99%	625	1,097	0.922	7,575	0.743	0.743
1,2,3,4,7,8,9-HpCDF	ppt	(1) 0 in - 1 in	27	100%	1,513	3,257	3.1	16,507	-	-	161	100%	29.7	43.2	0.82	347	-	-	138	100%	70.0	85.4	1.67	578	-	-
1,2,3,4,7,8,9-HpCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	44.8	65.4	0.429	307	-	-	139	100%	84.1	317	0.76	3,717	-	-
1,2,3,4,7,8,9-HpCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	133	98%	63.6	184	0.796	1,870	0.738	0.749
1,2,3,4,7,8,9-HpCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	144	93%	21.3	31.4	0.276	213	0.536	0.743
1,2,3,4,7,8-HxCDD	ppt	(1) 0 in - 1 in	28	100%	482	824	2	3,596	-	-	161	100%	24.7	27.6	0.833	203	-	-	139	100%	51.4	53.1	1.9	258	-	-
1,2,3,4,7,8-HxCDD	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	25.5	24.6	0.776	104	-	-	139	100%	53.1	152	1.19	1,774	-	-
1,2,3,4,7,8-HxCDD	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	135	100%	31.0	49.3	0.235	247	-	-
1,2,3,4,7,8-HxCDD	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	147	95%	11.5	18.0	0.13	103	0.142	0.571
1,2,3,4,7,8-HxCDF	ppt	(1) 0 in - 1 in	28	100%	2,670	5,877	11	30,935	-	-	161	100%	56.4	76.1	0.716	548	-	-	139	100%	141	188	2.82	1,294	-	-
1,2,3,4,7,8-HxCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	80.8	118	0.721	563	-	-	139	100%	200	891	1.46	10,476	-	-
1,2,3,4,7,8-HxCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	137	100%	127	296	0.785	2,824	-	-
1,2,3,4,7,8-HxCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	153	98%	49.0	73.7	0.214	591	0.143	0.149
1,2,3,6,7,8-HxCDD	ppt	(1) 0 in - 1 in	28	100%	1,465	2,193	4.5	10,319	-	-	161	100%	69.8	77.6	1.51	484	-	-	139	100%	154	163	5.7	830	-	-
1,2,3,6,7,8-HxCDD	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	83.2	87.7	1.46	408	-	-	139	100%	165	469	3.64	5,474	-	-
1,2,3,6,7,8-HxCDD	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	138	100%	98.9	163	0.569	1,040	-	-
1,2,3,6,7,8-HxCDD	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	151	97%	38.7	58.3	0.166	384	0.149	0.59
1,2,3,6,7,8-HxCDF	ppt	(1) 0 in - 1 in	23	100%	652	1,389	2.8	6,467	-	-	161	100%	28.0	42.8	0.422	267	-	-	139	100%	101	306	1.67	2,227	-	-
1,2,3,6,7,8-HxCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	35.2	44.0	0.419	204	-	-	139	100%	154	1,067	0.87	12,514	-	-
1,2,3,6,7,8-HxCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	137	100%	48.2	106	0.347	981	-	-
1,2,3,6,7,8-HxCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	151	97%	18.1	25.2	0.189	171	0.143	0.157
1,2,3,7,8,9-HxCDD	ppt	(1) 0 in - 1 in	28	100%	928	1,443	3.6	5,640	-	-	161	100%	45.4	49.1	1.24	346	-	-	139	100%	97.0	99.4	3.9	546	-	-
1,2,3,7,8,9-HxCDD	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	49.2	51.1	1.2	255	-	-	139	100%	96.0	234	2.65	2,700	-	-
1,2,3,7,8,9-HxCDD	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	137	100%	56.3	88.3	0.345	433	-	-
1,2,3,7,8,9-HxCDD	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	150	96%	22.7	35.3	0.164	224	0.143	0.623
1,2,3,7,8,9-HxCDF	ppt	(1) 0 in - 1 in	20	100%	393	1,125	1.7	4,967	-	-	161	100%	3.95	11.69	0.263	146	-	-	135	96%	8.60	17.05	0.23	144	5.8	6.3
1,2,3,7,8,9-HxCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	3.87	4.82	0.363	22.25	-	-	136	99%	9.75	32.33	0.16	355	6	6
1,2,3,7,8,9-HxCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	123	98%	12.8	43.9	0.16	452	0.148	5.5
1,2,3,7,8,9-HxCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	144	94%	9.69	21.14	0.212	174	0.142	1.03
1,2,3,7,8-PCDD	ppt	(1) 0 in - 1 in	28	100%	988	1,648	1.3	6,960	-	-	161	100%	32.2	34.5	0.761	224	-	-	139	100%	64.8	72.2	2.4	386	-	-
1,2,3,7,8-PCDD	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	29.2	26.1	1.01	122	-	-	139	100%	68.8	198	1.81	2,304	-	-
1,2,3,7,8-PCDD	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	135	100%	40.4	64.2	0.300	376	-	-
1,2,3,7,8-PCDD	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	149	95%	56.0	493	0.145	6,025	0.096	0.335
1,2,3,7,8-PCDF	ppt	(1) 0 in - 1 in	28	100%	545	1,035	3.7	4,000	-	-	161	100%	23.8	37.0	0.3	238	-	-	139	100%	51.0	67.8	1.1	409	-	-
1,2,3,7,8-PCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	29.9	51.0	0.235	271	-	-	139	100%	63.1	125	0.48	1,022	-	-
1,2,3,7,8-PCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	136	100%	50.4	89.6	0.289	707	-	-
1,2,3,7,8-PCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	154	99%	29.9	69.8	0.095	626	0.096	0.099
2,3,4,6,7,8-HxCDF	ppt	(1) 0 in - 1 in	27	100%	968	2,375	1.4	12,359	-	-	161	100%	21.0	34.1	0.506	251	-	-	139	94%	108	428	1.04	3,327	0.758	20.7
2,3,4,6,7,8-HxCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	23.0	26.1	0.609	130	-	-	139	96%	174	1,338	0.87	15,602	1.89	22.5
2,3,4,6,7,8-HxCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	131	95%	30.7	62.8	0.48	631	0.932	24.9
2,3,4,6,7,8-HxCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	150	73%	9.71	18.13	0.145	155	0.149	28.8
2,3,4,7,8-PCDF	ppt	(1) 0 in - 1 in	28	100%	668	1,217	2.8	5,952	-	-	161	100%	27.1	40.3	0.422	248	-	-	134	100%	84.3	200	1.77	1,357	-	-
2,3,4,7,8-PCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	31.1	40.7	0.541	197	-	-	138	100%	125	730	0.72	8,529	-	-
2,3,4,7,8-PCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	130	100%	58.3	98.2	0.583	841	-	-
2,3,4,7,8-PCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	148	99%	28.4	50.2	0.167	393	0.295	0.295
2,3,7,8-TCDD	ppt	(1) 0 in - 1 in	28	100%	21,000	58,287	0.8	289,000	-	-	161	100%	62.5	66.8	0.739	398	-	-	139	100%	113	156	3.2	934	-	-
2,3,7,8-TCDD	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	56.0	64.0	0.876	269	-	-	139	100%	91.7	97.4	2.81	532	-	-
2,3,7,8-TCDD	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	136	100%	61.6	113	0.218	598	-	-
2,3,7,8-TCDD	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	150	97%	20.0	43.4	0.111	311	0.157	0.679

Table 8-1
Summary Statistics of Dioxin Results by Data Set and Depth
Part II - Remedial Investigastion Report
The Dow Chemical Company, Michigan Operations

			2005/6 Dow On-Site								2006 COM Blind								2010 Dow/MDEQ							
Analyte	Unit	Depth Interval	No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Min RL of NDs	Max RL of NDs	No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Min RL of NDs	Max RL of NDs	No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	Min RL of NDs	Max RL of NDs
2,3,7,8-TCDF	ppt	(1) 0 in - 1 in	28	100%	759	1,519	5	6,572	-	-	161	100%	33.1	58.6	0.416	412	-	-	137	100%	76.1	104	1.4	622	-	-
2,3,7,8-TCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	43.3	82.4	0.261	462	-	-	137	100%	81.2	134	0.74	935	-	-
2,3,7,8-TCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	134	100%	76.8	147	0.296	1,139	-	-
2,3,7,8-TCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	153	99%	43.9	107	0.151	863	0.137	0.804
OCDD	ppt	(1) 0 in - 1 in	28	100%	368,918	707,133	890	2,911,985	-	-	161	100%	12,514	15,684	104	121,000	-	-	139	100%	27,899	26,595	560	151,009	-	-
OCDD	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	16,125	18,087	101	91,700	-	-	139	100%	21,755	22,254	348	146,440	-	-
OCDD	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	138	100%	12,924	22,695	85.9	145,854	-	-
OCDD	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	154	100%	5,181	8,951	4.21	59,361	-	-
OCDF	ppt	(1) 0 in - 1 in	28	100%	56,375	97,470	75	393,873	-	-	161	100%	1,202	1,445	7.48	9,900	-	-	139	100%	3,065	3,818	45.9	26,700	-	-
OCDF	ppt	(2) 1 in - 6 in	0	-	-	-	-	-	-	-	35	100%	1,616	1,783	7.07	7,440	-	-	138	100%	2,614	3,738	27.7	34,995	-	-
OCDF	ppt	(3) 6 in - 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	138	100%	1,935	3,797	8.95	26,000	-	-
OCDF	ppt	(4) > 1 ft	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	151	99%	851	1,587	1.04	10,600	2.23	2.23

Notes:

If duplicates exist, the average of the duplicate results was used as a single data point.

Nondetects were substituted by half of reporting limit (RL) for the computation of summary statistics.

Laboratory QAQC results are not included.

Missing data are pending to be included.

Table 8-2
Summary Statistics of Dioxin Results for the Combined 2006 CH2M Hill and 2010 Dow and MDEQ Data Sets by Depth
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

			Summmary Statistics of Combined 2006 CH2M Hill and 2010 Dow/MDEQ						Compare to Dioxin Criteria			
Chemical	Unit	Depth Interval	No. of Samples	Detection Rate	Mean	Std Dev	Min Detected Value	Max Detected Value	No. of Samples > 250 ppt	% of Samples > 250 ppt	No. of Samples > 300 ppt	% of Samples > 300 ppt
WHO-TEQ_2005	ppt	(1) 0 in - 1 in	361	100%	221	295	2.5	2750	102	28%	82	23%
WHO-TEQ_2005	ppt	(2) 1 in - 6 in	173	100%	303	817	2.9	10500	69	40%	56	32%
WHO-TEQ_2005	ppt	(3) 6 in - 1 ft	138	100%	196	282	0.49	1310	32	23%	28	20%
WHO-TEQ_2005	ppt	(4) > 1 ft	154	100%	76.8	109.4	0.231	807	11	7%	8	5%
Notes:												
If duplicates exist, the average of the duplicate results was used as a single data point.												
Nondetects were substituted by half of reporting limit (RL) for the computation of summary statistics.												
Laboratory QAQC results are not included.												
Missing data are pending to be included.												

Table 9-1
Year 1 Property Information, Implementation Activities
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	ZONING	Property ID Number	Property Acreage
Phase I				
501 STATE ST	48640	MULT	14-21-10-622	0.99
704 E GROVE ST	48640	RB	14-21-10-630	0.17
615 E INDIAN ST	48640	OS	14-16-50-064	0.35
611 E INDIAN ST	48640	OS	14-16-50-063	0.14
502 GEORGE ST	48640	OS	14-16-50-062	0.13
508 GEORGE ST	48640	OS	14-16-50-060	0.13
612 E GROVE ST	48640	RB	14-16-40-410	0.17
512 GEORGE ST	48640	RB	14-16-50-058	0.15
516 GEORGE ST	48640	RB	14-16-50-056	0.15
616 E GROVE ST	48640	RB	14-16-40-406	0.27
515 E BUTTLES ST	48640	OS	14-16-50-096	0.16
509 E BUTTLES ST	48640	OS	14-16-50-095	0.17
411 GEORGE ST	48640	OS	14-16-50-065	0.17
505 E BUTTLES ST	48640	OS	14-16-50-094	0.17
415 GEORGE ST	48640	OS	14-16-50-066	0.17
501 E BUTTLES ST	48640	OS	14-16-50-092	0.17
412 CRONKRIGHT ST	48640	OS	14-16-50-090	0.17
416 CRONKRIGHT ST	48640	OS	14-16-50-088	0.17
1010 E GROVE ST	48640	RB	14-21-10-410	1.31
1015 E GROVE ST	48640	RB	14-21-10-408	0.17
915 E INDIAN ST	48640	OS	14-21-10-536	0.17
1011 E GROVE ST	48640	RB	14-21-10-406	0.17
909 E INDIAN ST	48640	OS	14-21-10-534	0.17
609 FOURNIE ST	48640	RB	14-21-10-346	0.17
602 HALEY ST	48640	RB	14-21-10-404	0.17
916 E GROVE ST	48640	RB	14-21-10-520	0.17
613 FOURNIE ST	48640	RB	14-21-10-350	0.17
606 HALEY ST	48640	RB	14-21-10-402	0.17
914 E GROVE ST	48640	RB	14-21-10-522	0.17
901 E INDIAN ST	48640	OS	14-21-10-530	0.33
510 MILL ST	48640	RB	14-21-10-528	0.13
612 HALEY ST	48640	RB	14-21-10-400	0.21
614 HALEY ST	48640	RB	14-21-10-398	0.12
516 MILL ST	48640	RB	14-21-10-524	0.20
915 E GROVE ST	48640	RB	14-21-10-554	0.17
913 E GROVE ST	48640	RB	14-21-10-552	0.17
811 E INDIAN ST	48640	OS	14-21-10-604	0.33
613 HALEY ST	48640	RB	14-21-10-538	0.17
602 MILL ST	48640	RB	14-21-10-550	0.17
816 E GROVE ST	48640	RB	14-21-10-590	0.17
615 HALEY ST	48640	RB	14-21-10-540	0.17
606 MILL ST	48640	RB	14-21-10-548	0.17
812 E GROVE ST	48640	RB	14-21-10-592	0.17
610 MILL ST	48640	RB	14-21-10-546	0.17
502 STATE ST	48640	OS	14-21-10-600	0.50
906 E PINE ST	48640	RB	14-21-10-542	0.17
808 E GROVE ST	48640	RB	14-21-10-594	0.17
1110 E GROVE ST	48640	RB	14-21-10-344	0.31
1110 E PINE ST	48640	RB	14-21-10-308	1.20
613 E BUTTLES ST	48640	OS	14-21-80-470	0.17
609 E BUTTLES ST	48640	OS	14-21-80-468	0.17
616 E INDIAN ST	48640	OS	14-21-80-492	0.21
612 E INDIAN ST	48640	OS	14-21-80-494	0.17
402 GEORGE ST	48640	OS	14-21-80-499	0.34
412 GEORGE ST	48640	OS	14-21-80-498	0.17
416 GEORGE ST	48640	OS	14-21-80-496	0.17

Table 9-1
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Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	ZONING	Property ID Number	Property Acreage
715 E BUTTLES ST	48640	OS	14-21-80-480	0.17
711 E BUTTLES ST	48640	OS	14-21-80-478	0.12
409 STATE ST	48640	OS	14-21-80-482	0.08
707 E BUTTLES ST	48640	OS	14-21-80-476	0.12
411 STATE ST	48640	OS	14-21-80-484	0.08
701 E BUTTLES ST	48640	OS	14-21-80-472	0.25
712 E INDIAN ST	48640	OS	14-21-80-486	0.18
706 E INDIAN ST	48640	OS	14-21-80-488	0.15
702 E INDIAN ST	48640	OS	14-21-80-490	0.12
306 KENT CT	48642	RB	14-23-60-154	0.22
301 WALTER CT	48642	RB	14-23-60-088	0.24
310 KENT CT	48642	RB	14-23-60-152	0.21
307 WALTER CT	48642	RB	14-23-60-090	0.26
309 WALTER CT	48642	RB	14-23-60-092	0.22
306 WALTER CT	48642	RB	14-23-60-080	1.47
314 KENT CT	48642	RB	14-23-60-148	0.15
311 WALTER CT	48642	RB	14-23-60-094	0.21
316 WALTER CT	48642	RB	14-23-60-078	0.47
320 WALTER CT	48642	RB	14-23-60-076	0.34
324 WALTER CT	48642	RB	14-23-60-074	0.34
322 KENT CT	48642	RB	14-23-60-144	0.23
328 WALTER CT	48642	RB	14-23-60-072	0.32
328 KENT CT	48642	RB	14-23-60-142	0.25
329 WALTER CT	48642	RB	14-23-60-102	0.22
332 WALTER CT	48642	RB	14-23-60-070	0.40
332 KENT CT	48642	RB	14-23-60-140	0.22
401 WALTER CT	48642	RB	14-23-60-106	0.22
400 WALTER CT	48642	RB	14-23-60-068	0.64
400 KENT CT	48642	RB	14-23-60-132	0.68
408 WALTER CT	48642	RB	14-23-60-064	0.48
410 KENT CT	48642	RB	14-23-60-131	0.18
409 WALTER CT	48642	RB	14-23-60-110	0.20
410 WALTER CT	48642	RB	14-23-60-062	0.49
412 KENT CT	48642	RB	14-23-60-130	0.27
413 WALTER CT	48642	RB	14-23-60-112	0.30
416 KENT CT	48642	RB	14-23-60-128	0.43
424 KENT CT	48642	RB	14-23-60-124	0.23
2201 MARK PUTNAM RD	48642	IA	14-23-50-060	2.07
425 WALTER CT	48642	RB	14-23-60-120	0.48
420 KENT CT	48642	RB	14-23-60-126	0.28
2208 BAY CITY RD	48642	RB	14-23-60-122	0.24
319 WALTER CT	48642	RB	14-23-60-098	0.18
318 KENT CT	48642	RB	14-23-60-146	0.22
325 WALTER CT	48642	RB	14-23-60-100	0.22
312 KENT CT	48642	RB	14-23-60-150	0.23
301 KENT CT	48642	RB	14-23-60-156	0.38
309 KENT CT	48642	MULT	14-23-60-160	1.58
315 KENT CT	48642	MULT	14-23-60-164	0.16
315 KENT CT	48642	MULT	14-23-60-164	0.98
319 KENT CT	48642	MULT	14-23-60-168	0.49
323 KENT CT	48642	MULT	14-23-60-170	0.49
327 KENT CT	48642	MULT	14-23-60-172	0.97
331 KENT CT	48642	MULT	14-23-60-176	0.97
409 KENT CT	48642	RB	14-23-60-184	0.43
415 KENT CT	48642	RB	14-23-60-190	0.27
419 KENT CT	48642	RB	14-23-60-196	0.26
2127 MARK PUTNAM RD	48642	IA	14-23-50-070	0.95

Table 9-1
Year 1 Property Information, Implementation Activities
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The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	ZONING	Property ID Number	Property Acreage
Phase II				
706 MILL ST	48640	RC	14-16-40-508	0.19
710 MILL ST	48640	RC	14-16-40-510	0.34
801 HALEY ST	48640	RA4	14-16-40-612	0.27
805 HALEY ST	48640	RA4	14-16-40-614	0.18
811 HALEY ST	48640	RA4	14-16-40-616	0.18
815 HALEY ST	48640	RA4	14-16-40-618	0.18
819 HALEY ST	48640	RA4	14-16-40-620	0.18
1001 HALEY ST	48640	RA4	14-16-40-622	0.18
1007 HALEY ST	48640	RA4	14-16-40-624	0.19
916 E CARPENTER ST	48640	RA4	14-16-40-626	0.23
912 & 914 E CARPENTER ST	48640	RA4	14-16-40-630	0.18
906 E CARPENTER ST	48640	RA4	14-16-40-632	0.18
902 E CARPENTER ST	48640	RA4	14-16-40-634	0.25
1006 MILL ST	48640	RA4	14-16-40-636	0.19
1002 MILL ST	48640	RA4	14-16-40-638	0.19
820 MILL ST	48640	RA4	14-16-40-640	0.20
812 MILL ST	48640	RA4	14-16-40-642	0.19
810 MILL ST	48640	RA4	14-16-40-644	0.19
806 MILL ST	48640	RA4	14-16-40-646	0.19
802 MILL ST	48640	RA4	14-16-40-648	0.29
1110 E CARPENTER ST	48640	RB	14-16-40-649	0.55
811 FOURNIE ST	48640	RA4	14-16-40-654	0.19
813 FOURNIE ST	48640	RA4	14-16-40-656	0.19
819 FOURNIE ST	48640	RA4	14-16-40-658	0.19
1001 & 1,2 FOURNIE ST	48640	RA4	14-16-40-660	0.19
1007 FOURNIE ST	48640	RA4	14-16-40-662	0.19
1016 E CARPENTER ST	48640	RA4	14-16-40-664	0.25
1010 E CARPENTER ST	48640	RA4	14-16-40-666	0.17
1000 & 1006 E CARPENTER S	48640	NC	14-16-40-670	0.21
1014 & 1016 HALEY ST	48640	NC	14-16-40-672	0.24
1010 HALEY ST	48640	RA4	14-16-40-674	0.19
1002 HALEY ST	48640	RA4	14-16-40-676	0.19
818 & 1,2,3 HALEY ST	48640	RA4	14-16-40-678	0.18
816 & 816 1/2 HALEY ST	48640	RA4	14-16-40-680	0.19
810 HALEY ST	48640	RA4	14-16-40-682	0.19
806 HALEY ST	48640	RA4	14-16-40-684	0.19
806 FOURNIE ST	48640	RB	14-21-10-290	3.10
711 FOURNIE ST	48640	RB	14-21-10-316	0.19
715 FOURNIE ST	48640	RB	14-21-10-317	0.10
717 FOURNIE ST	48640	RB	14-21-10-318	0.09
719 FOURNIE ST	48640	RB	14-21-10-319	0.20
807 FOURNIE ST	48640	RA4	14-21-10-320	0.20
803 FOURNIE ST	48640	RA4	14-21-10-322	0.21
1109 E PINE ST	48640	RB	14-21-10-330	2.08
720 HALEY ST	48640	RA4	14-21-10-384	0.41
716 HALEY ST	48640	RB	14-21-10-386	0.19
712 HALEY ST	48640	RB	14-21-10-388	0.19
706 HALEY ST	48640	RB	14-21-10-390	0.19
702 HALEY ST	48640	RB	14-21-10-392	0.24
1009 E PINE ST	48640	RB	14-21-10-394	0.19
1013 E PINE ST	48640	RB	14-21-10-396	0.24
701 HALEY ST	48640	RC	14-21-10-558	0.43
711 HALEY ST	48640	RC	14-21-10-562	0.19
715 HALEY ST	48640	RC	14-21-10-564	0.32
907 E PINE ST	48640	RC	14-21-10-568	0.19
901 E PINE ST	48640	RC	14-21-10-570	0.25
800 E HALEY ST	48640	RB	14-15-50-012	0.19
804 & 808 E HALEY ST	48640	RB	14-15-50-010	0.25
720 E HALEY ST	48640	RB	14-15-50-014	0.19

Table 9-1
Year 1 Property Information, Implementation Activities
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	ZONING	Property ID Number	Property Acreage
716 E HALEY ST	48640	RB	14-15-50-016	0.19
712 E HALEY ST	48640	RB	14-15-50-018	0.19
704, 706, 708, & 710 E HALE	48640	RB	14-15-50-020	0.47

Notes:
[1] All Properties are within the City of Midland, MI
Zoning Codes
IA = Industrial
MULTI = Indicates that there is more than one zoning classification for that parcel
NC = Neighborhood Commercial
OS = Office Space
RA4 = Residential
RB = Residential
RC = Regional Commercial

Table 9-2
Year 2 Property Information, Implementation Activities
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
Phase I 2013				
1400 BAYLISS ST	48640	RC	14-15-50-108	0.18
1318 BAYLISS ST	48640	RC	14-15-50-110	0.11
1420 BAYLISS ST	48640	RC	14-15-50-112	0.38
1316 BAYLISS ST	48640	RC	14-15-50-116	0.11
1314 BAYLISS ST	48640	RC	14-15-50-118	0.11
1312 BAYLISS ST	48640	RC	14-15-50-120	0.11
1310 BAYLISS ST	48640	RC	14-15-50-122	0.11
1308 BAYLISS ST	48640	RC	14-15-50-124	0.11
1306 BAYLISS ST	48640	RC	14-15-50-126	0.11
1304 BAYLISS ST	48640	RC	14-15-50-128	0.11
1302 BAYLISS ST	48640	RC	14-15-50-130	0.11
501 E PATRICK RD	48642	RC	14-15-50-132	0.11
1422 BAYLISS ST	48640	RC	14-15-50-147	1.07
400 ARBURY PL	48640	RB	14-15-50-586	0.50
314 ARBURY PL	48640	RB	14-15-50-588	0.17
310 ARBURY PL	48640	RB	14-15-50-590	0.17
308 ARBURY PL	48640	RB	14-15-50-592	0.50
306 ARBURY PL	48640	RB	14-15-50-594	0.66
302 ARBURY PL	48640	RB	14-15-50-598	0.17
224 ARBURY PL	48640	RB	14-15-50-600	0.17
212 ARBURY PL	48640	RB	14-15-50-602	0.17
210 ARBURY PL	48640	RB	14-15-50-604	0.17
1418 LINCOLN ST	48640	RB	14-15-50-606	0.18
1414 LINCOLN ST	48640	RB	14-15-50-608	0.17
1410 LINCOLN ST	48640	RB	14-15-50-610	0.17
1406 LINCOLN ST	48640	RB	14-15-50-612	0.17
1408 LINCOLN ST	48640	RB	14-15-50-614	0.17
1402 LINCOLN ST	48640	RB	14-15-50-616	0.17
1318 LINCOLN ST	48640	RB	14-15-50-618	0.17
1312 LINCOLN ST	48640	RB	14-15-50-620	0.17
1314 LINCOLN ST	48640	RB	14-15-50-622	0.17
1310 LINCOLN ST	48640	RB	14-15-50-624	0.17
201 E PATRICK RD	48642	RB	14-15-50-626	0.17
205 E PATRICK RD	48642	RB	14-15-50-628	0.17
209 E PATRICK RD	48642	RB	14-15-50-630	0.36
217 E PATRICK RD	48642	RB	14-15-50-636	1.88
221 E PATRICK RD	48642	RB	14-15-50-650	5.22
311 E PATRICK RD	48642	RB	14-15-50-660	0.33
315 E PATRICK RD	48642	RB	14-15-50-664	0.17
413 E PATRICK RD	48642	RB	14-15-50-672	0.18
415 E PATRICK RD	48642	RB	14-15-50-674	0.25
116 ARBURY PL	48640	RB	14-15-50-724	0.21
1418 JEFFERSON AVE	48640	RB	14-15-50-726	0.14
1414 JEFFERSON AVE	48640	RB	14-15-50-728	0.12
1410 JEFFERSON AVE	48640	RB	14-15-50-730	0.16
1406 JEFFERSON AVE	48640	RB	14-15-50-732	0.16
1402 JEFFERSON AVE	48640	RB	14-15-50-734	0.21

Table 9-2
Year 2 Property Information, Implementation Activities
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
1322 JEFFERSON AVE	48640	RB	14-15-50-736	0.16
1318 JEFFERSON AVE	48640	RB	14-15-50-738	0.16
1314 JEFFERSON AVE	48640	RB	14-15-50-740	0.16
1310 JEFFERSON AVE	48640	RB	14-15-50-742	0.16
1306 JEFFERSON AVE	48640	RB	14-15-50-744	0.13
1302 JEFFERSON AVE	48640	RB	14-15-50-746	0.13
111 E PATRICK RD	48642	RB	14-15-50-748	0.17
115 E PATRICK RD	48642	RB	14-15-50-750	0.16
1309 LINCOLN ST	48640	RB	14-15-50-752	0.16
1313 LINCOLN ST	48640	RB	14-15-50-754	0.16
1319 LINCOLN ST	48640	RB	14-15-50-756	0.16
1401 LINCOLN ST	48640	RB	14-15-50-758	0.16
1405 LINCOLN ST	48640	RB	14-15-50-760	0.16
1409 LINCOLN ST	48640	RB	14-15-50-762	0.17
1411 LINCOLN ST	48640	RB	14-15-50-764	0.17
1420 FOURNIE ST	48640	RB	14-16-40-040	0.15
1412 FOURNIE ST	48640	RB	14-16-40-042	0.33
1402 FOURNIE ST	48640	RB	14-16-40-048	0.17
1107 NORTH ST	48640	RB	14-16-40-050	0.17
1115 NORTH ST	48640	RB	14-16-40-052	0.33
1117 NORTH ST	48640	RB	14-16-40-056	0.09
1413 JEFFERSON AVE	48640	RB	14-16-40-058	0.15
1301 PATRICK RD	48640	RB	14-16-40-064	0.25
1307 JEFFERSON AVE	48640	RB	14-16-40-066	0.20
1311 JEFFERSON AVE	48640	RB	14-16-40-068	0.16
1315 JEFFERSON AVE	48640	RB	14-16-40-070	0.16
1317 JEFFERSON AVE	48640	RB	14-16-40-072	0.16
1306 FRANKLIN ST	48640	RB	14-16-40-074	0.18
1302 FRANKLIN ST	48640	RB	14-16-40-076	0.16
1120 FRANKLIN ST	48640	RB	14-16-40-078	0.16
1116 FRANKLIN ST	48640	RB	14-16-40-080	0.16
1112 FRANKLIN ST	48640	RB	14-16-40-082	0.12
1316 FOURNIE ST	48640	RB	14-16-40-086	0.18
1312 FOURNIE ST	48640	RB	14-16-40-088	0.17
1306 FOURNIE ST	48640	RB	14-16-40-090	0.17
1302 FOURNIE ST	48640	RB	14-16-40-092	0.17
1120 FOURNIE ST	48640	RB	14-16-40-094	0.17
1116 FOURNIE ST	48640	RB	14-16-40-096	0.17
1110 FOURNIE ST	48640	RB	14-16-40-098	0.17
1101 E CARPENTER ST	48640	RB	14-16-40-100	0.17
1105 E CARPENTER ST	48640	RB	14-16-40-102	0.17
1113 E CARPENTER ST	48640	RB	14-16-40-104	0.33
1111 FRANKLIN ST	48640	RB	14-16-40-108	0.17
1113 FRANKLIN ST	48640	RB	14-16-40-110	0.16
1119 FRANKLIN ST	48640	RB	14-16-40-112	0.16
1301 FRANKLIN ST	48640	RB	14-16-40-114	0.16
1307 FRANKLIN ST	48640	RB	14-16-40-116	0.16
1309 FRANKLIN ST	48640	RB	14-16-40-118	0.16

Table 9-2
Year 2 Property Information, Implementation Activities
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
1313 FRANKLIN ST	48640	RB	14-16-40-120	0.18
1316 HALEY ST	48640	RA4	14-16-40-122	0.18
1310 HALEY ST	48640	RA4	14-16-40-124	0.17
1306 HALEY ST	48640	RA4	14-16-40-126	0.17
1302 HALEY ST	48640	RA4	14-16-40-128	0.17
1118 HALEY ST	48640	RA4	14-16-40-130	0.17
1116 HALEY ST	48640	RA4	14-16-40-132	0.17
1112 HALEY ST	48640	RA4	14-16-40-134	0.17
1001 E CARPENTER ST	48640	NC	14-16-40-136	0.17
1007 E CARPENTER ST	48640	RA1	14-16-40-138	0.17
1009 E CARPENTER ST	48640	RA4	14-16-40-140	0.17
1015 E CARPENTER ST	48640	RA4	14-16-40-142	0.17
1111 FOURNIE ST	48640	RA4	14-16-40-144	0.17
1115 FOURNIE ST	48640	RA4	14-16-40-146	0.17
1119 FOURNIE ST	48640	RA4	14-16-40-148	0.16
1301 FOURNIE ST	48640	RA4	14-16-40-150	0.16
1307 FOURNIE ST	48640	RA4	14-16-40-152	0.16
1311 FOURNIE ST	48640	RA4	14-16-40-154	0.16
1315 FOURNIE ST	48640	RA4	14-16-40-156	0.18
1316 MILL ST	48640	RA4	14-16-40-160	0.18
1312 MILL ST	48640	RA4	14-16-40-162	0.17
1308 MILL ST	48640	RA4	14-16-40-164	0.17
1302 MILL ST	48640	RA4	14-16-40-166	0.17
1120 MILL ST	48640	RA4	14-16-40-168	0.17
1116 MILL ST	48640	RA4	14-16-40-170	0.17
1112 MILL ST	48640	RA4	14-16-40-172	0.17
903 E CARPENTER ST	48640	RA4	14-16-40-174	0.17
905 E CARPENTER ST	48640	RA4	14-16-40-176	0.17
911 E CARPENTER ST	48640	RA4	14-16-40-178	0.17
915 E CARPENTER ST	48640	NC	14-16-40-180	0.17
1109 HALEY ST	48640	RA4	14-16-40-182	0.17
1113 HALEY ST	48640	RA4	14-16-40-184	0.17
1117 HALEY ST	48640	RA4	14-16-40-186	0.17
1301 HALEY ST	48640	RA4	14-16-40-188	0.17
1307 HALEY ST	48640	RA4	14-16-40-190	0.16
1311 HALEY ST	48640	RA4	14-16-40-192	0.16
916 NORTH ST	48640	RA4	14-16-40-194	0.18
1316 STATE ST	48640	RA4	14-16-40-248	0.18
1310 STATE ST	48640	RA4	14-16-40-250	0.17
1306 STATE ST	48640	RA4	14-16-40-252	0.17
1302 STATE ST	48640	RA4	14-16-40-254	0.17
1120 STATE ST	48640	RA4	14-16-40-256	0.17
1114 STATE ST	48640	RA4	14-16-40-258	0.17
1110 STATE ST	48640	RA4	14-16-40-260	0.17
803 E CARPENTER ST	48640	RA4	14-16-40-262	0.17
805 E CARPENTER ST	48640	RA4	14-16-40-264	0.17
809 E CARPENTER ST	48640	RA4	14-16-40-266	0.17
815 E CARPENTER ST	48640	RA4	14-16-40-268	0.17

Table 9-2
Year 2 Property Information, Implementation Activities
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
1109 MILL ST	48640	RA4	14-16-40-270	0.17
1115 MILL ST	48640	RA4	14-16-40-272	0.17
1117 MILL ST	48640	RA4	14-16-40-274	0.17
1303 MILL ST	48640	RA4	14-16-40-276	0.16
1307 MILL ST	48640	RA4	14-16-40-278	0.16
1309 MILL ST	48640	RA4	14-16-40-280	0.16
1315 MILL ST	48640	RA4	14-16-40-282	0.18
706 CRONKRIGHT ST	48640	RB	14-16-40-392	0.22
505 E PINE ST	48640	RB	14-16-40-394	0.17
701 GEORGE ST	48640	RB	14-16-40-396	0.17
705 GEORGE ST	48640	RB	14-16-40-398	0.23
713 GEORGE ST	48640	RB	14-16-40-400	0.18
715 GEORGE ST	48640	IA	14-16-40-402	0.26
615 GEORGE ST	48640	RB	14-16-40-404	0.18
609 GEORGE ST	48640	RB	14-16-40-405	0.18
611 E GROVE ST	48640	RB	14-16-40-414	0.17
615 E GROVE ST	48640	RB	14-16-40-416	0.17
701 E GROVE ST	48640	RB	14-16-40-418	0.17
703 E GROVE ST	48640	RB	14-16-40-420	0.14
709 E GROVE ST	48640	RB	14-16-40-422	0.14
601 STATE ST	48640	RB	14-16-40-424	0.11
605 STATE ST	48640	RB	14-16-40-426	0.11
716 E PINE ST	48640	RB	14-16-40-428	0.17
710 E PINE ST	48640	RB	14-16-40-430	0.17
706 E PINE ST	48640	RB	14-16-40-432	0.17
702 E PINE ST	48640	RB	14-16-40-434	0.17
616 E PINE ST	48640	RB	14-16-40-436	0.14
610 E PINE ST	48640	RB	14-16-40-438	0.25
614 GEORGE ST	48640	RB	14-16-40-442	0.07
610 GEORGE ST	48640	RB	14-16-40-444	0.21
604 GEORGE ST	48640	RB	14-16-40-448	0.17
602 GEORGE ST	48640	RB	14-16-40-450	0.17
609 E PINE ST	48640	RB	14-16-40-452	0.13
611 E PINE ST	48640	RB	14-16-40-454	0.15
613 E PINE ST	48640	RB	14-16-40-456	0.17
701 E PINE ST	48640	RB	14-16-40-458	0.17
705 E PINE ST	48640	RB	14-16-40-460	0.17
709 E PINE ST	48640	RB	14-16-40-462	0.14
701 STATE ST	48640	RB	14-16-40-464	0.11
705 STATE ST	48640	RB	14-16-40-466	0.12
711 STATE ST	48640	RB	14-16-40-468	0.15
715 STATE ST	48640	RB	14-16-40-470	0.18
708 E UNION ST	48640	RB	14-16-40-472	0.18
704 E UNION ST	48640	RB	14-16-40-474	0.18
702 E UNION ST	48640	RB	14-16-40-476	0.18
712 GEORGE ST	48640	IA	14-16-40-478	0.55
708 GEORGE ST	48640	RB	14-16-40-484	0.21
716 STATE ST	48640	RB	14-16-40-488	0.29

Table 9-2
Year 2 Property Information, Implementation Activities
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
706 STATE ST	48640	RB	14-16-40-490	0.17
704 STATE ST	48640	RB	14-16-40-492	0.17
702 STATE ST	48640	RB	14-16-40-494	0.17
616 STATE ST	48640	RB	14-16-40-496	0.17
610 STATE ST	48640	RB	14-16-40-498	0.17
815 E PINE ST	48640	RB	14-16-40-500	0.21
707 MILL ST	48640	RB	14-16-40-502	0.18
711 MILL ST	48640	RB	14-16-40-504	0.18
715 MILL ST	48640	RB	14-16-40-506	0.21
801 MILL ST	48640	RA4	14-16-40-576	0.25
805 MILL ST	48640	RA4	14-16-40-578	0.17
811 MILL ST	48640	RA4	14-16-40-580	0.17
813 MILL ST	48640	RA4	14-16-40-582	0.17
817 MILL ST	48640	RA4	14-16-40-584	0.17
1001 MILL ST	48640	RA4	14-16-40-586	0.17
1005 MILL ST	48640	RA4	14-16-40-588	0.17
814 E CARPENTER ST	48640	RA4	14-16-40-590	0.17
812 E CARPENTER ST	48640	RA4	14-16-40-592	0.17
806 E CARPENTER ST	48640	RA4	14-16-40-594	0.17
802 E CARPENTER ST	48640	RA4	14-16-40-596	0.17
1008 STATE ST	48640	RA4	14-16-40-598	0.17
1004 STATE ST	48640	RA4	14-16-40-600	0.16
820 STATE ST	48640	RA4	14-16-40-602	0.16
816 STATE ST	48640	RA4	14-16-40-604	0.16
810 STATE ST	48640	RA4	14-16-40-606	0.16
806 STATE ST	48640	RA4	14-16-40-608	0.16
802 STATE ST	48640	RA4	14-16-40-610	0.25
712 TOWNSEND ST	48640	RC	14-16-50-008	0.83
401 E PINE ST	48640	RB	14-16-50-010	0.30
405 E PINE ST	48640	RB	14-16-50-014	0.15
415 E PINE ST	48640	RB	14-16-50-016	0.17
709 CRONKRIGHT ST	48640	RC	14-16-50-018	0.10
616 CRONKRIGHT ST	48640	RB	14-16-50-024	0.15
612 CRONKRIGHT ST	48640	RB	14-16-50-026	0.15
501 E GROVE ST	48640	RB	14-16-50-028	0.17
505 E GROVE ST	48640	RB	14-16-50-030	0.17
515 E GROVE ST	48640	RB	14-16-50-034	0.33
410 E PINE ST	48640	RB	14-16-50-038	0.17
406 E PINE ST	48640	RB	14-16-50-040	0.07
616 TOWNSEND ST	48640	RB	14-16-50-042	0.12
614 TOWNSEND ST	48640	RB	14-16-50-044	0.14
604 TOWNSEND ST	48640	RB	14-16-50-046	0.12
602 TOWNSEND ST	48640	RB	14-16-50-048	0.21
409 E GROVE ST	48640	RB	14-16-50-050	0.17
413 E GROVE ST	48640	RB	14-16-50-052	0.17
615 CRONKRIGHT ST	48640	RB	14-16-50-054	0.17
501 GEORGE ST	48640	OS	14-16-50-068	0.11
505 GEORGE ST	48640	OS	14-16-50-070	0.11

Table 9-2
Year 2 Property Information, Implementation Activities
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
507 GEORGE ST	48640	RB	14-16-50-072	0.11
509 GEORGE ST	48640	RB	14-16-50-074	0.13
515 GEORGE ST	48640	RB	14-16-50-076	0.12
508 E GROVE ST	48640	RB	14-16-50-080	0.25
502 E GROVE ST	48640	RB	14-16-50-082	0.17
506 CRONKRIGHT ST	48640	OS	14-16-50-084	0.17
502 CRONKRIGHT ST	48640	OS	14-16-50-086	0.17
411 CRONKRIGHT ST	48640	OS	14-16-50-100	0.17
415 CRONKRIGHT ST	48640	OS	14-16-50-102	0.17
415 E INDIAN ST	48640	OS	14-16-50-106	0.34
416 E GROVE ST	48640	RB	14-16-50-114	0.17
414 E GROVE ST	48640	RB	14-16-50-116	0.17
406 E GROVE ST	48640	RB	14-16-50-118	0.07
512 TOWNSEND ST	48640	RB	14-16-50-120	0.26
502 TOWNSEND ST	48640	OS	14-16-50-122	0.34
414 TOWNSEND ST	48640	D	14-16-50-124	0.33
409 E BUTTLES ST	48640	D	14-16-50-130	0.17
415 E BUTTLES ST	48640	OS	14-16-50-132	0.17
403 TOWNSEND ST	48640	OS	14-16-50-156	0.08
407 TOWNSEND ST	48640	OS	14-16-50-158	0.07
409 TOWNSEND ST	48640	OS	14-16-50-160	0.16
415 TOWNSEND ST	48640	OS	14-16-50-162	0.15
309 E INDIAN ST	48640	OS	14-16-50-164	0.33
507 TOWNSEND ST	48640	OS	14-16-50-166	0.17
511 TOWNSEND ST	48640	RB	14-16-50-168	0.17
515 TOWNSEND ST	48640	RB	14-16-50-170	0.17
607 TOWNSEND ST	48640	RB	14-16-50-172	0.23
615 TOWNSEND ST	48640	CC	14-16-50-176	0.10
310 E PINE ST	48640	CC	14-16-50-178	0.12
309 E PINE ST	48640	RB	14-16-50-182	0.17
701 TOWNSEND ST	48640	RB	14-16-50-184	0.17
709 TOWNSEND ST	48640	RC	14-16-50-186	0.16
715 TOWNSEND ST	48640	RC	14-16-50-188	0.50
311 E BUTTLES ST	48640	OS	14-16-50-228	0.16
402 RODD ST	48640	OS	14-16-50-230	0.30
408 RODD ST	48640	OS	14-16-50-232	0.23
302 E INDIAN ST	48640	OS	14-16-50-234	0.17
508 RODD ST	48640	OS	14-16-50-238	0.17
510 RODD ST	48640	OS	14-16-50-240	0.17
516 RODD ST	48640	OS	14-16-50-242	0.17
309 E GROVE ST	48640	RB	14-16-50-246	0.10
315 E GROVE ST	48640	RB	14-16-50-248	0.12
602 RODD ST	48640	RB	14-16-50-250	0.17
606 RODD ST	48640	RB	14-16-50-252	0.17
610 RODD ST	48640	RB	14-16-50-254	0.17
616 RODD ST	48640	RB	14-16-50-256	0.17
702 RODD ST	48640	RB	14-16-50-258	0.17
708 RODD ST	48640	RB	14-16-50-260	0.17

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
712 RODD ST	48640	RC	14-16-50-262	0.17
711 TOWNSEND ST	48640	RC	14-16-50-264	0.00
1203 E CARPENTER ST	48640	RA4	14-21-10-096	0.08
601 MILL ST	48640	RB	14-21-10-608	0.29
609 MILL ST	48640	RB	14-21-10-612	0.17
615 MILL ST	48640	RB	14-21-10-614	0.17
602 STATE ST	48640	RB	14-21-10-616	0.21
807 E GROVE ST	48640	RB	14-21-10-618	0.17
2505 BAY CITY RD	48642	RB	14-23-20-004	1.15
307 SAM ST	48642	RB	14-23-60-004	0.61
309 SAM ST	48640	RB	14-23-60-006	0.39
311 SAM ST	48642	RB	14-23-60-008	0.69
315 SAM ST	48642	RB	14-23-60-010	0.17
321 SAM ST	48642	RB	14-23-60-012	1.01
327 SAM ST	48642	RB	14-23-60-016	1.01
401 SAM ST	48642	RB	14-23-60-020	1.01
407 SAM ST	48642	RB	14-23-60-024	0.51
411 SAM ST	48642	RB	14-23-60-028	0.51
413 SAM ST	48642	RB	14-23-60-032	0.44
2420 BAY CITY RD	48642	RB	14-23-60-036	0.46
2412 BAY CITY RD	48642	RB	14-23-60-040	0.90
2404 BAY CITY RD	48642	RB	14-23-60-044	0.90
2316 BAY CITY RD	48642	RB	14-23-60-048	0.90
2304 BAY CITY RD	48642	RB	14-23-60-052	0.90
426 WALTER CT	48642	RB	14-23-60-056	0.20
414 WALTER CT	48642	RB	14-23-60-060	0.25
404 SAUVE ST	48642	IA	14-23-60-288	0.70
2021 BAY CITY RD	48642	IA	14-23-70-050	0.21
2409 BAY CITY RD	48642	RB	14-23-70-404	0.28
2417 BAY CITY RD	48642	RB	14-23-70-408	0.33
2425 BAY CITY RD	48642	RB	14-23-70-412	0.31
Phase II 2013				
1419 IOWA ST	48642	RA3	14-15-40-130	3.77
1303 COLORADO CT	48642	RB	14-15-40-274	1.17
1405 COLORADO ST	48640	RB	14-15-40-284	0.18
1407 COLORADO ST	48642	RB	14-15-40-289	0.06
1411 COLORADO ST	48642	RB	14-15-40-290	0.17
1415 COLORADO ST	48642	RB	14-15-40-292	0.17
1419 COLORADO ST	48642	RA4	14-15-40-294	0.17
1501 COLORADO ST	48642	RB	14-15-40-296	0.18
1505 COLORADO ST	48642	RB	14-15-40-298	0.18
1509 COLORADO ST	48642	RB	14-15-40-300	0.18
1513 COLORADO ST	48642	RB	14-15-40-302	0.20
1501 E PATRICK RD	48642	NC	14-15-40-320	0.30
1503 E PATRICK RD	48642	NC	14-15-40-324	0.21
1507 E PATRICK RD	48642	NC	14-15-40-326	0.21
1511 E PATRICK RD	48642	NC	14-15-40-328	0.20
1515 E PATRICK RD	48642	NC	14-15-40-330	0.18

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
1517 E PATRICK RD	48642	NC	14-15-40-332	0.18
1607 E PATRICK RD	48642	NC	14-15-40-334	0.55
1613 E PATRICK RD	48642	NC	14-15-40-340	0.34
1514 COLORADO ST	48642	RB	14-15-40-356	0.18
1510 COLORADO ST	48642	RB	14-15-40-358	0.18
1506 COLORADO ST	48642	RB	14-15-40-360	0.18
1504 COLORADO ST	48642	RB	14-15-40-362	0.18
1420 COLORADO ST	48642	RB	14-15-40-364	0.18
1306 WALSH ST	48642	RB	14-15-40-366	0.28
418 E HALEY ST	48640	RB	14-15-50-370	0.13
414 E HALEY ST	48640	RB	14-15-50-372	0.14
410 E HALEY ST	48640	RB	14-15-50-374	0.17
406 E HALEY ST	48640	RB	14-15-50-376	0.37
402 E HALEY ST	48640	RB	14-15-50-380	0.16
322 E HALEY ST	48640	RB	14-15-50-382	0.18
320 E HALEY ST	48640	RB	14-15-50-388	0.15
316 E HALEY ST	48640	RB	14-15-50-390	0.16
312 E HALEY ST	48640	RB	14-15-50-392	0.16
308 E HALEY ST	48640	RB	14-15-50-394	0.18
304 E HALEY ST	48640	RB	14-15-50-396	0.18
220 E HALEY ST	48640	RB	14-15-50-398	0.18
214 E HALEY ST	48640	RB	14-15-50-399	0.18
210 E HALEY ST	48640	RB	14-15-50-400	0.16
206 E HALEY ST	48640	RB	14-15-50-402	0.16
120 E HALEY ST	48640	RB	14-15-50-404	0.18
118 E HALEY ST	48640	RB	14-15-50-406	0.17
116 E HALEY ST	48640	RB	14-15-50-408	0.15
110 E HALEY ST	48640	RB	14-15-50-410	0.15
108 E HALEY ST	48640	RB	14-15-50-412	0.15
1618 JEFFERSON AVE	48640	NC	14-15-50-414	0.24
1610 JEFFERSON AVE	48640	RB	14-15-50-418	0.12
1606 JEFFERSON AVE	48640	RB	14-15-50-420	0.12
1604 JEFFERSON AVE	48640	RB	14-15-50-422	0.12
111 BRADLEY CT	48640	RB	14-15-50-424	0.31
113 BRADLEY CT	48640	RB	14-15-50-428	0.15
121 BRADLEY CT	48640	RB	14-15-50-430	0.17
201 BRADLEY CT	48640	RB	14-15-50-432	0.18
205 BRADLEY CT	48640	RB	14-15-50-450	0.20
209 BRADLEY CT	48640	RB	14-15-50-452	0.20
213 BRADLEY CT	48640	RB	14-15-50-453	0.19
217 BRADLEY CT	48640	RB	14-15-50-454	0.19
303 BRADLEY CT	48640	RB	14-15-50-456	0.18
307 BRADLEY CT	48640	RB	14-15-50-458	0.17
311 BRADLEY CT	48640	RB	14-15-50-460	0.17
313 BRADLEY CT	48640	RB	14-15-50-461	0.61
312 BRADLEY CT	48640	RB	14-15-50-462	0.19
308 BRADLEY CT	48640	RB	14-15-50-464	0.28
304 BRADLEY CT	48640	RB	14-15-50-466	0.20

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
300 BRADLEY CT	48640	RB	14-15-50-468	0.18
218 BRADLEY CT	48640	RB	14-15-50-470	0.18
214 BRADLEY CT	48640	RB	14-15-50-472	0.18
210 BRADLEY CT	48640	RB	14-15-50-474	0.18
206 BRADLEY CT	48640	RB	14-15-50-488	0.18
202 BRADLEY CT	48640	RB	14-15-50-490	0.18
124 BRADLEY CT	48640	RB	14-15-50-492	0.17
120 BRADLEY CT	48640	RB	14-15-50-494	0.15
114 BRADLEY CT	48640	RB	14-15-50-496	0.15
110 BRADLEY CT	48640	RB	14-15-50-498	0.15
104 BRADLEY CT	48640	RB	14-15-50-500	0.12
1514 JEFFERSON AVE	48640	RB	14-15-50-502	0.12
1510 JEFFERSON AVE	48640	RB	14-15-50-504	0.12
1506 JEFFERSON AVE	48640	RB	14-15-50-506	0.12
1502 JEFFERSON AVE	48640	RB	14-15-50-508	0.12
109 ARBURY PL	48640	RB	14-15-50-510	0.15
113 ARBURY PL	48640	RB	14-15-50-512	0.15
119 ARBURY PL	48640	RB	14-15-50-514	0.15
121 ARBURY PL	48640	RB	14-15-50-516	0.18
201 ARBURY PL	48640	RB	14-15-50-518	0.18
207 ARBURY PL	48640	RB	14-15-50-520	0.18
209 ARBURY PL	48640	RB	14-15-50-522	0.16
213 ARBURY PL	48640	RB	14-15-50-524	0.19
215 ARBURY PL	48640	RB	14-15-50-526	0.19
217 ARBURY PL	48640	RB	14-15-50-528	0.18
301 ARBURY PL	48640	RB	14-15-50-530	0.18
305 ARBURY PL	48640	RB	14-15-50-532	0.19
309 ARBURY PL	48640	RB	14-15-50-534	0.19
313 ARBURY PL	48640	RB	14-15-50-536	0.19
317 ARBURY PL	48640	RB	14-15-50-538	0.19
401 ARBURY PL	48640	RB	14-15-50-540	0.16
405 ARBURY PL	48640	RB	14-15-50-542	0.17
1517 BAYLISS ST	48640	RB	14-15-50-550	2.69
1605 BAYLISS ST	48640	RB	14-15-50-560	0.17
1609 BAYLISS ST	48640	RB	14-15-50-562	0.17
2009 JEFFERSON AVE	48640	COM	14-16-30-404	2.62
1606 MILL ST	48640	RA4	14-16-30-436	0.14
1417 MILL ST	48640	RA4	14-16-30-438	0.15
1605 MILL ST	48640	RA4	14-16-30-440	0.15
1607 MILL ST	48640	RA4	14-16-30-442	0.15
1614 STATE ST	48640	RA4	14-16-30-460	0.22
1610 STATE ST	48640	RA4	14-16-30-462	0.18
1606 STATE ST	48640	RA4	14-16-30-464	0.19
1602 STATE ST	48640	RA4	14-16-30-466	0.20
1514 STATE ST	48640	RA4	14-16-30-468	0.20
1510 STATE ST	48640	RA4	14-16-30-470	0.18
1506 STATE ST	48640	RA4	14-16-30-472	0.17
1502 STATE ST	48640	RA4	14-16-30-474	0.18

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
1414 STATE ST	48640	RA4	14-16-30-476	0.17
1412 STATE ST	48640	RA4	14-16-30-478	0.16
1409 STATE ST	48640	RA4	14-16-30-480	0.21
1413 STATE ST	48640	RA4	14-16-30-482	0.21
1501 STATE ST	48640	RA4	14-16-30-484	0.21
1505 STATE ST	48640	RA4	14-16-30-486	0.21
1601 STATE ST	48640	RA4	14-16-30-488	0.20
1605 STATE ST	48640	RA4	14-16-30-490	0.20
1609 STATE ST	48640	RA4	14-16-30-492	0.19
1615 STATE ST	48640	RA4	14-16-30-494	0.27
1320 GEORGE ST	48640	RA4	14-16-30-496	0.19
1316 GEORGE ST	48640	RA4	14-16-30-498	0.23
1314 GEORGE ST	48640	RA4	14-16-30-500	0.23
1310 GEORGE ST	48640	RA4	14-16-30-502	0.23
1304 GEORGE ST	48640	RA4	14-16-30-504	0.23
1300 GEORGE ST	48640	RA4	14-16-30-506	0.20
707 NORTH ST	48640	RA4	14-16-30-508	0.19
709 NORTH ST	48640	RA4	14-16-30-510	0.19
715 NORTH ST	48640	RA4	14-16-30-512	0.22
708 NORTH ST	48640	RA4	14-16-30-514	0.28
704 NORTH ST	48640	RA4	14-16-30-518	0.23
2205 JEFFERSON AVE	48640	COM	14-16-30-600	10.39
500 E NELSON ST	48640	COM	14-16-30-640	0.66
1618 HALEY ST	48640	RA4	14-16-40-002	0.18
1614 HALEY ST	48640	RA4	14-16-40-004	0.21
1610 HALEY ST	48640	RA4	14-16-40-006	0.17
1606 HALEY ST	48640	RA4	14-16-40-008	0.17
1602 HALEY ST	48640	RA4	14-16-40-010	0.17
1418 HALEY ST	48640	RA4	14-16-40-012	0.17
1416 HALEY ST	48640	RA4	14-16-40-014	0.17
1410 HALEY ST	48640	RA4	14-16-40-016	0.17
1001 NORTH ST	48640	RA4	14-16-40-018	0.17
1005 NORTH ST	48640	RA4	14-16-40-020	0.17
1007 NORTH ST	48640	RA4	14-16-40-022	0.17
1401 FOURNIE ST	48640	RA4	14-16-40-024	0.17
1411 FOURNIE ST	48640	RA4	14-16-40-026	0.17
1415 FOURNIE ST	48640	RA4	14-16-40-028	0.16
1419 FOURNIE ST	48640	RA4	14-16-40-030	0.16
1423 FOURNIE ST	48640	RA4	14-16-40-032	0.16
1601 JEFFERSON AVE	48640	RA4	14-16-40-034	0.29
1407 HALEY ST	48640	RA4	14-16-40-196	0.17
1411 HALEY ST	48640	RA4	14-16-40-198	0.16
1415 HALEY ST	48640	RA4	14-16-40-200	0.16
1419 HALEY ST	48640	RA4	14-16-40-202	0.16
1601 HALEY ST	48640	RA4	14-16-40-204	0.16
1607 HALEY ST	48640	RA4	14-16-40-206	0.16
1609 HALEY ST	48640	RA4	14-16-40-208	0.16
1602 MILL ST	48640	RA4	14-16-40-214	0.17

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
1416 MILL ST	48640	RA4	14-16-40-218	0.33
1410 MILL ST	48640	RA4	14-16-40-220	0.17
903 NORTH ST	48640	RA4	14-16-40-222	0.17
907 NORTH ST	48640	RA4	14-16-40-224	0.16
915 NORTH ST	48640	RA4	14-16-40-226	0.17
1411 MILL ST	48640	RA4	14-16-40-230	0.17
1413 MILL ST	48640	RA4	14-16-40-232	0.18
1415 MILL ST	48640	RA4	14-16-40-234	0.17
1402 STATE ST	48640	RA4	14-16-40-238	0.16
805 NORTH ST	48640	RA4	14-16-40-240	0.16
807 NORTH ST	48640	RA4	14-16-40-244	0.17
815 NORTH ST	48640	RA4	14-16-40-246	0.17
714 NORTH ST	48640	RA4	14-16-40-284	0.20
615 REARDON CT	48640	RA4	14-16-40-286	0.20
621 REARDON CT	48640	RA4	14-16-40-288	0.30
618 REARDON CT	48640	RA4	14-16-40-291	0.17
616 REARDON CT	48640	RA4	14-16-40-293	0.17
610 REARDON CT	48640	RA4	14-16-40-296	0.17
1112 GEORGE ST	48640	RA4	14-16-40-300	0.31
605 E CARPENTER ST	48640	RA4	14-16-40-302	0.17
609 E CARPENTER ST	48640	RA4	14-16-40-304	0.16
613 E CARPENTER ST	48640	RA4	14-16-40-306	0.17
615 E CARPENTER ST	48640	RA4	14-16-40-308	0.16
701 E CARPENTER ST	48640	RA4	14-16-40-310	0.18
711 E CARPENTER ST	48640	RA4	14-16-40-312	0.17
713 E CARPENTER ST	48640	RA4	14-16-40-314	0.17
715 E CARPENTER ST	48640	RA4	14-16-40-316	0.17
1109 STATE ST	48640	RA4	14-16-40-318	0.36
1113 STATE ST	48640	RA4	14-16-40-320	0.19
1119 STATE ST	48640	RA4	14-16-40-322	0.18
1301 STATE ST	48640	RA4	14-16-40-324	0.18
1305 STATE ST	48640	RA4	14-16-40-326	0.18
1309 STATE ST	48640	RA4	14-16-40-328	0.18
Corner of Reardon and George	48642		No Parcel #	0.33
Phase III 2013				
1112 SCOTT ST	48642	RA2	14-15-10-430	0.29
1108 SCOTT ST	48642	RA2	14-15-10-432	0.25
1104 SCOTT ST	48642	RA2	14-15-10-434	0.25
1100 SCOTT ST	48642	RA2	14-15-10-436	0.25
1036 SCOTT ST	48642	RA2	14-15-10-438	0.25
1032 SCOTT ST	48642	RA2	14-15-10-440	0.27
1012 SCOTT ST	48642	RA2	14-15-10-442	0.28
1029 SCOTT ST	48642	RA2	14-15-10-462	0.30
1033 SCOTT ST	48642	RA2	14-15-10-464	0.24
1037 SCOTT ST	48642	RA2	14-15-10-466	0.24
1101 SCOTT ST	48642	RA2	14-15-10-468	0.24
1105 SCOTT ST	48642	RA2	14-15-10-470	0.24
1109 SCOTT ST	48642	RA2	14-15-10-472	0.24

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
1113 SCOTT ST	48642	RA2	14-15-10-474	0.24
1610 E HALEY ST	48642	RA3	14-15-40-004	0.40
1610 IOWA ST	48642	RA3	14-15-40-008	0.17
1606 IOWA ST	48642	RA3	14-15-40-010	0.17
1600 IOWA ST	48642	RA3	14-15-40-012	0.17
1518 IOWA ST	48642	RA3	14-15-40-014	0.17
1514 IOWA ST	48642	RA3	14-15-40-016	0.17
1510 IOWA ST	48642	RA3	14-15-40-018	0.17
1506 IOWA ST	48642	RA3	14-15-40-020	0.16
1502 IOWA ST	48642	RA3	14-15-40-022	0.17
1416 IOWA ST	48642	RA3	14-15-40-024	0.17
1412 IOWA ST	48642	RA3	14-15-40-026	0.17
1408 IOWA ST	48642	RA3	14-15-40-028	0.17
1404 IOWA ST	48642	RA3	14-15-40-030	0.17
1400 IOWA ST	48642	RB	14-15-40-032	0.18
1407 SWEDE AVE	48642	RB	14-15-40-036	0.56
1415 SWEDE AVE	48642	RB	14-15-40-043	0.27
1501 SWEDE AVE	48642	RB	14-15-40-046	0.28
1505 SWEDE AVE	48642	RB	14-15-40-048	0.28
1513 SWEDE AVE	48642	RA3	14-15-40-050	0.28
1601 SWEDE AVE	48642	RA3	14-15-40-052	0.17
1605 SWEDE AVE	48642	RA3	14-15-40-056	0.33
1609 SWEDE AVE	48642	RA3	14-15-40-060	0.17
1613 SWEDE AVE	48642	RA3	14-15-40-062	0.24
1518 E HALEY ST	48642	RA3	14-15-40-064	0.22
1514 E HALEY ST	48642	RA3	14-15-40-066	0.21
1510 E HALEY ST	48642	RA3	14-15-40-068	0.21
1506 E HALEY ST	48642	RA3	14-15-40-070	0.21
1502 E HALEY ST	48642	RA3	14-15-40-072	0.21
1418 E HALEY ST	48642	RA3	14-15-40-074	0.36
1412 E HALEY ST	48642	RA3	14-15-40-076	0.28
1406 E HALEY ST	48642	RA3	14-15-40-078	0.28
1402 E HALEY ST	48642	RA3	14-15-40-080	0.28
1318 E HALEY ST	48642	RA3	14-15-40-082	0.20
1310 E HALEY ST	48640	RA3	14-15-40-084	0.18
1306 E HALEY ST	48642	RA3	14-15-40-086	0.24
1311 CAROLINA ST	48642	RA3	14-15-40-088	0.18
1323 CAROLINA ST	48642	RA3	14-15-40-090	0.24
1405 CAROLINA ST	48642	RA4	14-15-40-092	0.27
1407 CAROLINA ST	48642	RA4	14-15-40-094	0.27
1411 CAROLINA ST	48642	RA4	14-15-40-096	0.30
1417 CAROLINA ST	48642	RA4	14-15-40-100	0.26
1501 CAROLINA ST	48642	RA4	14-15-40-102	0.23
1509 CAROLINA ST	48642	RA4	14-15-40-104	0.26
1605 IOWA ST	48642	RA3	14-15-40-106	0.24
1611 IOWA ST	48642	RA3	14-15-40-108	0.18
1510 CAROLINA ST	48642	RA4	14-15-40-110	0.22
1506 CAROLINA ST	48642	RA4	14-15-40-112	0.22

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
1502 CAROLINA ST	48642	RA4	14-15-40-114	0.23
1418 CAROLINA ST	48642	RA4	14-15-40-116	0.13
1416 CAROLINA ST	48642	RA4	14-15-40-117	0.15
1410 CAROLINA ST	48642	RA4	14-15-40-118	0.28
1406 CAROLINA ST	48642	RA4	14-15-40-120	0.28
1402 CAROLINA ST	48642	RA4	14-15-40-122	0.28
1324 CAROLINA ST	48642	RA3	14-15-40-140	0.27
1320 CAROLINA ST	48642	RA3	14-15-40-142	0.28
1316 CAROLINA ST	48642	RA3	14-15-40-144	0.17
1312 CAROLINA ST	48642	RA3	14-15-40-146	0.17
1308 CAROLINA ST	48642	RA3	14-15-40-148	0.17
1304 CAROLINA ST	48642	RA3	14-15-40-150	0.18
1300 E HALEY ST	48642	RA3	14-15-40-154	0.21
1210 E HALEY ST	48642	RB	14-15-40-156	0.28
1204 E HALEY ST	48642	RB	14-15-40-170	0.17
1407 IOWA ST	48642	RA3	14-15-40-304	0.17
1413 IOWA ST	48642	RA3	14-15-40-306	0.17
1417 IOWA ST	48642	RA3	14-15-40-308	0.17
1501 IOWA ST	48642	RA3	14-15-40-310	0.17
1505 IOWA ST	48642	RA3	14-15-40-312	0.17
1509 IOWA ST	48642	RA3	14-15-40-314	0.17
1513 IOWA ST	48642	RA3	14-15-40-316	0.22
700 E HALEY ST	48640	RB	14-15-50-026	0.26
612 E HALEY ST	48640	RB	14-15-50-028	0.19
608 E HALEY ST	48640	RB	14-15-50-030	0.18
604 E HALEY ST	48640	RB	14-15-50-032	0.19
602 E HALEY ST	48640	RB	14-15-50-034	0.18
514 E HALEY ST	48640	RB	14-15-50-036	0.17
510 E HALEY ST	48640	RB	14-15-50-038	0.17
504 E HALEY ST	48640	RB	14-15-50-040	0.17
500 E HALEY ST	48640	RB	14-15-50-042	0.17
1604 BAYLISS ST	48640	RB	14-15-50-044	0.17
1600 BAYLISS ST	48640	RB	14-15-50-046	0.23
1220 S SAGINAW RD	48640	RC	14-15-60-041	0.63
1214 S SAGINAW RD	48640	RC	14-15-60-046	0.66
1120 S SAGINAW RD	48640	RC	14-15-60-054	0.17
1112 S SAGINAW RD	48640	RC	14-15-60-058	0.37
1104 S SAGINAW RD	48640	RC	14-15-60-060	0.29
1020 S SAGINAW RD	48640	RC	14-15-60-064	0.25
1004 S SAGINAW RD	48640	RC	14-15-60-068	0.25
1000 S SAGINAW RD	48640	RC	14-15-60-070	0.23
1001 MICHIGAN ST	48640	RB	14-15-60-072	0.16
1005 MICHIGAN ST	48640	RB	14-15-60-074	0.17
1009 MICHIGAN ST	48640	RB	14-15-60-076	0.17
1013 MICHIGAN ST	48640	RB	14-15-60-078	0.17
1017 MICHIGAN ST	48640	RB	14-15-60-080	0.17
1101 MICHIGAN ST	48640	RB	14-15-60-082	0.17
1105 MICHIGAN ST	48640	RB	14-15-60-084	0.18

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1109 MICHIGAN ST	48640	RB	14-15-60-086	0.15
1113 MICHIGAN ST	48640	RB	14-15-60-088	0.17
1117 MICHIGAN ST	48640	RB	14-15-60-090	0.17
1201 MICHIGAN ST	48640	RB	14-15-60-092	0.17
1205 MICHIGAN ST	48640	RB	14-15-60-094	0.17
1209 MICHIGAN ST	48640	RB	14-15-60-096	0.17
1213 MICHIGAN ST	48640	RB	14-15-60-098	0.17
1217 MICHIGAN ST	48640	RB	14-15-60-100	0.17
1221 MICHIGAN ST	48640	RB	14-15-60-102	0.17
1225 MICHIGAN ST	48640	RB	14-15-60-104	0.17
1229 MICHIGAN ST	48640	RB	14-15-60-106	0.17
1301 MICHIGAN ST	48640	RB	14-15-60-108	0.17
1305 MICHIGAN ST	48640	RB	14-15-60-110	0.17
1401 MICHIGAN ST	48640	RB	14-15-60-112	0.20
806 MAPLE ST	48640	RB	14-15-60-120	0.18
802 MAPLE ST	48640	RB	14-15-60-122	0.18
722 MAPLE ST	48640	RB	14-15-60-124	0.18
718 MAPLE ST	48640	RB	14-15-60-126	0.18
714 MAPLE ST	48640	RB	14-15-60-128	0.18
710 MAPLE ST	48640	RB	14-15-60-130	0.18
706 MAPLE ST	48640	RB	14-15-60-132	0.18
700 MAPLE ST	48640	RB	14-15-60-134	0.25
614 MAPLE ST	48640	RB	14-15-60-136	0.26
610 MAPLE ST	48640	RB	14-15-60-138	0.18
606 MAPLE ST	48640	RB	14-15-60-140	0.18
602 MAPLE ST	48640	RB	14-15-60-142	0.18
514 MAPLE ST	48640	RB	14-15-60-144	0.18
510 MAPLE ST	48640	RB	14-15-60-146	0.18
506 MAPLE ST	48640	RB	14-15-60-148	0.18
2014 BAYLISS ST	48640	RB	14-15-60-150	0.24
501 E HALEY ST	48640	RB	14-15-60-152	0.24
505 E HALEY ST	48640	RB	14-15-60-154	0.18
511 E HALEY ST	48640	RB	14-15-60-156	0.18
513 E HALEY ST	48640	RB	14-15-60-158	0.18
607 E HALEY ST	48640	RB	14-15-60-160	0.18
605 E HALEY ST	48640	RB	14-15-60-162	0.18
609 E HALEY ST	48640	RB	14-15-60-164	0.18
613 E HALEY ST	48640	RB	14-15-60-166	0.27
701 E HALEY ST	48640	RB	14-15-60-168	0.22
705 E HALEY ST	48640	RB	14-15-60-170	0.22
709 E HALEY ST	48640	RB	14-15-60-172	0.18
713 E HALEY ST	48640	RB	14-15-60-174	0.18
717 E HALEY ST	48640	RB	14-15-60-176	0.18
719 E HALEY ST	48640	RB	14-15-60-178	0.18
801 E HALEY ST	48640	RB	14-15-60-180	0.18
805 E HALEY ST	48640	RB	14-15-60-182	0.18
809 E HALEY ST	48640	RB	14-15-60-184	0.19
813 E HALEY ST	48640	RB	14-15-60-186	0.18

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
817 E HALEY ST	48640	RB	14-15-60-188	0.16
1402 MICHIGAN ST	48640	RB	14-15-60-190	0.22
1220 MICHIGAN ST	48640	RB	14-15-60-194	0.30
1212 MICHIGAN ST	48640	RB	14-15-60-196	0.25
714 WALNUT ST	48640	RB	14-15-60-198	0.23
706 WALNUT ST	48640	RB	14-15-60-200	0.23
702 WALNUT ST	48640	RB	14-15-60-202	0.18
618 WALNUT ST	48640	RB	14-15-60-204	0.18
614 WALNUT ST	48640	RB	14-15-60-206	0.21
610 WALNUT ST	48640	RB	14-15-60-208	0.21
606 WALNUT ST	48640	RB	14-15-60-210	0.21
602 WALNUT ST	48640	RB	14-15-60-212	0.21
510 WALNUT ST	48640	RB	14-15-60-214	0.22
506 WALNUT ST	48640	RB	14-15-60-216	0.23
2116 BAYLISS ST	48640	RB	14-15-60-218	0.21
2102 BAYLISS ST	48640	RB	14-15-60-220	0.21
505 MAPLE ST	48640	RB	14-15-60-222	0.19
511 MAPLE ST	48640	RB	14-15-60-224	0.18
515 MAPLE ST	48640	RB	14-15-60-226	0.20
601 MAPLE ST	48640	RB	14-15-60-228	0.19
605 MAPLE ST	48640	RB	14-15-60-230	0.18
609 MAPLE ST	48640	RB	14-15-60-232	0.18
615 MAPLE ST	48640	RB	14-15-60-234	0.18
617 MAPLE ST	48640	RB	14-15-60-236	0.18
701 MAPLE ST	48640	RB	14-15-60-238	0.18
705 MAPLE ST	48640	RB	14-15-60-240	0.18
709 MAPLE ST	48640	RB	14-15-60-242	0.18
717 MAPLE ST	48640	RB	14-15-60-244	0.18
719 MAPLE ST	48640	RB	14-15-60-246	0.18
705 WALNUT ST	48640	RB	14-15-60-250	0.29
1102 MICHIGAN ST	48640	RB	14-15-60-252	0.33
614 CHERRY ST	48640	RB	14-15-60-256	0.15
606 CHERRY ST	48640	RB	14-15-60-258	0.33
502 CHERRY ST	48640	RB	14-15-60-270	1.58
513 WALNUT ST	48640	RB	14-15-60-278	0.21
601 WALNUT ST	48640	RB	14-15-60-280	0.20
609 WALNUT ST	48640	RB	14-15-60-282	0.20
613 WALNUT ST	48640	RB	14-15-60-284	0.21
617 WALNUT ST	48640	RB	14-15-60-286	0.20
701 WALNUT ST	48640	RB	14-15-60-288	0.20
1000 MICHIGAN ST	48640	RB	14-15-60-292	0.20
514 EASTLAWN DR	48640	RB	14-15-60-294	0.18
512 EASTLAWN DR	48640	RB	14-15-60-296	0.18
504 EASTLAWN DR	48640	RB	14-15-60-298	0.22
502 EASTLAWN DR	48640	RB	14-15-60-300	0.24
505 CHERRY ST	48640	RB	14-15-60-304	0.39
511 CHERRY ST	48640	RB	14-15-60-306	0.18
601 CHERRY ST	48640	RB	14-15-60-310	0.37

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
605 CHERRY ST	48640	RB	14-15-60-312	0.35
413 CHERRY ST	48640	RB	14-15-60-314	0.18
2307 BAYLISS ST	48640	RB	14-15-60-316	0.21
412 EASTLAWN DR	48640	RB	14-15-60-320	0.33
406 EASTLAWN DR	48640	RB	14-15-60-324	0.21
404 EASTLAWN DR	48640	RB	14-15-60-326	0.21
400 EASTLAWN DR	48640	RB	14-15-60-328	0.21
312 EASTLAWN DR	48640	RB	14-15-60-330	0.21
308 EASTLAWN DR	48640	RB	14-15-60-332	0.21
304 EASTLAWN DR	48640	RB	14-15-60-334	0.21
300 EASTLAWN DR	48640	RB	14-15-60-336	0.21
218 EASTLAWN DR	48640	RB	14-15-60-338	0.21
214 EASTLAWN DR	48640	RB	14-15-60-340	0.18
210 EASTLAWN DR	48640	RB	14-15-60-342	0.18
2314 CLEVELAND AVE	48640	RB	14-15-60-344	0.17
2310 CLEVELAND AVE	48640	RB	14-15-60-346	0.17
2306 CLEVELAND AVE	48640	RB	14-15-60-348	0.18
2302 CLEVELAND AVE	48640	RB	14-15-60-350	0.28
2200 CLEVELAND AVE	48640	RB	14-15-60-360	4.64
211 CHERRYVIEW DR	48640	RB	14-15-60-362	1.95
213 CHERRYVIEW DR	48640	RB	14-15-60-364	0.02
215 CHERRYVIEW DR	48640	RB	14-15-60-366	0.02
217 CHERRYVIEW DR	48640	RB	14-15-60-368	0.02
219 CHERRYVIEW DR	48640	RB	14-15-60-370	0.02
221 CHERRYVIEW DR	48640	RB	14-15-60-372	0.02
223 CHERRYVIEW DR	48640	RB	14-15-60-374	0.02
225 CHERRYVIEW DR	48640	RB	14-15-60-376	0.03
301 CHERRYVIEW DR	48640	RB	14-15-60-378	0.02
303 CHERRYVIEW DR	48640	RB	14-15-60-380	0.02
305 CHERRYVIEW DR	48640	RB	14-15-60-382	0.02
307 CHERRYVIEW DR	48640	RB	14-15-60-384	0.02
309 CHERRYVIEW DR	48640	RB	14-15-60-386	0.02
311 CHERRYVIEW DR	48640	RB	14-15-60-388	0.02
313 CHERRYVIEW DR	48640	RB	14-15-60-390	0.02
315 CHERRYVIEW DR	48640	RB	14-15-60-392	0.02
321 CHERRYVIEW DR	48640	RB	14-15-60-394	0.02
323 CHERRYVIEW DR	48640	RB	14-15-60-396	0.02
325 CHERRYVIEW DR	48640	RB	14-15-60-398	0.02
327 CHERRYVIEW DR	48640	RB	14-15-60-400	0.02
329 CHERRYVIEW DR	48640	RB	14-15-60-402	0.02
331 CHERRYVIEW DR	48640	RB	14-15-60-404	0.02
333 CHERRYVIEW DR	48640	RB	14-15-60-406	0.02
335 CHERRYVIEW DR	48640	RB	14-15-60-408	0.02
401 CHERRYVIEW DR	48640	RB	14-15-60-412	0.02
403 CHERRYVIEW DR	48640	RB	14-15-60-414	0.02
405 CHERRYVIEW DR	48640	RB	14-15-60-416	0.02
407 CHERRYVIEW DR	48640	RB	14-15-60-418	0.02
409 CHERRYVIEW DR	48640	RB	14-15-60-420	0.02

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
411 CHERRYVIEW DR	48640	RB	14-15-60-422	0.02
413 CHERRYVIEW DR	48640	RB	14-15-60-424	0.02
415 CHERRYVIEW DR	48640	RB	14-15-60-426	0.03
2303 CLEVELAND AVE	48640	RB	14-15-60-430	0.15
2311 CLEVELAND AVE	48640	RB	14-15-60-432	0.30
2315 CLEVELAND AVE	48640	RB	14-15-60-436	0.14
114 EASTLAWN DR	48640	RB	14-15-60-438	0.21
2318 JEFFERSON AVE	48640	RB	14-15-60-440	0.22
2314 JEFFERSON AVE	48640	RB	14-15-60-442	0.12
2310 JEFFERSON AVE	48640	RB	14-15-60-444	0.15
2306 JEFFERSON AVE	48640	RB	14-15-60-446	0.15
2302 JEFFERSON AVE	48640	RB	14-15-60-448	0.15
2218 JEFFERSON AVE	48640	RB	14-15-60-450	0.22
2214 JEFFERSON AVE	48640	RB	14-15-60-452	0.17
2212 JEFFERSON AVE	48640	RB	14-15-60-454	0.17
2210 JEFFERSON AVE	48640	RB	14-15-60-456	0.17
2202 JEFFERSON AVE	48640	RB	14-15-60-458	0.17
2120 JEFFERSON AVE	48640	RB	14-15-60-460	0.17
2118 JEFFERSON AVE	48640	RB	14-15-60-462	0.17
2112 JEFFERSON AVE	48640	RB	14-15-60-464	0.17
2114 JEFFERSON AVE	48640	RB	14-15-60-466	0.17
2024 JEFFERSON AVE	48640	RB	14-15-60-468	0.14
2020 JEFFERSON AVE	48640	RB	14-15-60-470	0.13
2018 JEFFERSON AVE	48640	RB	14-15-60-472	0.16
2016 JEFFERSON AVE	48640	RB	14-15-60-474	0.16
2010 JEFFERSON AVE	48640	RB	14-15-60-476	0.16
2006 JEFFERSON AVE	48640	RB	14-15-60-478	0.18
2002 JEFFERSON AVE	48640	OS	14-15-60-480	0.14
111 E HALEY ST	48640	RB	14-15-60-482	0.16
115 E HALEY ST	48640	RB	14-15-60-484	0.16
2011 CLEVELAND AVE	48640	RB	14-15-60-486	0.16
2013 CLEVELAND AVE	48640	RB	14-15-60-488	0.16
2017 CLEVELAND AVE	48640	RB	14-15-60-490	0.16
2100 CLEVELAND AVE	48640	RB	14-15-60-492	4.06
2018 CLEVELAND AVE	48640	RB	14-15-60-500	0.24
2012 CLEVELAND AVE	48640	RB	14-15-60-502	0.23
2006 CLEVELAND AVE	48640	RB	14-15-60-504	0.17
205 E HALEY ST	48640	RB	14-15-60-506	0.19
207 E HALEY ST	48640	RB	14-15-60-508	0.19
215 E HALEY ST	48640	RB	14-15-60-510	0.17
217 E HALEY ST	48640	RB	14-15-60-512	0.17
219 E HALEY ST	48640	RB	14-15-60-514	0.17
301 E HALEY ST	48640	RB	14-15-60-516	0.17
305 E HALEY ST	48640	RB	14-15-60-518	0.17
309 E HALEY ST	48640	RB	14-15-60-522	0.33
401 E HALEY ST	48640	RB	14-15-60-524	0.14
405 E HALEY ST	48640	RB	14-15-60-526	0.14
409 E HALEY ST	48640	RB	14-15-60-528	0.57

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411 E HALEY ST	48640	RB	14-15-60-530	0.16
2007 BAYLISS ST	48640	RB	14-15-60-532	0.32
2017 BAYLISS ST	48640	RB	14-15-60-536	0.19
418 MAPLE ST	48640	RB	14-15-60-538	0.24
400 MAPLE ST	48640	RB	14-15-60-544	0.17
314 MAPLE ST	48640	RB	14-15-60-546	0.20
312 MAPLE ST	48640	RB	14-15-60-548	0.20
306 MAPLE ST	48640	RB	14-15-60-550	0.20
302 MAPLE ST	48640	RB	14-15-60-552	0.40
218 MAPLE ST	48640	RB	14-15-60-556	0.20
214 MAPLE ST	48640	RB	14-15-60-558	0.20
206 MAPLE ST	48640	RB	14-15-60-560	0.20
2101 BAYLISS ST 11	48640	RB	14-15-60-601	5.13
2117 BAYLISS ST	48640	RB	14-15-60-647	0.02
2115 BAYLISS ST	48640	RB	14-15-60-648	0.02
2113 BAYLISS ST	48640	RB	14-15-60-649	0.02
2111 BAYLISS ST	48640	RB	14-15-60-650	0.02
2109 BAYLISS ST	48640	RB	14-15-60-651	0.02
2107 BAYLISS ST	48640	RB	14-15-60-652	0.02
2105 BAYLISS ST	48640	RB	14-15-60-653	0.02
2103 BAYLISS ST	48640	RB	14-15-60-654	0.02
309 MAPLE ST	48640	RB	14-15-60-660	2.81
1002 RODD ST	48640	RA4	14-16-30-100	0.11
1004 RODD ST	48640	RA4	14-16-30-102	0.11
1006 RODD ST	48640	RA4	14-16-30-104	0.11
1008 RODD ST	48640	RA4	14-16-30-106	0.11
1014 RODD ST	48640	RA4	14-16-30-108	0.11
1016 RODD ST	48640	RA4	14-16-30-110	0.11
502 E CARPENTER ST	48640	RB	14-16-30-148	0.17
500 E CARPENTER ST	48640	RB	14-16-30-150	0.17
1016 TOWNSEND ST	48640	RB	14-16-30-152	0.17
1012 TOWNSEND ST	48640	RB	14-16-30-154	0.17
401 E HINES ST	48640	RB	14-16-30-156	0.18
405 E HINES ST	48640	RB	14-16-30-158	0.15
409 E HINES ST	48640	RB	14-16-30-160	0.17
415 E HINES ST	48640	RB	14-16-30-162	0.17
1001 TOWNSEND ST	48640	RB	14-16-30-168	0.14
1005 TOWNSEND ST	48640	RB	14-16-30-170	0.15
1009 TOWNSEND ST	48640	RB	14-16-30-172	0.15
1013 TOWNSEND ST	48640	RB	14-16-30-174	0.11
1015 TOWNSEND ST	48640	RB	14-16-30-176	0.06
506 E CARPENTER ST	48640	RB	14-16-40-330	0.19
504 E CARPENTER ST	48640	RB	14-16-40-332	0.18
411 E HINES ST	48640	RC	14-16-40-334	1.19
406 E HINES ST	48640	IA	14-16-40-350	1.18
402 E HINES ST	48640	IA	14-16-40-364	0.33
802 TOWNSEND ST	48640	IA	14-16-40-368	0.19
800 TOWNSEND ST	48640	IA	14-16-40-372	1.06

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Property Address[1]	Property Zip	Zoning	Property ID Number	Property Acreage
805 GEORGE ST	48640	IA	14-16-40-380	0.65
803 STATE ST	48640	RB	14-16-40-512	1.56
815 STATE ST	48640	RB	14-16-40-540	1.30
600 E CARPENTER ST	48640	RB	14-16-40-574	3.41
803 TOWNSEND ST	48640	MULT	14-16-60-030	1.53
2710 PARSONS CT	48642	RB	14-23-30-366	0.49
2706 PARSONS CT	48642	RB	14-23-30-368	0.51
2700 PARSONS CT	48642	RB	14-23-30-376	0.19
2704 PARSONS CT	48642	RB	14-23-30-378	0.25
2614 PARSONS CT	48642	RB	14-23-30-380	0.72
2610 PARSONS CT	48642	RB	14-23-30-384	0.72
2604 PARSONS CT	48642	RB	14-23-30-388	0.19
2600 PARSONS CT	48642	RB	14-23-30-390	0.23
2602 PARSONS CT	48642	RB	14-23-30-394	0.54
2516 PARSONS CT	48642	RB	14-23-30-398	0.48
310 SAM ST	48642	RB	14-23-30-400	0.13
2504 PARSONS CT	48642	RB	14-23-30-404	1.09
320 SAM ST	48642	RB	14-23-30-406	0.33
2505 PARSONS CT	48642	RB	14-23-30-412	0.43
2509 PARSONS CT	48642	RB	14-23-30-414	0.43
2513 PARSONS CT	48642	RB	14-23-30-416	0.43
333 DICK ST	48642	RB	14-23-30-418	0.27
345 DICK ST	48642	RB	14-23-30-420	0.57
351 DICK ST	48642	RB	14-23-30-426	0.62
2600 CHARLES ST	48642	RB	14-23-30-428	0.43
2520 CHARLES ST	48642	RB	14-23-30-430	0.43
2502 CHARLES ST	48642	RB	14-23-30-432	0.43
334 SAM ST	48642	RB	14-23-30-434	0.39
342 SAM ST	48642	RB	14-23-30-436	0.20
348 SAM ST	48642	RB	14-23-30-438	0.20
400 SAM ST	48642	RB	14-23-30-442	0.37
410 SAM ST	48642	RB	14-23-30-446	0.51
2620 BAY CITY RD	48642	RB	14-23-30-460	1.01
2600 BAY CITY RD	48642	RB	14-23-30-462	1.71
2524 BAY CITY RD	48642	RB	14-23-30-466	0.62
2514 BAY CITY RD	48642	RB	14-23-30-468	1.40
2504 BAY CITY RD	48642	RB	14-23-30-472	0.32
418 SAM ST	48642	RB	14-23-30-474	0.19

Notes: [1] All Properties are within the City of Midland, MI

Zoning Codes:
CC = Community Commercial
COM = Community
D = Downtown District
IA = Industrial
MULT = Indicates that there is more than one zoning classification for that parcel
NC = Neighborhood Commercial
OS = Office Space

Table 9-3
Identification of 2014 Phase I Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
2313 Swede Ave	RA-3	14-15-30-002	0.24
1614 Eastlawn Dr	RA-3	14-15-30-004	0.21
1610 Eastlawn Dr	RA-3	14-15-30-006	0.22
1604 Eastlawn Dr	RA-3	14-15-30-008	0.22
1600 Eastlawn Dr	RA-3	14-15-30-010	0.19
1514 Eastlawn Dr	RA-3	14-15-30-012	0.26
1508 Eastlawn Dr	RA-3	14-15-30-014	0.19
1504 Eastlawn Dr	RA-3	14-15-30-016	0.21
1500 Eastlawn Dr	RA-3	14-15-30-018	0.21
1418 Eastlawn Dr	RA-3	14-15-30-020	0.22
1414 Eastlawn Dr	RA-3	14-15-30-022	0.23
1408 Eastlawn Dr	RA-3	14-15-30-024	0.21
1400 Eastlawn Dr	RA-3	14-15-30-026	0.24
1318 Eastlawn Dr	RA-3	14-15-30-028	0.26
1314 Eastlawn Dr	RA-3	14-15-30-030	0.19
1310 Eastlawn Dr	RA-3	14-15-30-032	0.19
2316 Carolina St	RA-3	14-15-30-034	0.21
2312 Carolina St	RA-3	14-15-30-036	0.21
2302 Carolina St	RA-3	14-15-30-038	0.22
1305 Ohio St	RA-3	14-15-30-040	0.19
1309 Ohio St	RA-3	14-15-30-042	0.19
1313 Ohio St	RA-3	14-15-30-044	0.19
1317 Ohio St	RA-3	14-15-30-046	0.19
1401 Ohio St	RA-3	14-15-30-048	0.19
1405 Ohio St	RA-3	14-15-30-050	0.19
1409 Ohio St	RA-3	14-15-30-052	0.19
1413 Ohio St	RA-3	14-15-30-054	0.21
1417 Ohio St	RA-3	14-15-30-056	0.18
1501 Ohio St	RA-3	14-15-30-058	0.20
1505 Ohio St	RA-3	14-15-30-060	0.20
1509 Ohio St	RA-3	14-15-30-062	0.20
1513 Ohio St	RA-3	14-15-30-064	0.20
1517 Ohio St	RA-3	14-15-30-066	0.19
1601 Ohio St	RA-3	14-15-30-068	0.19
1605 Ohio St	RA-3	14-15-30-070	0.19
1609 Ohio St	RA-3	14-15-30-072	0.19
1613 Ohio St	RA-3	14-15-30-074	0.19
1617 Ohio St	RA-3	14-15-30-076	0.19
1618 Ohio St	RA-3	14-15-30-080	0.18
1614 Ohio St	RA-3	14-15-30-082	0.18
2218 Tennessee St	RA-3	14-15-30-084	0.19

Table 9-3
Identification of 2014 Phase I Properties
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The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
2214 Tennessee St	RA-3	14-15-30-086	0.17
2210 Tennessee St	RA-3	14-15-30-088	0.17
2206 Tennessee St	RA-3	14-15-30-090	0.17
2202 Tennessee St	RA-3	14-15-30-092	0.17
2118 Tennessee St	RA-3	14-15-30-094	0.17
2114 Tennessee St	RA-3	14-15-30-096	0.17
2110 Tennessee St	RA-3	14-15-30-098	0.17
2106 Tennessee St	RA-3	14-15-30-100	0.17
2102 Tennessee St	RA-3	14-15-30-102	0.19
1617 Maryland St	RA-3	14-15-30-104	0.19
2109 Swede Ave - DU A	RA-3	14-15-30-106A	0.16
2109 Swede Ave - DU B	RA-3	14-15-30-106B	0.17
2115 Swede Ave	RA-3	14-15-30-110	0.17
2121 Swede Ave	RA-3	14-15-30-112	0.17
2201 Swede Ave	RA-3	14-15-30-114	0.25
2209 Swede Ave	RA-3	14-15-30-120	0.25
1510 Ohio St	RA-3	14-15-30-124	0.19
1506 Ohio St	RA-3	14-15-30-126	0.19
1502 Ohio St	RA-3	14-15-30-128	0.18
1418 Ohio St	RA-3	14-15-30-130	0.18
1414 Ohio St	RA-3	14-15-30-132	0.19
1410 Ohio St	RA-3	14-15-30-134	0.19
2220 Kentucky St	RA-3	14-15-30-136	0.19
2216 Kentucky St	RA-3	14-15-30-138	0.17
2212 Kentucky St	RA-3	14-15-30-140	0.17
2210 Kentucky St	RA-3	14-15-30-142	0.17
2202 Kentucky St	RA-3	14-15-30-144	0.15
2118 Kentucky St	RA-3	14-15-30-146	0.15
2114 Kentucky St	RA-3	14-15-30-148	0.17
2110 Kentucky St	RA-3	14-15-30-150	0.17
2106 Kentucky St	RA-3	14-15-30-152	0.17
1407 Maryland St	RA-3	14-15-30-154	0.19
1411 Maryland St	RA-3	14-15-30-156	0.19
1415 Maryland St	RA-3	14-15-30-158	0.19
1417 Maryland St	RA-3	14-15-30-160	0.18
1501 Maryland St	RA-3	14-15-30-162	0.18
1507 Maryland St	RA-3	14-15-30-164	0.19
1519 Maryland St	RA-3	14-15-30-166	0.19
2101 Tennessee St	RA-3	14-15-30-168	0.19
2105 Tennessee St	RA-3	14-15-30-170	0.17
2109 Tennessee St	RA-3	14-15-30-172	0.17

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Property Address[1]	Zoning	Property ID Number	Property Acreage
2113 Tennessee St	RA-3	14-15-30-174	0.17
2117 Tennessee St	RA-3	14-15-30-176	0.15
1421 Maryland St - DU A	RA-3	14-15-30-180A	0.89
1421 Maryland St - DU B	RA-3	14-15-30-180B	0.91
1421 Maryland St - DU C	RA-3	14-15-30-180C	0.96
1421 Maryland St - DU D	RA-3	14-15-30-180D	0.94
1421 Maryland St - DU E	RA-3	14-15-30-180E	0.04
2201 Tennessee St	RA-3	14-15-30-184	0.15
2205 Tennessee St	RA-3	14-15-30-186	0.17
2209 Tennessee St	RA-3	14-15-30-188	0.17
2213 Tennessee St	RA-3	14-15-30-190	0.17
2217 Tennessee St	RA-3	14-15-30-192	0.19
1314 Ohio St	RA-3	14-15-30-194	0.18
1310 Ohio St	RA-3	14-15-30-196	0.18
1306 Ohio St	RA-3	14-15-30-198	0.19
2214 Carolina St	RA-3	14-15-30-200	0.17
2210 Carolina St	RA-3	14-15-30-202	0.17
2206 Carolina St	RA-3	14-15-30-204	0.17
2202 Carolina St	RA-3	14-15-30-206	0.17
2118 Carolina St	RA-3	14-15-30-208	0.17
2114 Carolina St	RA-3	14-15-30-210	0.17
2110 Carolina St	RA-3	14-15-30-212	0.17
2106 Carolina St	RA-3	14-15-30-214	0.17
1309 Maryland St	RA-3	14-15-30-216	0.19
2101 Kentucky St	RA-3	14-15-30-218	0.19
2109 Kentucky St	RA-3	14-15-30-220	0.17
2113 Kentucky St	RA-3	14-15-30-222	0.17
2117 Kentucky St	RA-3	14-15-30-224	0.17
2121 Kentucky St	RA-3	14-15-30-226	0.17
2203 Kentucky St	RA-3	14-15-30-228	0.17
2207 Kentucky St	RA-3	14-15-30-230	0.17
2211 Kentucky St	RA-3	14-15-30-232	0.17
2014 Carolina St	RA-3	14-15-30-236	0.17
2010 Carolina St	RA-3	14-15-30-238	0.17
2004 Carolina St	RA-3	14-15-30-240	0.17
1307 E Haley St	RA-3	14-15-30-242	0.14
1309 E Haley St	RA-3	14-15-30-244	0.19
1317 E Haley St	RA-3	14-15-30-246	0.17
1321 E Haley St	RA-3	14-15-30-248	0.14
1401 E Haley St	RA-3	14-15-30-250	0.18
1407 E Haley St	RA-3	14-15-30-252	0.17

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The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
1409 E Haley St	RA-3	14-15-30-254	0.18
1415 E Haley St	RA-3	14-15-30-256	0.18
1419 E Haley St	RA-3	14-15-30-258	0.18
1501 E Haley St	RA-3	14-15-30-260	0.20
1505 E Haley St	RA-3	14-15-30-262	0.18
1509 E Haley St	RA-3	14-15-30-264	0.18
1513 E Haley St	RA-3	14-15-30-266	0.18
1517 E Haley St	RA-3	14-15-30-268	0.17
1601 E Haley St	RA-3	14-15-30-270	0.17
1605 E Haley St	RA-3	14-15-30-272	0.17
1609 E Haley St	RA-3	14-15-30-274	0.17
1613 E Haley St	RA-3	14-15-30-276	0.17
2003 Swede Ave	RA-3	14-15-30-278	0.17
2011 Swede Ave	RA-3	14-15-30-280	0.17
1614 Maryland St	RA-3	14-15-30-282	0.17
1610 Maryland St	RA-3	14-15-30-284	0.17
1606 Maryland St	RA-3	14-15-30-286	0.17
1602 Maryland St	RA-3	14-15-30-288	0.17
1518 Maryland St	RA-3	14-15-30-290	0.17
1514 Maryland St	RA-3	14-15-30-292	0.18
1510 Maryland St	RA-3	14-15-30-294	0.18
1506 Maryland St	RA-3	14-15-30-296	0.18
1502 Maryland St	RA-3	14-15-30-298	0.20
1418 Maryland St	RA-3	14-15-30-300	0.18
1414 Maryland St	RA-3	14-15-30-302	0.18
1410 Maryland St	RA-3	14-15-30-304	0.18
1406 Maryland St - DU A	RA-3	14-15-30-306A	0.17
1406 Maryland St - DU B	RA-3	14-15-30-306B	0.16
1318 Maryland St	RA-3	14-15-30-310	0.16
1314 Maryland St	RA-3	14-15-30-312	0.17
1310 Maryland St	RA-3	14-15-30-314	0.17
2009 Carolina St	RA-3	14-15-30-316	0.18
2013 Carolina St	RA-3	14-15-30-318	0.18
2017 Carolina St	RA-3	14-15-30-320	0.18
2103 Carolina St	RA-3	14-15-30-322	0.18
2107 Carolina St	RA-3	14-15-30-324	0.18
2111 Carolina St	RA-3	14-15-30-326	0.18
2115 Carolina St	RA-3	14-15-30-328	0.18
2119 Carolina St	RA-3	14-15-30-330	0.18
2201 Carolina St	RA-3	14-15-30-332	0.18
2205 Carolina St	RA-3	14-15-30-334	0.18

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The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
2209 Carolina St	RA-3	14-15-30-336	0.18
2213 Carolina St	RA-3	14-15-30-338	0.18
2217 Carolina St	RA-3	14-15-30-340	0.20
2221 Carolina St	RA-3	14-15-30-342	0.20
2303 Carolina St	RA-3	14-15-30-344	0.18
2307 Carolina St	RA-3	14-15-30-346	0.18
2311 Carolina St	RA-3	14-15-30-348	0.18
2315 Carolina St	RA-3	14-15-30-350	0.22
2316 Virginia St	RA-3	14-15-30-352	0.22
2312 Virginia St	RA-3	14-15-30-354	0.19
2308 Virginia St	RA-3	14-15-30-356	0.18
2306 Virginia St	RA-3	14-15-30-358	0.18
2302 Virginia St	RA-3	14-15-30-360	0.20
2218 Virginia St	RA-3	14-15-30-362	0.20
2214 Virginia St	RA-3	14-15-30-364	0.18
2212 Virginia St	RA-3	14-15-30-366	0.18
2206 Virginia St	RA-3	14-15-30-368	0.18
2204 Virginia St	RA-3	14-15-30-370	0.18
2120 Virginia St	RA-3	14-15-30-372	0.18
2114 Virginia St	RA-3	14-15-30-374	0.18
2112 Virginia St	RA-3	14-15-30-376	0.18
2106 Virginia St	RA-3	14-15-30-378	0.18
2102 Virginia St	RA-3	14-15-30-380	0.18
2020 Virginia St	RA-3	14-15-30-382	0.18
2014 Virginia St	RA-3	14-15-30-384	0.18
2010 Virginia St	RA-3	14-15-30-386	0.18
2004 Virginia St	RA-3	14-15-30-388	0.19
1205 E Haley St	RA-3	14-15-30-390	0.17
1209 E Haley St	RB	14-15-30-392	0.17
1213 E Haley St	RA-3	14-15-30-394	0.19
1125 E Haley St	RA-3	14-15-30-400	0.25
1129 E Haley St	RA-3	14-15-30-402	0.19
2009 Virginia St	RA-3	14-15-30-404	0.18
2013 Virginia St	RA-3	14-15-30-406	0.28
2103 Virginia St	RA-3	14-15-30-410	0.29
2107 Virginia St	RA-3	14-15-30-414	0.18
2115 Virginia St - DU A	RA-3	14-15-30-416A	0.11
2115 Virginia St - DU B	RA-3	14-15-30-416B	0.73
2207 Virginia St	RA-3	14-15-30-424	0.18
2209 Virginia St	RA-3	14-15-30-426	0.18
2215 Virginia St	RA-3	14-15-30-428	0.18

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Identification of 2014 Phase I Properties
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The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
2217 Virginia St	RA-3	14-15-30-430	0.20
2301 Virginia St	RA-3	14-15-30-432	0.20
2305 Virginia St	RA-3	14-15-30-434	0.18
2307 Virginia St	RA-3	14-15-30-436	0.18
2311 Virginia St	RA-3	14-15-30-438	0.20
2315 Virginia St	RA-3	14-15-30-440	0.20
1024 Eastlawn Dr - DU A	RB	14-15-30-444A	1.17
1024 Eastlawn Dr - DU B	RB	14-15-30-444B	1.04
1010 Eastlawn Dr - DU B	RB	14-15-30-450B	1.62
1010 Eastlawn Dr - DU C	RB	14-15-30-450C	0.46
1000 Eastlawn & 1010 Eastlawn Dr	RB	14-15-30-496 14	1.16
2008 Wisconsin St - DU A	OS	14-15-30-518A	0.53
2008 Wisconsin St - DU B	OS	14-15-30-518B	0.57
2008 Wisconsin St - DU C	OS	14-15-30-518C	1.13
2008 Wisconsin St - DU D	OS	14-15-30-518D	0.70
2008 Wisconsin St - DU E	OS	14-15-30-518E	1.07
2008 Wisconsin St - DU F	OS	14-15-30-518F	1.00
2410 Rodd St - DU A	RB	14-16-20-480A	0.35
2410 Rodd St - DU B	RB	14-16-20-480B	1.02
410 E Nelson St - DU A	COM	14-16-20-584A	0.70
410 E Nelson St - DU B	COM	14-16-20-584B	0.58
410 E Nelson St - DU C	COM	14-16-20-584C	0.43
410 E Nelson St - DU D	COM	14-16-20-584D	0.55
410 E Nelson St - DU E	COM	14-16-20-584E	1.32
410 E Nelson St - DU F	COM	14-16-20-584F	0.06
410 E Nelson St - DU G	COM	14-16-20-584G	1.22
410 E Nelson St - DU H	COM	14-16-20-584H	1.32
410 E Nelson St - DU I	COM	14-16-20-584I	1.94
410 E Nelson St - DU J	COM	14-16-20-584J	0.98
410 E Nelson St - DU K	COM	14-16-20-584K	1.24
410 E Nelson St - DU L	COM	14-16-20-584L	1.03
410 E Nelson St - DU M	COM	14-16-20-584M	0.81
410 E Nelson St - DU N	COM	14-16-20-584N	0.86
410 E Nelson St - DU O	COM	14-16-20-584O	0.88
505 E Carpenter St - DU A	RA-4	14-16-30-120A	1.24
505 E Carpenter St - DU B	RA-4	14-16-30-120B	1.28
505 E Carpenter St - DU C	RA-4	14-16-30-120C	0.68
505 E Carpenter St - DU D	RA-4	14-16-30-120D	1.19
1102 Rodd St	RA-4	14-16-30-180	0.17
1106 Rodd St	RA-4	14-16-30-182	0.21
1116 Rodd St	RA-4	14-16-30-184	0.29

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Property Address[1]	Zoning	Property ID Number	Property Acreage
305 E Reardon St - DU A	COM	14-16-30-200A	20.64
305 E Reardon St - DU B	COM	14-16-30-200B	1.56
305 E Reardon St - DU C	COM	14-16-30-200C	1.89
305 E Reardon St - DU D	COM	14-16-30-200D	1.76
305 E Reardon St - DU E	COM	14-16-30-200E	0.69
305 E Reardon St - DU F	COM	14-16-30-200F	0.96
305 E Reardon St - DU G	COM	14-16-30-200G	0.21
305 E Reardon St - DU H	COM	14-16-30-200H	0.58
305 E Reardon St - DU I	COM	14-16-30-200I	0.28
305 E Reardon St - DU J	COM	14-16-30-200J	0.81
305 E Reardon St - DU K	COM	14-16-30-200K	0.33
305 E Reardon St - DU L	COM	14-16-30-200L	1.36
305 E Reardon St - DU M	COM	14-16-30-200M	2.85
305 E Reardon St - DU N	COM	14-16-30-200N	0.42
310 Townsend St	D	14-16-50-142	0.12
314 Townsend St	D	14-16-50-144	0.21
301 Townsend St	D	14-16-50-150	0.11
311 E Ellsworth St	D	14-16-50-208	0.17
2607 Bay City Rd - DU A	COM	14-23-20-010A	1.44
2607 Bay City Rd - DU B	COM	14-23-20-010B	1.28
2607 Bay City Rd - DU C	COM	14-23-20-010C	1.20
2607 Bay City Rd - DU D	COM	14-23-20-010D	0.81
2607 Bay City Rd - DU E	COM	14-23-20-010E	0.75
2607 Bay City Rd - DU F	COM	14-23-20-010F	1.21
2607 Bay City Rd - DU G	COM	14-23-20-010G	0.68
807 Waldo Ave	RC	14-23-20-486	0.63
835 Waldo Ave	RC	14-23-20-494	0.35
833 Waldo Ave - DU A	RC	14-23-20-498A	0.29
833 Waldo Ave - DU B	RC	14-23-20-498B	0.56
837 Waldo Ave	RC	14-23-20-502	0.36
401 Waldo Ave	RA-4	14-23-30-002	0.14
409 Waldo Ave	RA-3	14-23-30-004	0.33
415 Waldo Ave	RA-4	14-23-30-006	0.67
419 Waldo Ave	RA-4	14-23-30-010	0.67
3216 Bay City Rd - DU B	RC	14-23-30-018B	0.43
3212 Bay City Rd	RA-4	14-23-30-022	0.42
3204 Bay City Rd	RA-4	14-23-30-024	0.37
3128 Bay City Rd - DU A	RA-1	14-23-30-028A	0.26
3128 Bay City Rd - DU B	RA-1	14-23-30-028B	0.21
3120 Bay City Rd - DU A	RA-4	14-23-30-032A	0.43
3120 Bay City Rd - DU B	RA-4	14-23-30-032B	0.18

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Property Address[1]	Zoning	Property ID Number	Property Acreage
434 Lemke St	RA-4	14-23-30-034	0.38
428 Lemke St	RA-4	14-23-30-036	0.29
424 Lemke St	RA-4	14-23-30-042	0.27
420 Lemke St - DU A	RA-4	14-23-30-044A	0.24
420 Lemke St - DU B	RA-4	14-23-30-044B	0.21
416 Lemke St - DU A	RA-4	14-23-30-045A	0.16
416 Lemke St - DU B	RA-4	14-23-30-045B	0.26
412 Lemke St - DU A	RA-4	14-23-30-046A	0.16
412 Lemke St - DU B	RA-4	14-23-30-046B	0.26
408 Lemke St - DU A	RA-4	14-23-30-047A	0.17
408 Lemke St - DU B	RA-4	14-23-30-047B	0.26
404 Lemke St	RA-4	14-23-30-054	0.20
3101 Beech St	RA-4	14-23-30-056	0.20
3111 Beech St	RA-4	14-23-30-058	0.21
3115 Beech St	RA-4	14-23-30-060	0.29
3119 Beech St - DU A	RA-4	14-23-30-064A	0.25
3119 Beech St - DU B	RA-4	14-23-30-064B	0.21
3205 Beech St	RA-4	14-23-30-066	0.27
235 Waldo Ave	RA-4	14-23-30-070	0.41
239 Waldo Ave	RA-4	14-23-30-072	0.45
301 Waldo Ave	RA-3	14-23-30-074	0.44
305 Waldo Ave	RA-4	14-23-30-076	0.46
309 Waldo Ave	RA-4	14-23-30-078	0.45
311 Waldo		14-23-30-080	0.45
315 Waldo Ave	RA-4	14-23-30-082	0.20
317 Waldo Ave	RA-4	14-23-30-083	0.20
321 Waldo Ave	RA-4	14-23-30-086	0.28
3208 Beech St	RA-4	14-23-30-088	0.42
3204 Beech St	RA-4	14-23-30-090	0.39
337 Lemke St - DU A	RA-4	14-23-30-094A	1.71
337 Lemke St - DU B	RA-4	14-23-30-094B	0.64
337 Lemke St - DU C	RA-4	14-23-30-094C	3.52
337 Lemke St - DU D	RA-4	14-23-30-094D	0.85
337 Lemke St - DU E	RA-4	14-23-30-094E	1.12
337 Lemke St - DU F	RA-4	14-23-30-094F	0.81
337 Lemke St - DU G	RA-4	14-23-30-094G	0.77
337 Lemke St - DU H	RA-4	14-23-30-094H	1.18
337 Lemke St - DU I		14-23-30-094I	0.13
409 Lemke St	RA-4	14-23-30-180	0.40
413 Lemke St	RA-4	14-23-30-182	0.48
421 Lemke St	RA-4	14-23-30-184	0.40

Table 9-3
Identification of 2014 Phase I Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
425 Lemke St	RA-4	14-23-30-186	0.27
3020 Bay City Rd	RA-4	14-23-30-188	0.24
3008 Bay City Rd	RA-4	14-23-30-190	0.22
3000 Bay City Rd	RA-4	14-23-30-192	0.36
2924 Bay City Rd		14-23-30-196	0.29
2916 Bay City Rd	RA-4	14-23-30-198	0.29
424 Longview St	RA-4	14-23-30-202	0.19
420 Longview St	RA-4	14-23-30-204	0.19
416 Longview St	RA-4	14-23-30-206	0.19
412 Longview St	RA-4	14-23-30-208	0.19
408 Longview St	RA-4	14-23-30-210	0.19
404 Longview St	RA-4	14-23-30-212	0.19
400 Longview St	RA-4	14-23-30-214	0.19
340 Longview St	RA-4	14-23-30-216	0.19
336 Longview St	RA-4	14-23-30-218	0.19
332 Longview St	RA-4	14-23-30-220	0.19
328 Longview St	RA-4	14-23-30-222	0.19
324 Longview St	RA-4	14-23-30-224	0.19
320 Longview St	RA-4	14-23-30-226	0.19
316 Longview St	RA-4	14-23-30-228	0.19
312 Longview St	RA-4	14-23-30-230	0.19
308 Longview St	RA-4	14-23-30-232	0.19
304 Longview St	RA-4	14-23-30-234	0.19
300 Longview St	RA-4	14-23-30-236	0.22
301 Longview St	RA-4	14-23-30-238	0.22
305 Longview St	RA-4	14-23-30-240	0.19
309 Longview St	RA-4	14-23-30-242	0.19
313 Longview St	RA-4	14-23-30-246	0.19
317 Longview St	RA-4	14-23-30-248	0.16
321 Longview St	RA-4	14-23-30-250	0.19
325 Longview St	RA-4	14-23-30-252	0.19
329 Longview St	RA-4	14-23-30-254	0.19
333 Longview St	RA-4	14-23-30-256	0.19
337 Longview St	RA-4	14-23-30-258	0.19
341 Longview St	RA-4	14-23-30-260	0.19
401 Longview St	RA-4	14-23-30-262	0.19
405 Longview St	RA-4	14-23-30-263	0.19
409 Longview St	RA-4	14-23-30-266	0.19
413 Longview St	RA-4	14-23-30-268	0.19
417 Longview St	RA-4	14-23-30-270	0.19
421 Longview St	RA-4	14-23-30-272	0.19

Table 9-3
Identification of 2014 Phase I Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
425 Longview St	RA-4	14-23-30-274	0.19
2908 Bay City Rd	RA-4	14-23-30-278	0.29
2824 Bay City Rd	RA-4	14-23-30-280	0.29
2800 Bay City Rd	RB	14-23-30-282	0.36
2734 Bay City Rd	RB	14-23-30-288	0.33
2728 Bay City Rd	RB	14-23-30-290	0.28
2710 Bay City Rd	RB	14-23-30-292	0.48
2708 Bay City Rd	RB	14-23-30-294	0.87
420 Dick St - DU A	RB	14-23-30-300A	0.94
420 Dick St - DU B	RB	14-23-30-300B	0.73
420 Dick St - DU C	RB	14-23-30-300C	0.71
350 Dick St - DU A	RB	14-23-30-332A	0.62
350 Dick St - DU B	RB	14-23-30-332B	0.68
336 Dick St - DU A	RB	14-23-30-344A	0.35
336 Dick St - DU B	RB	14-23-30-344B	0.33
2705 Parsons Ct	RB	14-23-30-348	0.50
2711 Parsons Ct	RB	14-23-30-350	0.50
2719 Parsons Ct	RB	14-23-30-352	0.48
2801 Parsons Ct - DU A	RB	14-23-30-354A	0.39
2801 Parsons Ct - DU B	RB	14-23-30-354B	0.23
2805 Parsons Ct	RB	14-23-30-358	0.59
2804 Parsons Ct - DU A	RB	14-23-30-359A	0.24
2804 Parsons Ct - DU B	RB	14-23-30-359B	0.20
2800 Parsons Ct - DU A	RB	14-23-30-360A	0.33
2800 Parsons Ct - DU B	RB	14-23-30-360B	0.46
2720 Parsons Ct	RB	14-23-30-361	0.44
2716 Parsons Ct	RB	14-23-30-364	0.58
310 Sam St	RB	14-23-30-400	0.14

[1] All properties are within the City of Midland, Michigan

Zoning Codes:

COM = Community
D= Downtown District
IA = Indistrial
OS = Office Space
LCMR =
MULT = Indicates that there is more than one zoning classificaiton for tha
NC = Neighborhood Commercial
RA-3 = Residential
RA-4 - Residential
RB = Residential
RC = Regional Commercial

Table 9-4
Identification of 2014 Phase IA and II Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
2014 Phase IA			
3500 E Ashman St - DU A	LCMR	14-13-10-800A	2.06
3500 E Ashman St - DU B	LCMR	14-13-10-800B	2.06
2301 Waldo Ave - DU A	LCMR	14-14-30-010A	2.28
2301 Waldo Ave - DU B	LCMR	14-14-30-010B	2.28
1012 E Patrick Rd DU A	RC	MDOT Right Of Way A	6.16
1012 E Patrick Rd DU B	RC	MDOT Right Of Way B	-
1012 E Patrick Rd DU C	RC	MDOT Right Of Way C	-
1012 E Patrick Rd DU D	RC	MDOT Right Of Way D	-
1012 E Patrick Rd DU E	RC	MDOT Right Of Way E	-
2014 Phase II - Commercial Properties			
910 Eastlawn Dr	OS	14-15-30-498	0.56
1607 E Patrick Rd	NC	14-15-40-334	0.55
1613 E Patrick Rd	NC	14-15-40-340	0.34
816 E Haley St	RB	14-15-50-004	1.16
1510 Bayliss St - DU A	OS	14-15-50-090A	6.14
1510 Bayliss St - DU B	OS	14-15-50-090B	-
1510 Bayliss St - DU C	OS	14-15-50-090C	-
1510 Bayliss St - DU D	OS	14-15-50-090D	-
1510 Bayliss St - DU E	OS	14-15-50-090E	-
502 Cherry St	RB	14-15-60-270	1.86
1113 E Carpenter St	RB	14-16-40-104	0.33
1001 E Carpenter St	NC	14-16-40-136	0.17
805 George St[2]	IA	14-16-40-380	0.71
600 E Carpenter St - DU A	RB	14-16-40-574A	3.82
600 E Carpenter St - DU B	RB	14-16-40-574B	-
600 E Carpenter St - DU C	RB	14-16-40-574C	-
1006 E Carpenter St	NC	14-16-40-670	0.18
1016 Haley St	NC	14-16-40-672	0.17
712 Townsend St	RC	14-16-50-008	0.91
501 George St	OS	14-16-50-068	0.11
502 Townsend St	OS	14-16-50-122	0.34
414 Townsend St	D	14-16-50-124	0.66
409 E Buttles St	D	14-16-50-130	0.17
309 E Indian St	OS	14-16-50-164	0.33
709 Townsend St	RC	14-16-50-186	0.19
715 Townsend St	RC	14-16-50-188	0.56
302 E Indian St	OS	14-16-50-234	0.17

Table 9-4
Identification of 2014 Phase IA and II Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
803 Townsend St & 809 Townsend	MULT	14-16-60-030	1.74
614 Haley St	RB	14-21-10-398	0.12
901 E Indian St	OS	14-21-10-530	0.33
711 Haley St	RC	14-21-10-562	0.17
715 Haley St	RC	14-21-10-564	0.28
907 E Pine St & 701 Haley St & 706 Mill St	RC	14-21-10-568 & 14-21-10-558 & 14-16-40-508	0.67
601 Mill St	RB	14-21-10-608	0.29
609 Mill St	RB	14-21-10-612	0.17
1612 E Patrick Rd - DU A	RC	14-22-10-004A	0.94
1612 E Patrick Rd - DU B	RC	14-22-10-004B	-
2505 Bay City Rd	RB	14-23-20-004	1.15
3216 Bay City Rd - DU A	RC	14-23-30-018A	0.68
309 Kent Ct - DU A	MULT	14-23-60-160A	0.39
309 Kent Ct - DU B	MULT	14-23-60-160B	-
401 Kent Ct - DUA	MULT	14-23-60-180A	0.55
401 Kent Ct - DUB	MULT	14-23-60-180B	-
1700 E Patrick Rd	RC	14-23-80-090	1.16

[1] All properties are within the City of Midland, Michigan

[2] Removed from sampling list per DEQ request, due to insufficient area to sam

Zoning Codes:

COM = Community
D= Downtown District
IA = Indistrial
OS = Office Space
LCMR =
MULT = Indicates that there is more than one zoning classificaiton for that p
NC = Neighborhood Commercial
RA-3 = Residential
RA-4 - Residential
RB = Residential
RC = Regional Commercial

Table 9-5
Identification of 2014 Phase III Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
3011 SWEDE AVE	RA-3	14-15-10-002	0.14
1614 E ASHMAN ST	RA-3	14-15-10-004	0.14
1610 E ASHMAN ST	RA-3	14-15-10-006	0.23
1602 E ASHMAN ST	RA-3	14-15-10-008	0.23
1522 E ASHMAN ST	RA-3	14-15-10-010	0.14
1518 E ASHMAN ST	RA-3	14-15-10-012	0.17
1514 E ASHMAN ST	RA-3	14-15-10-014	0.12
1510 E ASHMAN ST	RA-3	14-15-10-016	0.14
1506 E ASHMAN ST	RA-3	14-15-10-018	0.14
3010 BYRD ST	RA-3	14-15-10-020	0.14
3000 BYRD ST	RA-3	14-15-10-022	0.14
1505 WYLLYS ST	RA-3	14-15-10-024	0.14
1509 WYLLYS ST	RA-3	14-15-10-026	0.14
1513 WYLLYS ST	RA-3	14-15-10-028	0.14
1517 WYLLYS ST	RA-3	14-15-10-030	0.14
1521 WYLLYS ST	RA-3	14-15-10-032	0.14
1603 WYLLYS ST	RA-3	14-15-10-034	0.21
1609 WYLLYS ST	RA-3	14-15-10-038	0.20
1613 WYLLYS ST	RA-3	14-15-10-040	0.14
3005 SWEDE AVE	RA-3	14-15-10-042	0.14
1422 E ASHMAN ST	RA-3	14-15-10-050	0.14
1418 E ASHMAN ST	RA-3	14-15-10-052	0.14
1414 E ASHMAN ST	RA-3	14-15-10-054	0.14
1410 E ASHMAN ST	RA-3	14-15-10-056	0.14
1406 E ASHMAN ST	RA-3	14-15-10-058	0.14
1402 E ASHMAN ST	RA-3	14-15-10-060	0.14
1326 E ASHMAN ST	RA-3	14-15-10-062	0.14
1322 E ASHMAN ST	RA-3	14-15-10-064	0.14
1318 E ASHMAN ST	RA-3	14-15-10-066	0.14
1314 E ASHMAN ST	RA-3	14-15-10-068	0.14
1310 E ASHMAN ST	RA-3	14-15-10-070	0.13
1306 E ASHMAN ST	RA-3	14-15-10-072	0.14
1302 E ASHMAN ST	RA-3	14-15-10-074	0.14
1301 WYLLYS ST	RA-3	14-15-10-076	0.14
1305 WYLLYS ST	RA-3	14-15-10-078	0.14
1309 WYLLYS ST	RA-3	14-15-10-080	0.13
1313 WYLLYS ST	RA-3	14-15-10-082	0.14
1317 WYLLYS ST	RA-3	14-15-10-084	0.14

Table 9-5
Identification of 2014 Phase III Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
1321 WYLLYS ST	RA-3	14-15-10-086	0.14
1325 WYLLYS ST	RA-3	14-15-10-088	0.14
1401 WYLLYS ST	RA-3	14-15-10-090	0.14
1405 WYLLYS ST	RA-3	14-15-10-092	0.14
1409 WYLLYS ST	RA-3	14-15-10-094	0.14
1413 WYLLYS ST	RA-3	14-15-10-096	0.14
1417 WYLLYS ST	RA-3	14-15-10-098	0.14
3003 BYRD ST	RA-3	14-15-10-100	0.14
1222 E ASHMAN ST	RA-3	14-15-10-104	0.14
1218 E ASHMAN ST	RA-3	14-15-10-106	0.14
1214 E ASHMAN ST	RA-3	14-15-10-108	0.14
1210 E ASHMAN ST	RA-3	14-15-10-110	0.14
1206 E ASHMAN ST	RA-3	14-15-10-112	0.14
1200 E ASHMAN ST	RA-3	14-15-10-114	0.14
1126 E ASHMAN ST	RA-3	14-15-10-116	0.21
1122 E ASHMAN ST	RA-3	14-15-10-120	0.21
1112 E ASHMAN ST-DUA	RA-3	14-15-10-124A	0.60
1112 E ASHMAN ST-DUB	RA-3	14-15-10-124B	0.78
1125 WYLLYS ST	RA-3	14-15-10-186	0.29
1205 WYLLYS ST	RA-3	14-15-10-190	0.29
1213 WYLLYS ST	RA-3	14-15-10-196	0.22
1217 WYLLYS ST	RA-3	14-15-10-200	0.14
3003 LINDY ST	RA-3	14-15-10-202	0.14
1222 WYLLYS ST	RA-3	14-15-10-206	0.14
1220 WYLLYS ST	RA-3	14-15-10-208	0.14
1216 WYLLYS ST	RA-3	14-15-10-210	0.14
1210 WYLLYS ST	RA-3	14-15-10-212	0.14
1208 WYLLYS ST	RA-3	14-15-10-214	0.29
1128 WYLLYS ST	RA-3	14-15-10-218	0.14
1124 WYLLYS ST	RA-3	14-15-10-220	0.14
1120 WYLLYS ST	RA-3	14-15-10-222	0.14
1112 WYLLYS ST	RA-3	14-15-10-224	0.18
1108 WYLLYS ST	RA-3	14-15-10-228	0.30
1020 WYLLYS ST	RA-3	14-15-10-232	0.25
2913 SWEDE AVE	RA-3	14-15-10-554	0.14
1614 WYLLYS ST	RA-2	14-15-10-556	0.14
1610 WYLLYS ST	RA-2	14-15-10-558	0.20
1604 WYLLYS ST	RA-2	14-15-10-562	0.23

Table 9-5
Identification of 2014 Phase III Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
1524 WYLLYS ST	RA-2	14-15-10-566	0.21
1514 WYLLYS ST	RA-2	14-15-10-568	0.21
1510 WYLLYS ST	RA-2	14-15-10-570	0.14
1506 WYLLYS ST	RA-2	14-15-10-572	0.14
1502 WYLLYS ST	RA-2	14-15-10-574	0.21
1424 WYLLYS ST	RA-2	14-15-10-578	0.21
1420 WYLLYS ST	RA-2	14-15-10-580	0.14
1416 WYLLYS ST	RA-2	14-15-10-582	0.14
1412 WYLLYS ST	RA-2	14-15-10-584	0.14
1408 WYLLYS ST	RA-2	14-15-10-586	0.14
1402 WYLLYS ST	RA-2	14-15-10-588	0.14
1326 WYLLYS ST	RA-2	14-15-10-590	0.14
1322 WYLLYS ST	RA-2	14-15-10-592	0.14
1318 WYLLYS ST	RA-2	14-15-10-594	0.14
1314 WYLLYS ST	RA-2	14-15-10-596	0.14
1308 WYLLYS ST	RA-2	14-15-10-598	0.28
1304 WYLLYS ST	RA-2	14-15-10-602	0.14
1301 EASTLAWN DR - DU A	RB	14-15-20-004A	45.72
1301 EASTLAWN DR - DU AA	RB	14-15-20-004AA	--
1301 EASTLAWN DR - DU AB	RB	14-15-20-004AB	--
1301 EASTLAWN DR - DU B	RB	14-15-20-004B	--
1301 EASTLAWN DR - DU C	RB	14-15-20-004C	--
1301 EASTLAWN DR - DU D	RB	14-15-20-004D	--
1301 EASTLAWN DR - DU E	RB	14-15-20-004E	--
1301 EASTLAWN DR DU F	RB	14-15-20-004F	--
1301 EASTLAWN DR - DU G	RB	14-15-20-004G	--
1301 EASTLAWN DR - DU H	RB	14-15-20-004H	--
1301 EASTLAWN DR - DU I	RB	14-15-20-004I	--
1301 EASTLAWN DR - DU J	RB	14-15-20-004J	--
1301 EASTLAWN DR - DU K	RB	14-15-20-004K	--
1301 EASTLAWN DR - DU L	RB	14-15-20-004L	--
1301 EASTLAWN DR - DU M	RB	14-15-20-004M	--
1301 EASTLAWN DR - DU N	RB	14-15-20-004N	--
1301 EASTLAWN DR - DU O	RB	14-15-20-004O	--
1301 EASTLAWN DR - DU P	RB	14-15-20-004P	--
1301 EASTLAWN DR - DU Q	RB	14-15-20-004Q	--
1301 EASTLAWN DR - DU R	RB	14-15-20-004R	--
1301 EASTLAWN DR - DU S	RB	14-15-20-004S	--

Table 9-5
Identification of 2014 Phase III Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
1301 EASTLAWN DR - DU T	RB	14-15-20-004T	--
1301 EASTLAWN DR - DU U	RB	14-15-20-004U	--
1301 EASTLAWN DR - DU V	RB	14-15-20-004V	--
1301 EASTLAWN DR - DU W	RB	14-15-20-004W	--
1301 EASTLAWN DR - DU X	RB	14-15-20-004X	--
1301 EASTLAWN DR - DU Y	RB	14-15-20-004Y	--
1301 EASTLAWN DR - DU Z	RB	14-15-20-004Z	--
218 E COLLINS ST	RA-4	14-16-20-294	0.11
214 E COLLINS ST	RA-4	14-16-20-296	0.11
210 E COLLINS ST	RA-4	14-16-20-298	0.11
206 E COLLINS ST	RA-4	14-16-20-300	0.11
202 E COLLINS ST	RA-4	14-16-20-302	0.11
122 E COLLINS ST	RA-4	14-16-20-304	0.11
120 E COLLINS ST	RA-4	14-16-20-306	0.11
116 E COLLINS ST	RA-4	14-16-20-308	0.11
110 E COLLINS ST	RA-4	14-16-20-310	0.11
1620 ASHMAN ST	RA-4	14-16-20-312	0.11
1616 ASHMAN ST	RA-4	14-16-20-314	0.12
1610 ASHMAN ST	RA-4	14-16-20-316	0.19
1600 ASHMAN ST	RA-4	14-16-20-320	0.34
111 E BAKER ST	RA-4	14-16-20-322	0.26
113 E BAKER ST	RA-4	14-16-20-324	0.26
117 E BAKER ST	RA-4	14-16-20-326	0.25
119 E BAKER ST	RA-4	14-16-20-328	0.26
205 E BAKER ST	RA-4	14-16-20-330	0.26
209 E BAKER ST	RA-4	14-16-20-332	0.26
1601 RODD ST	RA-4	14-16-20-334	0.26
1005 RODD ST	OS	14-16-30-002	0.17
1013 RODD ST	OS	14-16-30-004	0.17
1015 RODD ST	OS	14-16-30-006	0.16
115 E CARPENTER ST	RA-4	14-16-30-010	0.12
119 E CARPENTER ST	RA-4	14-16-30-012	0.14
201 E CARPENTER ST	RA-4	14-16-30-014	0.15
205 E CARPENTER ST	RA-4	14-16-30-016	0.17
1101 RODD ST	RA-4	14-16-30-018	0.17
1103 RODD ST	RA-4	14-16-30-020	0.17
1111 RODD ST	RA-4	14-16-30-022	0.12
1113 RODD ST	RA-4	14-16-30-024	0.21

Table 9-5
Identification of 2014 Phase III Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
208 E REARDON ST	RA-4	14-16-30-026	0.17
204 E REARDON ST	RA-4	14-16-30-028	0.17
120 E REARDON ST	RA-4	14-16-30-030	0.17
116 E REARDON ST	RA-4	14-16-30-032	0.17
110 E REARDON ST	RA-4	14-16-30-034	0.17
501 RODD ST	OS	14-16-50-326	0.17
505 RODD ST	OS	14-16-50-328	0.17
509 RODD ST	OS	14-16-50-330	0.17
513 RODD ST	OS	14-16-50-332	0.17
501 MCDONALD ST	OS	14-16-50-388	0.17
505 MCDONALD ST	OS	14-16-50-390	0.17
509 MCDONALD ST	OS	14-16-50-392	0.17
515 MCDONALD ST	OS	14-16-50-394	0.17
110 E GROVE ST	OS	14-16-50-400	0.17
512 ASHMAN ST	OS	14-16-50-402	0.17
508 ASHMAN ST	OS	14-16-50-404	0.17
502 ASHMAN ST	OS	14-16-50-406	0.17
205 E INDIAN ST & 502 MCDONALD ST	OS	14-16-50-7902 & 1	0.06
508 MCDONALD ST	OS	14-16-50-828	0.17
510 MCDONALD ST	OS	14-16-50-830	0.17
516 MCDONALD ST	OS	14-16-50-832	0.17
205 E GROVE ST-DUA	OS	14-16-50-900A	5.02
205 E GROVE ST-DUB	OS	14-16-50-900B	--
205 E GROVE ST-DUC	OS	14-16-50-900C	--
205 E GROVE ST-DUD	OS	14-16-50-900D	--
205 E GROVE ST-DUE	OS	14-16-50-900E	--
811 RODD ST	RC	14-16-60-038	0.17
813 RODD ST	RC	14-16-60-040	0.17
206 E HINES ST	RC	14-16-60-042	0.16
202 E HINES ST	RC	14-16-60-046	0.17
114 E HINES ST[2]	RC	14-16-60-048	0.33
110 E HINES ST[2]	RC	14-16-60-052	0.17
111 E HINES ST	RB	14-16-60-054	0.17
113 E HINES ST	RB	14-16-60-056	0.17
119 E HINES ST	RB	14-16-60-058	0.17
203 E HINES ST	RB	14-16-60-060	0.17
207 E HINES ST	RB	14-16-60-062	0.17

Table 9-5
Identification of 2014 Phase III Properties
Part II - Remedial Investigation Report
The Dow Chemical Company, Michigan Operations

Property Address[1]	Zoning	Property ID Number	Property Acreage
1001 RODD ST	RB	14-16-60-064	0.17
206 E CARPENTER ST	RB	14-16-60-070	0.17
204 E CARPENTER ST	RB	14-16-60-072	0.17
120 E CARPENTER ST	RB	14-16-60-074	0.10
116 E CARPENTER ST	RB	14-16-60-076	0.11
108 E CARPENTER ST	RB	14-16-60-078	0.12
106 E CARPENTER ST	RB	14-16-60-080	0.16
111 E CARPENTER ST	RA-4	14-16-60-082	0.11
107 E CARPENTER ST	RA-4	14-16-60-083	0.14
1116 ASHMAN ST	RA-4	14-16-60-350	0.17
1112 ASHMAN ST	RA-4	14-16-60-352	0.17
1108 ASHMAN ST	OS	14-16-60-354	0.16
1100 ASHMAN ST	OS	14-16-60-356	0.17
1014 ASHMAN ST	OS	14-16-60-358	0.17
1010 ASHMAN ST	OS	14-16-60-360	0.17
1006 ASHMAN ST	OS	14-16-60-362	0.33
810 ASHMAN ST[2]	RC	14-16-60-372	0.33
802 ASHMAN ST[2]	IA	14-16-60-374	1.89
716 ASHMAN ST[2]	RC	14-16-60-378	1.86
706 ASHMAN ST[2]	RC	14-16-60-382	0.17
702 ASHMAN ST[2]	RC	14-16-60-384	0.17

[1] All properties are within the City of Midland, Michigan

[2] Property verified non-residential and removed from sampling list.

Zoning Codes:

COM = Community
D= Downtown District
IA = Indistrial
OS = Office Space
LCMR =
MULT = Indicates that there is more than one zoning classificaiton for that
NC = Neighborhood Commercial
RA-3 = Residential
RA-4 - Residential
RB = Residential
RC = Regional Commercial