

NOTE: The data below represents surface water samples that were collected on Feb 7, 2014 by EPA SEDS sampling teams. Water sample measurements are in micrograms per liter (ug/L) and milligrams per liter (mg/L) for these samples. The data is being compared to EPA ecological risk screening levels (ERSLs) to protect aquatic life in the surface water of the Dan River. Specific qualifiers and footnotes are listed below the summary table. These samples were collected at various locations along the river (refer to map for generalized locations). The detected concentrations in surface water are all below the EPA ERSLs.

		Van Buren Road Bridge	Approximately ½ mile downstream of outfall	Upstream Sample - approximately 500 yards downstream of dam at plant	
Location	Ecological Screening Standard for Surface Water Samples ²	VBB	DR1	DRREF	
Sample ID		VBB01	DR1-0214SW	DRREF-0214SW	
Date Collected		2/7/2014	2/7/2014	2/7/2014	
Time Collected		1255	1020	0905	
Status		Validation Complete	Validation Complete	Validation Complete	
Type		Surface Water	Surface Water	Surface Water	
Volatile Organic Compounds					Units
(m- and/or p-)Xylene		1.0 U,O	Not analyzed	Not analyzed	µg/L
1,1,1,2-Tetrachloroethane		0.50 U	Not analyzed	Not analyzed	µg/L
1,1,1-Trichloroethane		2.0 U,O	Not analyzed	Not analyzed	µg/L
1,1,2,2-Tetrachloroethane		0.50 U,O	Not analyzed	Not analyzed	µg/L
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)		0.50 U	Not analyzed	Not analyzed	µg/L
1,1,2-Trichloroethane		0.50 U	Not analyzed	Not analyzed	µg/L
1,1-Dichloroethane		0.50 U	Not analyzed	Not analyzed	µg/L
1,1-Dichloroethene (1,1-Dichloroethylene)		0.50 U,O	Not analyzed	Not analyzed	µg/L
1,1-Dichloropropene		0.50 U	Not analyzed	Not analyzed	µg/L
1,2,3-Trichlorobenzene		0.50 U,O	Not analyzed	Not analyzed	µg/L
1,2,3-Trichloropropane		2.0 U,O	Not analyzed	Not analyzed	µg/L
1,2,4-Trichlorobenzene		0.50 U	Not analyzed	Not analyzed	µg/L
1,2,4-Trimethylbenzene		0.50 U,O	Not analyzed	Not analyzed	µg/L
1,2-Dibromo-3-Chloropropane (DBCP)		4.0 U,O	Not analyzed	Not analyzed	µg/L
1,2-Dibromoethane (EDB)		2.0 U,O	Not analyzed	Not analyzed	µg/L
1,2-Dichlorobenzene		0.50 U	Not analyzed	Not analyzed	µg/L
1,2-Dichloroethane		0.50 U	Not analyzed	Not analyzed	µg/L
1,2-Dichloropropane		0.50 U,O	Not analyzed	Not analyzed	µg/L
1,3,5-Trimethylbenzene		0.50 U	Not analyzed	Not analyzed	µg/L
1,3-Dichlorobenzene		0.50 U	Not analyzed	Not analyzed	µg/L
1,3-Dichloropropane		0.50 U,O	Not analyzed	Not analyzed	µg/L
1,4-Dichlorobenzene		0.50 U,O	Not analyzed	Not analyzed	µg/L
2,2-Dichloropropane		0.50 U	Not analyzed	Not analyzed	µg/L
Acetone		4.0 U,O	Not analyzed	Not analyzed	µg/L
Benzene		0.50 U	Not analyzed	Not analyzed	µg/L
Bromobenzene		0.50 U,O	Not analyzed	Not analyzed	µg/L
Bromochloromethane		0.50 U,O	Not analyzed	Not analyzed	µg/L
Bromodichloromethane		0.50 U	Not analyzed	Not analyzed	µg/L
Bromoform		4.0 U,O	Not analyzed	Not analyzed	µg/L
Bromomethane		2.0 U,O	Not analyzed	Not analyzed	µg/L
Carbon Tetrachloride		2.0 U,O	Not analyzed	Not analyzed	µg/L
Carbon disulfide		2.0 U	Not analyzed	Not analyzed	µg/L

Location	Ecological Screening Standard for Surface Water Samples ²	VBB	DR1	DRREF	
Sample ID		VBB01	DR1-0214SW	DRREF-0214SW	
Date Collected		2/7/2014	2/7/2014	2/7/2014	
Time Collected		1255	1020	0905	
Status		Validation Complete	Validation Complete	Validation Complete	
Type		Surface Water	Surface Water	Surface Water	
Chlorobenzene		0.50 U	Not analyzed	Not analyzed	µg/L
Chloroethane		2.0 U,O	Not analyzed	Not analyzed	µg/L
Chloroform		0.50 U,O	Not analyzed	Not analyzed	µg/L
Chloromethane		0.50 U	Not analyzed	Not analyzed	µg/L
Cyclohexane		0.50 U	Not analyzed	Not analyzed	µg/L
Dibromochloromethane		2.0 U,O	Not analyzed	Not analyzed	µg/L
Dibromomethane		0.50 U,O	Not analyzed	Not analyzed	µg/L
Dichlorodifluoromethane (Freon 12)		2.0 U,O	Not analyzed	Not analyzed	µg/L
Ethyl Benzene		0.50 U,O	Not analyzed	Not analyzed	µg/L
Hexachlorobutadiene		0.50 U,O	Not analyzed	Not analyzed	µg/L
Isopropylbenzene		0.50 U,O	Not analyzed	Not analyzed	µg/L
Methyl Acetate		1.0 U	Not analyzed	Not analyzed	µg/L
Methyl Butyl Ketone		1.0 U,O	Not analyzed	Not analyzed	µg/L
Methyl Ethyl Ketone		4.0 U,O	Not analyzed	Not analyzed	µg/L
Methyl Isobutyl Ketone		1.0 U	Not analyzed	Not analyzed	µg/L
Methyl T-Butyl Ether (MTBE)		0.50 U	Not analyzed	Not analyzed	µg/L
Methylcyclohexane		0.50 U	Not analyzed	Not analyzed	µg/L
Methylene Chloride		0.50 U	Not analyzed	Not analyzed	µg/L
Styrene		0.50 U	Not analyzed	Not analyzed	µg/L
Tetrachloroethene (Tetrachloroethylene)		0.50 U	Not analyzed	Not analyzed	µg/L
Toluene		0.50 U,O	Not analyzed	Not analyzed	µg/L
Trichloroethene (Trichloroethylene)		0.50 U	Not analyzed	Not analyzed	µg/L
Trichlorofluoromethane (Freon 11)		0.50 U,O	Not analyzed	Not analyzed	µg/L
Vinyl chloride		0.50 U,O	Not analyzed	Not analyzed	µg/L
cis-1,2-Dichloroethene		0.50 U	Not analyzed	Not analyzed	µg/L
cis-1,3-Dichloropropene		0.50 U	Not analyzed	Not analyzed	µg/L
n-Butylbenzene		0.50 U,O	Not analyzed	Not analyzed	µg/L
n-Propylbenzene		0.50 U,O	Not analyzed	Not analyzed	µg/L
o-Chlorotoluene		0.50 U	Not analyzed	Not analyzed	µg/L
o-Xylene		0.50 U	Not analyzed	Not analyzed	µg/L
p-Chlorotoluene		0.50 U,O	Not analyzed	Not analyzed	µg/L
p-Isopropyltoluene		0.50 U	Not analyzed	Not analyzed	µg/L
sec-Butylbenzene		0.50 U	Not analyzed	Not analyzed	µg/L
tert-Butylbenzene		0.50 U,O	Not analyzed	Not analyzed	µg/L
trans-1,2-Dichloroethene		0.50 U	Not analyzed	Not analyzed	µg/L
trans-1,3-Dichloropropene		0.50 U,O	Not analyzed	Not analyzed	µg/L
Semi-Volatile Organic Compounds					Units
(3-and/or 4-)Methylphenol		10 U	Not analyzed	Not analyzed	µg/L
1,1-Biphenyl		2.0 U	Not analyzed	Not analyzed	µg/L
1-Methylnaphthalene		2.0 U	Not analyzed	Not analyzed	µg/L
2,3,4,6-Tetrachlorophenol		10 U	Not analyzed	Not analyzed	µg/L
2,4,5-Trichlorophenol		10 U	Not analyzed	Not analyzed	µg/L

Location	Ecological Screening Standard for Surface Water Samples ²	VBB	DR1	DRREF	
Sample ID		VBB01	DR1-0214SW	DRREF-0214SW	
Date Collected		2/7/2014	2/7/2014	2/7/2014	
Time Collected		1255	1020	0905	
Status		Validation Complete	Validation Complete	Validation Complete	
Type		Surface Water	Surface Water	Surface Water	
2,4,6-Trichlorophenol		10 U	Not analyzed	Not analyzed	µg/L
2,4-Dichlorophenol		10 U	Not analyzed	Not analyzed	µg/L
2,4-Dimethylphenol		10 U	Not analyzed	Not analyzed	µg/L
2,4-Dinitrophenol		10 U	Not analyzed	Not analyzed	µg/L
2,4-Dinitrotoluene		10 U	Not analyzed	Not analyzed	µg/L
2,6-Dinitrotoluene		10 U	Not analyzed	Not analyzed	µg/L
2-Chloronaphthalene		10 U	Not analyzed	Not analyzed	µg/L
2-Chlorophenol		10 U	Not analyzed	Not analyzed	µg/L
2-Methyl-4,6-dinitrophenol		10 U	Not analyzed	Not analyzed	µg/L
2-Methylnaphthalene		2.0 U	Not analyzed	Not analyzed	µg/L
2-Methylphenol		10 U	Not analyzed	Not analyzed	µg/L
2-Nitroaniline		10 U	Not analyzed	Not analyzed	µg/L
2-Nitrophenol		10 U	Not analyzed	Not analyzed	µg/L
3,3'-Dichlorobenzidine		10 U	Not analyzed	Not analyzed	µg/L
3-Nitroaniline		10 U	Not analyzed	Not analyzed	µg/L
4-Bromophenyl phenyl ether		10 U	Not analyzed	Not analyzed	µg/L
4-Chloro-3-methylphenol		10 U	Not analyzed	Not analyzed	µg/L
4-Chloroaniline		10 U	Not analyzed	Not analyzed	µg/L
4-Chlorophenyl phenyl ether		10 U	Not analyzed	Not analyzed	µg/L
4-Nitroaniline		10 U	Not analyzed	Not analyzed	µg/L
4-Nitrophenol		10 U	Not analyzed	Not analyzed	µg/L
Acenaphthene		1.0 U	Not analyzed	Not analyzed	µg/L
Acenaphthylene		1.0 U	Not analyzed	Not analyzed	µg/L
Acetophenone		10 U	Not analyzed	Not analyzed	µg/L
Anthracene		1.0 U	Not analyzed	Not analyzed	µg/L
Atrazine		10 U	Not analyzed	Not analyzed	µg/L
Benzaldehyde		10 U	Not analyzed	Not analyzed	µg/L
Benzo(a)anthracene		2.0 U	Not analyzed	Not analyzed	µg/L
Benzo(a)pyrene		0.20 U,J,O	Not analyzed	Not analyzed	µg/L
Benzo(b)fluoranthene		2.0 U	Not analyzed	Not analyzed	µg/L
Benzo(g,h,i)perylene		2.0 U	Not analyzed	Not analyzed	µg/L
Benzo(k)fluoranthene		1.0 U,J,O	Not analyzed	Not analyzed	µg/L
Benzyl butyl phthalate		10 U	Not analyzed	Not analyzed	µg/L
Bis(2-chloroethoxy)methane		10 U	Not analyzed	Not analyzed	µg/L
Bis(2-chloroisopropyl) ether		10 U	Not analyzed	Not analyzed	µg/L
Bis(2-ethylhexyl) phthalate		10 U	Not analyzed	Not analyzed	µg/L
Bis-(2-Ethylhexyl) Adipate		1.0 U,J,O	Not analyzed	Not analyzed	µg/L
Caprolactam		10 U	Not analyzed	Not analyzed	µg/L
Carbazole		2.0 U	Not analyzed	Not analyzed	µg/L
Chrysene		1.0 U,J,O	Not analyzed	Not analyzed	µg/L
Di-n-butylphthalate		10 U	Not analyzed	Not analyzed	µg/L
Di-n-octylphthalate		10 U	Not analyzed	Not analyzed	µg/L

Location	Ecological Screening Standard for Surface Water Samples ²	VBB	DR1	DRREF	
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Date Collected		2/7/2014	2/7/2014	2/7/2014	
Time Collected		1255	1020	0905	
Status		Validation Complete	Validation Complete	Validation Complete	
Type		Surface Water	Surface Water	Surface Water	
Dibenz(a,h)anthracene		1.0 U,J,O	Not analyzed	Not analyzed	µg/L
Dibenzofuran		2.0 U	Not analyzed	Not analyzed	µg/L
Diethyl phthalate		10 U	Not analyzed	Not analyzed	µg/L
Dimethyl phthalate		1.0 U	Not analyzed	Not analyzed	µg/L
Fluoranthene		1.0 U	Not analyzed	Not analyzed	µg/L
Fluorene		2.0 U	Not analyzed	Not analyzed	µg/L
Hexachlorobenzene (HCB)		10 U	Not analyzed	Not analyzed	µg/L
Hexachlorobutadiene		10 U	Not analyzed	Not analyzed	µg/L
Hexachloroethane		10 U	Not analyzed	Not analyzed	µg/L
Indeno (1,2,3-cd) pyrene		2.0 U	Not analyzed	Not analyzed	µg/L
Isophorone		10 U	Not analyzed	Not analyzed	µg/L
Naphthalene		1.0 U	Not analyzed	Not analyzed	µg/L
Nitrobenzene		10 U	Not analyzed	Not analyzed	µg/L
Pentachlorophenol		10 U	Not analyzed	Not analyzed	µg/L
Phenanthrene		2.0 U	Not analyzed	Not analyzed	µg/L
Phenol		10 U	Not analyzed	Not analyzed	µg/L
Pyrene		1.0 U	Not analyzed	Not analyzed	µg/L
bis(2-Chloroethyl) Ether		10 U	Not analyzed	Not analyzed	µg/L
n-Nitroso di-n-Propylamine		10 U	Not analyzed	Not analyzed	µg/L
n-Nitrosodiphenylamine/Diphenylamine		10 U	Not analyzed	Not analyzed	µg/L
Total Metals					Units
Aluminum	-	690	740	680	µg/L
Antimony	5.6 µg/L	1.0 U	1.0 U	1.0 U	µg/L
Arsenic	10 µg/L	1.0 U	1.0 U	1.0 U	µg/L
Barium	220 µg/L	24	23	22	µg/L
Beryllium	0.66 µg/L	3.0 U	3.0 U	3.0 U	µg/L
Boron		-	160	170	µg/L
Cadmium	2 µg/L	0.50 U	0.50 U	0.50 U	µg/L
Calcium	-	7800	7100	6800	µg/L
Chromium	29 µg/L	5.0 U	5.0 U	5.0 U	µg/L
Cobalt	24 µg/L	5.0 U	5.0 U	5.0 U	µg/L
Copper	3 µg/L	1.0 U	10 U	10 U	µg/L
Iron	-	1000	990	1000	µg/L
Lead	0.6 µg/L	1.0 U	0.52	0.43	µg/L
Magnesium	-	2900	2800	2400	µg/L
Manganese	200 µg/L	25	27	23	µg/L
Mercury	0.012 µg/L	0.10 U	0.10 U	0.10 U	µg/L
Molybdenum	-	10 U	10 U	10 U	µg/L
Nickel	17 µg/L	10 U	10 U	10 U	µg/L
Potassium	53000 µg/L	1400	1300	1400	µg/L
Selenium	-	2.0 U	2.0 U	2.0 U	µg/L
Silver	0.06 µg/L	5.0 U	5.0 U	5.0 U	µg/L

Location	Ecological Screening Standard for Surface Water Samples ²	VBB	DR1	DRREF	
Sample ID		VBB01	DR1-0214SW	DRREF-0214SW	
Date Collected		2/7/2014	2/7/2014	2/7/2014	
Time Collected		1255	1020	0905	
Status		Validation Complete	Validation Complete	Validation Complete	
Type		Surface Water	Surface Water	Surface Water	
Sodium	680000 µg/L	4200	4700	4000	µg/L
Strontium	NA	47	45	44	µg/L
Thallium	0.24 µg/L	1.0 U	0.50 U	0.50 U	µg/L
Tin	-	15 U	15 U	15 U	µg/L
Titanium	NA	28	31	31	µg/L
Vanadium	27 µg/L	5.0 U	5.0 U	5.0 U	µg/L
Yttrium	-	3.0 U	3.0 U	3.0 U	µg/L
Zinc	39 µg/L	10 U	10 U	10 U	µg/L
Additional Solids Analysis					Units
Total Dissolved Solids		76	Not analyzed	Not analyzed	mg/L
Total Suspended Solids		4.1	Not analyzed	Not analyzed	mg/L
Classical/Nutrient Analysis					Units
Nitrate as N	0.31 mg/L	0.33 J,O	Not analyzed	Not analyzed	mg/L
Nitrate/Nitrite as N		0.33 J,O	Not analyzed	Not analyzed	mg/L
Nitrite as N		0.050 U	Not analyzed	Not analyzed	mg/L
Total Organic Carbon		1.3	Not analyzed	Not analyzed	mg/L
Cyanide (total)		15 U	Not analyzed	Not analyzed	µg/L

LEGEND	
2	Value obtained from the GL Tier 2 Values; National Recommended Water Quality Criteria; Suter and Tsao (1996); Reference condition for EcoRegion XI (25 percentile); NCDNER State Standards for surface water. If the compound was not detected, a screening value may not be indicated.
mg/L	milligram per liter
µg/L	microgram per liter
NA	Not available
U	The analyte was not detected at or above the reporting limit.
J	The identification of the analyte is acceptable; the reported value is an estimate.
O	Other qualifiers have been assigned providing additional information. These explanatory qualifiers are included in the printable pdf report and in other columns