



US Army Corps
of Engineers®

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	
5/22/13 12:00 AM	203.00	4.80	19.00	22.80	3.80	22.80	29.20	19.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 12:15 AM	199.00	5.20	18.10	23.00	4.90	23.00	27.90	18.10	29.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 12:30 AM	197.00	5.50	17.60	21.20	3.60	21.20	24.50	17.60	26.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 12:45 AM	196.00	4.30	17.00	21.40	4.40	21.40	22.20	17.00	26.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 1:00 AM	210.00	5.30	16.40	21.50	5.10	21.50	19.70	16.40	23.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 1:15 AM	213.00	6.10	15.60	20.90	5.30	20.90	20.20	15.60	21.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 1:30 AM	214.00	4.50	14.90	20.70	5.80	20.70	20.20	14.90	21.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 1:45 AM	206.00	3.70	14.00	20.10	6.10	20.10	18.70	14.00	21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 2:00 AM	225.00	3.40	13.70	20.20	6.50	20.20	18.20	13.70	19.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 2:15 AM	210.00	3.20	13.30	19.70	6.40	19.70	17.50	13.30	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 2:30 AM	203.00	3.20	13.30	19.40	6.10	19.40	17.30	13.30	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 2:45 AM	201.00	3.10	13.20	19.20	6.00	19.20	17.40	13.20	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 3:00 AM	193.00	4.10	13.00	19.40	6.40	19.40	15.80	13.00	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 3:15 AM	194.00	5.20	13.00	19.10	6.10	19.10	15.90	13.00	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 3:30 AM	197.00	4.00	13.50	18.90	5.40	18.90	15.70	13.50	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 3:45 AM	199.00	3.30	12.90	19.40	6.50	19.40	16.20	12.90	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 4:00 AM	189.00	4.60	13.10	19.70	6.60	19.70	17.30	13.10	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 4:15 AM	199.00	5.20	13.20	20.30	7.10	20.30	18.70	13.20	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 6:30 AM	206.00	4.20	12.30	18.90	6.60	18.90	14.30	12.30	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 6:45 AM	207.00	4.70	12.50	19.50	7.00	19.50	14.40	12.50	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 7:00 AM	198.00	4.30	12.40	19.90	7.50	19.90	15.60	12.40	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 7:15 AM	199.00	4.70	13.10	20.10	7.00	20.10	16.80	13.10	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 9:30 AM	203.00	3.50	14.90	25.70	10.80	25.70	21.70	14.90	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 9:45 AM	207.00	4.10	13.20	24.10	10.90	24.10	22.40	13.20	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 10:00 AM	235.00	4.80	13.50	21.40	7.90	21.40	14.60	13.50	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 10:15 AM	218.00	4.00	13.00	22.40	9.40	22.40	17.70	13.00	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 10:30 AM	224.00	5.70	13.10	21.70	8.60	21.70	15.30	13.10	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 10:45 AM	237.00	4.60	10.50	20.30	9.80	20.30	12.10	10.50	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 11:00 AM	213.00	2.60	9.40	14.80	5.40	14.80	9.80	9.40	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 11:15 AM	194.00	7.80	9.30	13.20	3.90	13.20	9.00	9.30	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 11:30 AM	198.00	6.70	9.20	12.30	3.10	12.30	9.00	9.20	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 11:45 AM	238.00	2.20	8.90	11.30	2.40	11.30	8.90	8.90	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 12:00 PM	238.00	6.30	8.70	10.20	1.50	10.20	9.90	8.70	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 12:15 PM	290.00	2.30	10.00	10.40	0.40	10.60	10.40	9.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 12:30 PM	265.00	4.40	11.60	11.80	0.20	11.80	12.70	11.60	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 12:45 PM	269.00	4.90	7.50	10.40	2.90	10.40	4.60	7.50	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 1:00 PM	249.00	4.50	7.70	10.80	3.10	10.80	4.90	7.70	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 1:15 PM	266.00	7.60	12.30	15.20	2.90	15.20	22.90	12.30	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 1:30 PM	275.00	4.90	19.40	19.40	0.00	19.50	19.40	15.10	19.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 1:45 PM	287.00	2.40	18.30	18.00	0.00	19.00	18.00	14.00	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 2:00 PM	310.00	2.90	25.80	19.40	0.00	20.80	19.40	15.10	25.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 2:15 PM	297.00	3.00	24.50	15.80	0.00	16.90	15.80	13.30	24.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 2:30 PM	260.00	4.10	7.60	12.00	4.40	12.00	6.30	7.60	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 2:45 PM	254.00	4.40	8.30	11.30	3.00	11.30	7.60	8.30	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 3:00 PM	252.00	3.70	8.90	11.80	2.90	11.80	8.60	8.90	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 3:15 PM	256.00	4.10	7.30	10.80	3.50	10.80	7.40	7.30	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 3:30 PM	253.00	6.20	7.30	10.30	3.00	10.30	8.80	7.30	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 3:45 PM	238.00	6.70	7.20	9.60	2.40	9.60	8.50	7.20	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 4:00 PM	296.00	5.30	8.10	7.20	0.00	8.70	7.20	6.60	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 4:15 PM	281.00	5.30	7.50	5.50	0.00	7.60	5.50	6.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 4:30 PM	254.00	5.00	6.10	7.50	1.40	7.50	6.90	6.10	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 4:45 PM	252.00	6.20	6.30	6.50	0.30	6.60	7.30	6.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 5:00 PM	278.00	6.30	6.70	5.90	0.00	6.60	5.90	6.30	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 5:15 PM	255.00	4.10	6.90	5.00	0.00	5.00	6.40	6.90	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 5:30 PM	258.00	6.60	8.00	4.20	0.00	4.20	9.40	8.00	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 5:45 PM	250.00	3.70	7.70	3.70	0.00	3.70	9.20	7.70	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 6:00 PM	237.00	5.00	8.40	3.50	0.00	3.50	11.20	8.40	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 6:15 PM	0.00	0.00	0.00	0.00	0.00	0.00	3.50	9.50	8.90	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 6:30 PM	239.00	3.20	9.70	3.60	0.00	3.60	11.30	9.70	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 6:45 PM	248.00	4.10	10.00	0.00	0.00	0.00	10.00	10.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 7:00 PM	253.00	4.50	10.70	3.60	0.00	3.60	14.70	10.70	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 7:15 PM	234.00	3.80	11.60	4.20	0.00	4.20	12.60	11.60	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 7:30 PM	251.00	3.30	12.10	0.00	0.00	0.00	8.30	12.10	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 7:45 PM	249.00	2.70	11.80	4.40	0.00	4.40	7.70	11.80	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 8:00 PM	283.00	4.30	11.50	7.50	0.00	4.70	7.50	11.30	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/22/13 8:15 PM	270.00	4.50	12.30	7.00	0.00	5.10	7.00	10.10	12.30	0.00	0.00						



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
5-22-13 to 5-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)							Naphthalene (µg/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
5/23/13 4:45 AM	4.00	7.20	5.60	4.10	0.00	5.60	1.60	4.10	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 5:00 AM	5.00	7.20	5.10	4.30	0.00	5.10	1.60	4.30	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 5:15 AM	7.00	7.60	5.20	4.20	0.00	5.20	2.70	4.20	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 5:30 AM	3.00	6.30	0.00	4.70	0.00	0.00	2.60	4.70	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 5:45 AM	7.00	9.80	5.00	5.20	0.20	5.00	2.70	5.20	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 6:00 AM	4.00	10.60	5.00	4.90	0.00	5.00	2.00	4.90	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 6:15 AM	13.00	12.20	5.20	4.40	0.00	5.20	1.90	4.40	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 6:30 AM	8.00	11.20	4.80	3.40	0.00	4.80	2.20	3.40	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 6:45 AM	6.00	9.60	4.50	2.60	0.00	4.50	1.10	2.60	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 7:00 AM	1.00	9.80	4.50	2.40	0.00	4.50	1.40	2.40	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 7:15 AM	3.00	7.80	4.30	2.70	0.00	4.30	1.70	2.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 7:30 AM	1.00	9.80	4.20	3.10	0.00	4.20	2.90	3.10	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 7:45 AM	6.00	8.40	4.00	3.40	0.00	4.00	3.50	3.40	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 8:00 AM	6.00	10.90	3.90	3.50	0.00	3.90	2.20	3.50	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 8:15 AM	5.00	12.50	3.80	3.50	0.00	3.80	2.20	3.50	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 8:30 AM	13.00	12.40	3.80	4.30	0.50	3.80	2.30	4.30	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 8:45 AM	14.00	11.80	3.80	4.40	0.60	3.80	2.20	4.40	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 9:00 AM	3.00	12.80	3.60	4.70	1.10	3.60	2.20	4.70	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 9:15 AM	5.00	11.50	3.40	4.80	1.40	3.40	2.00	4.80	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 10:30 AM	10.00	14.80	3.00	5.40	2.40	3.00	2.00	5.40	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 10:45 AM	12.00	14.40	3.00	5.80	2.80	3.00	2.30	5.80	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 11:00 AM	7.00	15.50	3.10	6.20	3.10	3.10	2.50	6.20	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 11:15 AM	8.00	12.30	3.10	6.70	3.60	3.10	2.50	6.70	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 11:30 AM	13.00	16.90	3.10	7.20	4.10	3.10	2.30	7.20	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 11:45 AM	11.00	16.10	3.10	7.50	4.40	3.10	2.30	7.50	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 12:00 PM	13.00	15.70	3.10	7.70	4.60	3.10	2.00	7.70	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 12:15 PM	12.00	14.10	0.00	7.60	0.00	0.00	1.90	7.60	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 12:30 PM	7.00	14.80	3.10	7.60	4.50	3.10	1.70	7.60	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 12:45 PM	15.00	16.00	3.10	7.60	4.50	3.10	1.90	7.60	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 1:00 PM	16.00	18.80	3.00	7.60	4.60	3.00	1.90	7.60	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 1:15 PM	14.00	14.80	3.10	8.10	5.00	3.10	2.30	8.10	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 1:30 PM	13.00	14.90	3.10	8.10	5.00	3.10	2.30	8.10	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 1:45 PM	13.00	15.20	3.10	7.80	4.70	3.10	2.50	7.80	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 2:00 PM	10.00	15.70	3.10	7.60	4.50	3.10	2.20	7.60	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 2:15 PM	9.00	17.80	3.10	7.40	4.30	3.10	2.80	7.40	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 2:30 PM	9.00	15.70	3.10	7.60	4.50	3.10	3.60	7.60	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 2:45 PM	10.00	12.50	3.20	7.50	4.30	3.20	3.50	7.50	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 3:00 PM	18.00	13.70	3.30	7.40	4.10	3.30	3.30	7.40	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 3:15 PM	18.00	15.00	3.30	7.40	4.40	3.30	3.60	7.70	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 3:30 PM	14.00	17.00	3.20	7.40	4.20	3.20	4.70	7.40	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 3:45 PM	22.00	13.80	3.20	7.30	4.10	3.20	4.00	7.30	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 4:00 PM	18.00	13.70	3.30	7.20	3.90	3.30	5.30	7.20	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 4:15 PM	17.00	17.30	3.20	7.10	3.90	3.20	6.90	7.10	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 4:30 PM	18.00	17.80	3.40	8.00	4.60	3.40	8.30	8.00	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 4:45 PM	21.00	14.00	3.30	7.00	3.70	3.30	7.20	7.00	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 5:00 PM	14.00	14.40	3.50	7.10	3.60	3.50	9.90	7.10	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 5:15 PM	15.00	14.90	3.70	7.10	3.40	3.70	10.40	7.10	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 5:30 PM	27.00	13.70	4.20	7.00	2.80	4.20	9.70	7.00	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 5:45 PM	18.00	14.00	4.50	7.00	2.50	4.50	10.00	7.00	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 6:00 PM	19.00	12.50	4.80	7.40	2.60	4.80	13.10	7.40	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 6:15 PM	18.00	13.20	4.90	6.50	1.60	4.90	9.50	6.50	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 6:30 PM	14.00	11.00	4.60	6.80	2.20	4.60	14.00	6.80	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 6:45 PM	7.00	11.60	5.10	6.10	1.00	5.10	11.50	6.10	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 7:00 PM	9.00	11.60	5.10	6.30	1.20	5.10	9.50	6.30	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 7:15 PM	13.00	12.50	4.90	5.50	0.60	4.90	5.80	5.50	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 7:30 PM	9.00	11.70	5.40	5.20	0.00	5.40	7.30	5.20	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 7:45 PM	9.00	12.00	5.40	4.90	0.00	5.40	4.70	4.90	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 8:00 PM	10.00	11.90	6.00	4.90	0.00	6.00	6.40	4.90	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 8:15 PM	10.00	11.70	0.00	5.00	0.00	0.00	6.80	5.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 8:30 PM	11.00	10.60	6.20	4.80	0.00	6.20	6.00	4.80	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 8:45 PM	8.00	11.10	6.30	4.80	0.00	6.30	6.50	4.80	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 9:00 PM	9.00	10.50	6.10	4.50	0.00	6.10	5.60	4.50	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 9:15 PM	16.00	10.60	5.90	4.50	0.00	5.90	6.10	4.50	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 9:30 PM	20.00	11.00	0.00	4.60	0.00	0.00	6.30	4.60	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 9:45 PM	17.00	11.10	6.40	4.70	0.00	6.40	8.20	4.70	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 10:00 PM	14.00	10.90	6.20	4.50	0.00	6.20	11.80	4.50	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 10:15 PM	18.00	12.30	6.00	4.60	0.00	6.00	5.40	4.60	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 10:30 PM	20.00	13.30	6.10	4.70	0.00	6.10	9.60	4.70	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 10:45 PM	21.00	12.60	6.50	4.60	0.00	6.50	9.00	4.60	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 11:00 PM	12.00	13.30	0.00	4.40	0.00	0.00	8.80	4.40	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/23/13 11:15 PM	15.00	12.60	6.90	4.40	0.00	6.90	7.90	4.40	13.70	0.00	0.00	0.00	0.00			



US Army Corps
of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
5-22-13 to 5-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates ($\mu\text{g}/\text{m}^3$)								Naphthalene ($\mu\text{g}/\text{m}^3$)					
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
5/25/13 7:15 AM	65.00	1.50	11.30	8.10	0.00	11.30	7.10	8.10	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 7:30 AM	34.00	5.30	10.70	7.80	0.00	10.70	8.80	7.80	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 7:45 AM	24.00	4.60	10.50	8.00	0.00	10.50	13.00	8.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 8:00 AM	63.00	4.60	12.30	7.80	0.00	12.30	13.00	7.80	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 8:15 AM	66.00	2.80	12.80	21.90	9.10	12.80	22.30	21.90	23.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 8:30 AM	207.00	1.00	19.70	16.30	0.00	16.30	26.40	19.70	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 8:45 AM	184.00	1.50	14.30	11.00	0.00	11.00	12.30	14.30	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 9:00 AM	56.00	1.00	11.20	9.40	0.00	11.20	19.50	9.40	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 9:15 AM	148.00	1.30	33.40	8.50	0.00	13.20	33.40	16.50	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 9:30 AM	5.00	1.80	14.10	20.70	6.60	14.10	28.40	20.70	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 9:45 AM	272.00	0.40	16.50	11.90	0.00	14.00	11.90	13.00	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 10:00 AM	19.00	0.90	14.00	11.30	0.00	14.00	14.10	11.30	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 10:15 AM	17.00	2.40	15.60	12.30	0.00	15.60	19.90	12.30	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 10:30 AM	357.00	1.90	7.30	25.20	17.90	15.10	25.20	16.80	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 10:45 AM	0.00	2.50	12.50	13.30	0.80	12.50	21.90	13.30	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 11:00 AM	8.00	2.60	13.20	12.00	0.00	13.20	13.30	12.00	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 11:15 AM	12.00	2.60	13.10	12.00	0.00	13.10	15.20	12.00	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 11:30 AM	4.00	2.50	12.60	9.60	0.00	12.60	11.90	9.60	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 11:45 AM	1.00	1.40	12.40	8.90	0.00	12.40	6.80	8.90	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 12:00 PM	16.00	2.40	11.90	9.60	0.00	11.90	6.80	9.60	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 12:15 PM	4.00	1.50	12.30	9.40	0.00	12.30	7.00	9.40	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 12:30 PM	5.00	2.10	12.00	8.90	0.00	12.00	6.50	8.90	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 12:45 PM	2.00	1.50	11.70	8.70	0.00	11.70	7.00	8.70	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 1:00 PM	17.00	1.50	11.30	8.70	0.00	11.30	5.80	8.70	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 1:15 PM	28.00	1.80	11.10	8.70	0.00	11.10	6.80	8.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 1:30 PM	21.00	2.10	11.30	7.90	0.00	11.30	9.60	7.90	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 1:45 PM	19.00	0.90	11.10	7.50	0.00	11.10	6.70	7.50	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 2:00 PM	21.00	2.10	11.10	7.60	0.00	11.10	7.80	7.60	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 2:15 PM	26.00	2.80	11.90	9.80	0.00	11.90	18.80	9.80	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 2:30 PM	41.00	3.00	12.40	13.10	0.70	12.40	27.50	13.10	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 2:45 PM	51.00	2.50	13.00	14.40	1.40	13.00	32.00	14.40	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 3:00 PM	90.00	2.10	31.00	7.10	0.00	12.10	31.00	16.00	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 3:15 PM	85.00	2.30	18.20	14.00	0.00	18.20	18.10	14.00	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 3:30 PM	82.00	3.20	14.80	15.90	1.10	14.80	51.70	15.90	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 3:45 PM	67.00	2.50	19.10	15.30	0.00	19.10	37.80	15.30	29.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 4:00 PM	43.00	4.60	20.60	18.90	0.00	20.60	28.00	18.90	50.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 4:15 PM	24.00	5.00	20.30	20.50	0.20	20.30	27.50	20.50	80.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 4:30 PM	25.00	4.90	20.00	17.40	0.00	20.00	26.20	17.40	77.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 4:45 PM	39.00	4.30	23.60	27.70	4.10	23.60	32.20	27.70	87.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 5:00 PM	10.00	4.00	22.00	25.20	3.20	22.00	42.10	25.20	65.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 5:15 PM	13.00	3.10	18.30	19.70	1.40	18.30	33.70	19.70	38.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 5:30 PM	28.00	2.80	19.40	23.00	3.60	19.40	40.20	23.00	39.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 5:45 PM	12.00	3.50	17.70	18.60	0.90	17.70	19.30	18.60	37.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 6:00 PM	6.00	3.40	18.20	12.70	0.00	18.20	15.20	12.70	19.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 6:15 PM	9.00	3.70	17.70	13.90	0.00	17.70	16.30	13.90	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 6:30 PM	13.00	3.40	16.90	13.20	0.00	16.90	14.00	13.20	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 6:45 PM	58.00	4.10	16.20	13.10	0.00	16.20	13.80	13.10	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 7:00 PM	60.00	4.20	16.10	11.70	0.00	16.10	9.70	11.70	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 7:15 PM	30.00	4.60	15.90	11.00	0.00	15.90	8.30	11.00	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 7:30 PM	50.00	5.50	16.40	10.80	0.00	16.40	7.90	10.80	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 7:45 PM	43.00	5.20	16.70	11.20	0.00	16.70	6.80	11.20	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 8:00 PM	50.00	3.50	17.10	12.90	0.00	17.10	8.90	12.90	21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 8:15 PM	46.00	3.10	16.80	11.90	0.00	16.80	10.30	11.90	28.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 8:30 PM	52.00	3.80	17.30	13.30	0.00	17.30	12.10	13.30	32.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 8:45 PM	36.00	3.20	18.10	14.80	0.00	18.10	20.20	14.80	25.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 9:00 PM	30.00	2.10	18.10	17.10	0.00	18.10	17.40	17.10	28.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 9:15 PM	44.00	2.30	17.90	15.30	0.00	17.90	14.80	15.30	26.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 9:30 PM	13.00	1.80	17.50	14.70	0.00	17.50	17.00	14.70	27.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 9:45 PM	355.00	1.40	21.00	19.20	0.00	17.90	19.20	12.90	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 10:00 PM	3.00	2.80	18.10	17.20	0.00	18.10	24.40	17.20	33.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 10:15 PM	4.00	2.50	17.20	16.00	0.00	17.20	21.40	16.00	27.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 10:30 PM	356.00	1.80	14.50	13.30	0.00	15.50	13.30	10.90	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 10:45 PM	349.00	1.10	14.50	9.40	0.00	15.50	9.40	11.10	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 11:00 PM	7.00	1.20	14.90	10.60	0.00	14.90	10.00	10.60	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 11:15 PM	9.00	2.00	15.00	9.80	0.00	15.00	8.20	9.80	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 11:30 PM	35.00	2.00	14.90	9.80	0.00	14.90	8.00	9.80	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/25/13 11:45 PM	8.00	1.70	14.60	9.70	0.00	14.60	8.00	9.70	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 12:00 AM	51.00	2.60	13.90	9.30	0.00	13.90	7.90	9.30	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 12:15 AM	55.00	2.10	13.70	9.10	0.00	13.70	7.60	9.10	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 12:30 AM	36.00															



US Army Corps
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Real-Time Air Monitoring Data
5-22-13 to 5-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)					
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
5/26/13 8:15 AM	132.00	2.50	16.70	8.80	0.00	17.10	16.70	11.90	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 8:30 AM	171.00	2.00	16.90	17.50	0.60	19.80	16.90	11.60	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 8:45 AM	167.00	3.00	40.10	24.50	0.00	23.40	40.10	16.30	24.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 9:00 AM	170.00	2.80	30.10	19.40	0.00	21.10	30.10	12.80	19.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 9:15 AM	163.00	2.00	22.40	21.90	0.00	19.90	22.40	12.80	21.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 9:30 AM	145.00	3.60	36.90	19.60	0.00	18.70	36.90	15.70	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 9:45 AM	125.00	3.00	43.00	22.90	0.00	20.90	43.00	17.00	22.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 10:00 AM	154.00	4.40	48.80	25.40	0.00	21.60	48.80	18.00	25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 10:15 AM	175.00	2.30	53.00	28.90	0.00	20.90	53.00	19.90	28.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 10:30 AM	134.00	3.20	54.40	29.40	0.00	20.70	54.40	20.10	29.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 10:45 AM	143.00	2.40	52.80	27.90	0.00	20.10	52.80	20.60	27.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 11:00 AM	183.00	3.40	21.70	19.90	0.00	19.90	54.10	21.70	29.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 11:15 AM	188.00	3.10	22.50	20.00	0.00	20.00	51.70	22.50	29.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 11:30 AM	165.00	4.00	51.40	34.00	0.00	20.80	51.40	22.80	34.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 11:45 AM	171.00	3.20	52.10	32.00	0.00	20.80	52.10	23.40	32.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 12:00 PM	178.00	2.80	48.70	32.10	0.00	0.00	48.70	23.30	32.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 12:15 PM	166.00	3.30	46.50	31.40	0.00	21.80	46.50	23.30	31.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 12:30 PM	136.00	3.80	45.10	32.50	0.00	21.50	45.10	24.40	32.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 12:45 PM	159.00	3.00	45.90	30.00	0.00	21.60	45.90	26.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 1:00 PM	156.00	3.90	45.90	30.00	0.00	21.90	45.90	27.60	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 1:15 PM	168.00	5.00	43.30	27.90	0.00	21.80	43.30	25.50	27.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 1:30 PM	148.00	4.50	45.10	28.10	0.00	21.40	45.10	26.80	28.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 1:45 PM	147.00	5.60	43.50	27.70	0.00	21.60	43.50	27.90	27.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 2:00 PM	142.00	7.20	40.50	27.40	0.00	21.80	40.50	26.80	27.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 2:15 PM	137.00	5.00	45.30	27.10	0.00	20.90	45.30	27.60	27.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 2:30 PM	101.00	4.50	41.40	27.60	0.00	20.90	41.40	28.70	27.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 2:45 PM	105.00	3.50	37.10	27.40	0.00	20.00	37.10	26.70	27.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 3:00 PM	141.00	4.70	38.50	27.50	0.00	19.90	38.50	27.00	27.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 3:15 PM	175.00	3.40	33.90	27.10	0.00	19.50	33.90	23.50	27.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 3:30 PM	219.00	4.80	23.90	18.80	0.00	18.80	32.40	23.90	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 3:45 PM	205.00	4.00	25.30	19.00	0.00	19.00	35.70	25.30	25.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 4:00 PM	208.00	4.40	22.60	19.90	0.00	19.90	29.80	22.60	27.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 4:15 PM	197.00	3.70	22.60	21.30	0.00	21.30	27.50	22.60	24.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 4:30 PM	208.00	1.90	23.00	19.20	0.00	19.20	29.50	23.00	29.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 4:45 PM	154.00	1.30	19.30	17.90	0.00	17.00	19.30	17.80	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 5:00 PM	149.00	2.10	17.00	14.00	0.00	17.20	17.00	17.10	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 5:15 PM	146.00	3.00	20.20	13.70	0.00	18.10	20.20	17.40	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 5:30 PM	160.00	2.70	21.40	13.80	0.00	18.80	21.40	17.40	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 5:45 PM	192.00	2.90	18.00	0.00	0.00	0.00	22.70	18.00	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 6:00 PM	203.00	1.00	17.30	19.30	2.00	19.30	21.30	17.30	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 6:15 PM	306.00	2.50	11.90	20.70	8.80	0.00	20.70	17.20	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 6:30 PM	7.00	1.80	18.40	16.80	0.00	18.40	19.30	16.80	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 6:45 PM	132.00	2.30	20.60	11.40	0.00	18.00	20.60	16.80	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 7:00 PM	341.00	1.00	11.70	19.10	7.40	17.90	19.10	16.90	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 7:15 PM	211.00	0.80	18.50	18.80	0.30	18.80	19.40	18.50	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 7:30 PM	191.00	2.70	23.40	19.20	0.00	19.20	23.50	23.40	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 7:45 PM	194.00	2.70	21.20	20.40	0.00	20.40	26.50	21.20	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 8:00 PM	181.00	3.30	23.20	21.80	0.00	21.80	23.30	23.20	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 8:15 PM	156.00	2.80	24.80	19.10	0.00	23.60	24.80	22.90	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 8:30 PM	157.00	2.20	21.90	21.30	0.00	24.00	21.90	18.40	21.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 8:45 PM	177.00	2.20	19.40	16.30	0.00	23.30	19.40	17.40	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 9:00 PM	153.00	2.00	19.30	15.20	0.00	23.30	19.30	16.30	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 9:15 PM	128.00	2.30	18.60	13.80	0.00	23.30	18.60	15.80	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 9:30 PM	135.00	3.10	21.70	13.80	0.00	23.20	21.70	15.30	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 9:45 PM	81.00	2.80	23.00	15.90	0.00	23.00	26.60	15.90	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 10:00 PM	131.00	2.40	27.50	12.00	0.00	23.20	27.50	17.90	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 10:15 PM	123.00	3.50	31.40	12.60	0.00	25.90	31.40	19.60	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 10:30 PM	105.00	2.60	31.20	12.70	0.00	26.00	31.20	22.10	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 10:45 PM	142.00	2.50	30.30	12.90	0.00	26.30	30.30	21.50	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 11:00 PM	157.00	2.80	29.90	13.10	0.00	23.90	29.90	20.60	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 11:15 PM	132.00	3.20	27.10	13.10	0.00	23.90	27.10	19.10	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 11:30 PM	132.00	3.90	27.30	19.20	0.00	26.80	27.30	21.10	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/26/13 11:45 PM	124.00	3.30	27.30	19.00	0.00	26.40	27.30	22.10	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 12:00 AM	121.00	3.40	25.80	19.40	0.00	28.10	25.80	22.40	19.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 12:15 AM	158.00	2.80	22.50	18.90	0.00	30.40	22.50	20.80	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 12:30 AM	164.00	3.40	22.30	18.40	0.00	30.10	22.30	19.50	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 12:45 AM	163.00	3.60	23.70	17.70	0.00	28.60	23.70	19.10	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 1:00 AM	159.00	3.00	24.90	16.90	0.00	29.20	24.90	19.10	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 1:15 AM	154.00	5.00	23.20	15.00	0.00											



**US Army Corps
of Engineers®**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
5-22-13 to 5-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)					
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
5/27/13 9:00 AM	148.00	4.50	9.90	6.00	0.00	20.60	9.90	12.30	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 9:15 AM	143.00	3.70	8.20	5.80	0.00	19.70	8.20	11.00	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 9:30 AM	136.00	6.50	7.50	5.50	0.00	19.10	7.50	10.70	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 9:45 AM	146.00	6.40	8.30	6.20	0.00	18.90	8.30	11.10	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 10:00 AM	170.00	5.40	9.70	7.70	0.00	19.00	9.70	11.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 10:15 AM	165.00	4.80	10.80	9.30	0.00	19.50	10.80	11.60	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 10:30 AM	152.00	5.40	12.20	10.80	0.00	19.40	12.20	12.30	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 10:45 AM	162.00	4.50	11.80	10.40	0.00	18.60	11.80	12.40	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 11:00 AM	151.00	5.70	11.60	10.60	0.00	17.80	11.60	11.90	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 11:15 AM	142.00	6.00	12.60	11.20	0.00	18.00	12.60	13.60	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 11:30 AM	168.00	6.50	13.10	10.90	0.00	18.10	13.10	15.20	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 11:45 AM	161.00	4.50	13.40	10.50	0.00	18.20	13.40	15.20	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 12:00 PM	169.00	4.50	12.70	10.70	0.00	18.30	12.70	14.90	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 12:15 PM	146.00	6.20	11.80	10.60	0.00	18.20	11.80	14.50	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 12:30 PM	158.00	6.10	10.30	10.00	0.00	17.50	10.30	13.80	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 12:45 PM	165.00	6.10	9.40	9.70	0.30	16.60	9.40	12.10	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 1:00 PM	156.00	6.00	8.90	10.00	1.10	16.30	8.90	11.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 1:15 PM	155.00	6.30	9.30	9.40	0.10	16.00	9.30	11.10	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 1:30 PM	169.00	4.90	9.80	9.80	0.00	15.40	9.80	11.70	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 1:45 PM	169.00	4.20	11.00	12.20	1.20	15.70	11.00	12.90	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 2:00 PM	188.00	3.50	14.20	15.50	1.30	15.50	14.20	14.20	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 2:15 PM	163.00	4.00	13.30	13.60	0.30	16.40	13.30	15.30	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 2:30 PM	155.00	3.80	13.70	13.70	0.00	16.30	13.70	15.70	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 2:45 PM	162.00	3.20	14.20	13.90	0.00	16.90	14.20	16.00	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 3:00 PM	135.00	5.00	14.10	15.00	0.90	17.20	14.10	15.60	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 3:15 PM	147.00	4.70	13.60	13.50	0.00	17.80	13.60	14.90	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 3:30 PM	132.00	5.20	13.60	13.30	0.00	19.70	13.60	15.80	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 3:45 PM	152.00	4.70	12.70	13.90	1.20	22.10	12.70	14.50	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 4:00 PM	105.00	3.40	13.50	14.80	1.30	23.20	13.50	14.80	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 4:15 PM	99.00	2.50	10.50	12.30	1.80	22.00	10.50	12.50	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 4:30 PM	143.00	2.20	8.80	11.10	2.30	20.30	8.80	11.00	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 4:45 PM	149.00	4.20	8.80	13.50	4.70	19.00	8.80	11.30	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 5:00 PM	134.00	2.80	10.60	11.40	0.80	18.00	10.60	10.40	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 5:15 PM	156.00	3.50	16.20	11.70	0.00	17.50	16.20	13.80	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 5:30 PM	101.00	2.80	15.70	14.30	0.00	19.40	15.70	13.00	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 5:45 PM	85.00	3.40	19.20	11.70	0.00	19.20	11.80	11.70	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 6:00 PM	127.00	4.10	13.30	11.10	0.00	19.30	13.30	12.00	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 6:15 PM	78.00	2.90	19.40	11.70	0.00	19.40	12.60	11.70	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 6:30 PM	132.00	3.70	12.60	10.70	0.00	19.50	12.60	11.90	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 6:45 PM	140.00	3.20	13.80	12.40	0.00	18.60	13.80	12.30	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 7:00 PM	127.00	2.80	14.30	11.30	0.00	17.80	14.30	14.00	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 7:15 PM	129.00	1.20	14.00	14.10	0.10	17.20	14.00	13.10	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 7:30 PM	84.00	1.00	17.10	15.10	0.00	17.10	23.00	15.10	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 7:45 PM	105.00	2.70	14.50	12.90	0.00	17.80	14.50	12.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 8:00 PM	133.00	2.90	14.40	16.80	2.40	19.20	14.40	13.90	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 8:15 PM	131.00	2.20	14.10	21.10	7.00	22.40	14.10	15.40	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 8:30 PM	125.00	3.50	29.00	22.70	0.00	22.30	29.00	27.80	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 8:45 PM	87.00	3.00	19.40	20.70	1.30	19.40	17.20	20.70	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 9:00 PM	90.00	3.90	13.50	12.30	0.00	18.90	13.50	16.20	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 9:15 PM	150.00	3.80	13.50	17.70	4.20	20.90	13.50	15.50	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 9:30 PM	129.00	3.10	15.20	19.50	4.30	23.00	15.20	15.80	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 9:45 PM	108.00	0.90	15.50	18.40	2.90	22.80	15.50	16.10	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 10:00 PM	79.00	1.40	22.20	24.00	1.80	22.20	17.80	24.00	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 10:15 PM	155.00	2.20	25.50	15.30	0.00	22.80	25.50	19.30	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 10:30 PM	117.00	1.90	14.00	17.70	3.70	24.30	14.00	13.80	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 10:45 PM	132.00	2.10	21.00	36.70	15.00	31.60	21.70	16.90	36.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 11:00 PM	139.00	2.20	38.10	28.30	0.00	30.40	38.10	25.90	28.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 11:15 PM	131.00	1.60	24.60	29.40	4.80	29.10	24.60	22.30	29.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 11:30 PM	288.00	2.20	30.70	22.50	0.00	29.30	22.50	21.80	30.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/27/13 11:45 PM	276.00	0.70	24.20	24.50	0.30	30.70	24.50	22.50	24.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/28/13 12:00 AM	222.00	1.50	23.10	34.60	11.50	34.60	26.70	23.10	36.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/28/13 12:15 AM	204.00	2.80	23.10	34.80	11.70	34.80	23.80	23.10	32.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/28/13 12:30 AM	223.00	2.90	22.60	35.70	13.10	35.70	25.40	22.60	29.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/28/13 12:45 AM	192.00	7.30	24.30	38.70	14.40	38.70	25.30	24.30	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/28/13 1:00 AM	188.00	5.40	27.80	40.60	12.80	40.60	29.30	27.80	29.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/28/13 1:15 AM	185.00	5.80	28.70	45.80	17.10	45.80	33.50	28.70	34.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/28/13 1:30 AM	192.00	3.30	23.50	41.10	17.60	41.10	24.40	23.50	30.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/28/13 1:45 AM	332.00	5.40	24.60	17.40	0.00	37.40	17.40	18.40	24.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/28/13 2:00 AM	176.00	3.90	13.80	15.50	1.70	32.10	13.									



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
5-22-13 to 5-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m³)								Naphthalene (µg/m³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	
5/29/13 11:00 AM	24.00	4.00	28.00	9.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 11:15 AM	27.00	2.60	28.00	9.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 11:30 AM	48.00	3.60	28.00	9.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 11:45 AM	30.00	2.90	28.00	9.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 12:00 PM	55.00	2.60	28.00	9.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 12:15 PM	101.00	2.30	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 12:30 PM	133.00	4.00	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 12:45 PM	141.00	4.20	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 1:00 PM	131.00	3.50	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 1:15 PM	111.00	2.60	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 1:30 PM	92.00	4.10	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 1:45 PM	97.00	3.70	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 2:00 PM	83.00	4.60	28.00	9.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 2:15 PM	113.00	2.60	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 2:30 PM	126.00	4.40	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 2:45 PM	89.00	3.40	28.00	9.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 3:00 PM	120.00	4.30	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 3:15 PM	98.00	3.10	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 3:30 PM	108.00	2.90	20.60	14.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 3:45 PM	89.00	3.60	28.00	9.50	0.00	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 4:00 PM	206.00	6.70	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 4:15 PM	231.00	6.70	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 4:30 PM	200.00	6.90	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 4:45 PM	198.00	5.50	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 5:00 PM	204.00	6.30	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 5:15 PM	185.00	4.80	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 5:30 PM	192.00	5.50	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 5:45 PM	194.00	2.90	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 6:00 PM	208.00	4.30	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 6:15 PM	197.00	4.40	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 6:30 PM	199.00	5.40	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 6:45 PM	182.00	7.80	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 7:00 PM	186.00	5.40	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 7:15 PM	206.00	4.00	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 7:30 PM	198.00	4.80	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 7:45 PM	199.00	5.20	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 8:00 PM	194.00	5.30	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 8:15 PM	194.00	4.80	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 8:30 PM	194.00	4.30	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 8:45 PM	189.00	3.90	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 9:00 PM	194.00	3.80	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 9:15 PM	192.00	5.00	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 9:30 PM	199.00	4.70	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 9:45 PM	188.00	4.40	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 10:00 PM	200.00	5.00	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 10:15 PM	201.00	4.80	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 10:30 PM	193.00	4.20	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 10:45 PM	189.00	4.90	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 11:00 PM	199.00	4.80	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 11:15 PM	186.00	4.40	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 11:30 PM	194.00	4.40	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/29/13 11:45 PM	190.00	3.90	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 12:00 AM	205.00	3.90	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 12:15 AM	190.00	4.10	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 12:30 AM	195.00	5.40	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 12:45 AM	190.00	4.90	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 1:00 AM	206.00	5.10	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 1:15 AM	203.00	5.00	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 1:30 AM	209.00	5.40	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 1:45 AM	211.00	5.80	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 2:00 AM	199.00	3.40	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 2:15 AM	194.00	4.30	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 2:30 AM	196.00	6.00	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 2:45 AM	192.00	4.60	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 3:00 AM	196.00	4.90	9.50	28.00	18.50	28.00	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/30/13 3:15 AM	199.00	5.00	9.50	28.00	18.50	28.00	20.60	9.50	1								



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Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
5-22-13 to 5-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)							Naphthalene (µg/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
5/31/13 12:30 PM	207.00	5.80	9.50	40.10	30.60	40.10	20.60	9.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 12:45 PM	221.00	6.20	6.80	40.20	33.40	40.20	7.80	6.80	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 1:00 PM	201.00	5.90	7.10	40.00	32.90	40.00	8.50	7.10	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 1:15 PM	209.00	7.50	7.00	40.00	33.00	40.00	8.80	7.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 1:30 PM	196.00	7.40	7.20	40.00	32.80	40.00	7.40	7.20	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 1:45 PM	209.00	7.20	7.50	39.40	31.90	39.40	8.40	7.50	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 2:00 PM	212.00	8.70	7.50	39.80	32.30	39.80	9.70	7.50	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 2:15 PM	205.00	8.60	8.90	39.80	30.90	39.80	7.80	8.90	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 2:30 PM	202.00	8.20	7.90	0.00	0.00	0.00	8.20	7.90	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 2:45 PM	223.00	5.90	10.00	39.60	29.60	39.60	8.80	10.00	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 3:00 PM	220.00	9.30	8.40	39.80	31.40	39.80	8.30	8.40	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 3:15 PM	211.00	5.70	8.70	40.60	31.90	40.60	5.90	8.70	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 3:30 PM	211.00	4.20	7.10	40.50	33.40	40.50	6.50	7.10	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 3:45 PM	206.00	4.30	7.30	40.10	32.80	40.10	5.60	7.30	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 4:00 PM	208.00	6.70	6.80	40.50	33.70	40.50	5.30	6.80	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 4:15 PM	252.00	2.80	6.40	40.50	34.10	40.50	5.90	6.40	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 4:30 PM	222.00	3.90	6.70	40.50	33.80	40.50	5.90	6.70	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 4:45 PM	213.00	5.00	7.60	40.90	33.30	40.90	5.90	7.60	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 5:00 PM	210.00	6.10	7.90	40.90	33.00	40.90	5.60	7.90	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 5:15 PM	203.00	6.40	10.20	40.70	30.50	40.70	7.80	10.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 5:30 PM	194.00	5.20	10.50	40.70	30.20	40.70	7.60	10.50	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 5:45 PM	200.00	5.10	9.20	40.20	31.00	40.20	10.50	9.20	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 6:00 PM	256.00	4.80	7.30	40.20	32.90	40.20	11.00	7.30	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 6:15 PM	214.00	3.10	7.40	40.10	32.70	40.10	11.10	7.40	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 6:30 PM	206.00	3.70	7.30	40.10	32.80	40.10	9.60	7.30	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 6:45 PM	209.00	3.30	7.00	40.10	33.10	40.10	9.10	7.00	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 7:00 PM	205.00	4.60	8.20	40.20	32.00	40.20	13.60	8.20	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 7:15 PM	204.00	3.30	8.30	40.30	32.00	40.30	11.90	8.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 7:30 PM	203.00	4.50	8.20	39.10	30.90	39.10	8.70	8.20	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 7:45 PM	192.00	5.00	9.60	39.10	29.50	39.10	7.80	9.60	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 8:00 PM	206.00	4.20	8.70	39.50	30.80	39.50	7.70	8.70	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 8:15 PM	207.00	5.00	8.30	39.40	31.10	39.40	8.30	8.30	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 8:30 PM	209.00	4.90	9.10	38.40	29.30	38.40	7.50	9.10	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 8:45 PM	218.00	4.20	8.90	38.30	29.40	38.30	6.70	8.90	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 9:00 PM	230.00	4.20	8.20	38.10	29.90	38.10	6.50	8.20	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 9:15 PM	207.00	3.50	8.40	37.90	29.50	37.90	6.90	8.40	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 9:30 PM	223.00	3.70	6.80	37.60	30.80	37.60	6.70	6.80	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 9:45 PM	217.00	4.00	5.80	37.50	31.70	37.50	5.70	5.80	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 10:00 PM	201.00	4.50	6.60	37.40	30.80	37.40	5.90	6.60	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 10:15 PM	212.00	3.50	7.50	37.40	29.90	37.40	6.00	7.50	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 10:30 PM	197.00	4.10	8.80	37.60	28.80	37.60	7.20	8.80	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 10:45 PM	182.00	4.10	8.90	37.60	28.70	37.60	7.60	8.90	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 11:00 PM	181.00	5.20	9.70	37.60	27.90	37.60	8.10	9.70	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 11:15 PM	167.00	4.70	7.50	10.90	3.40	37.80	7.50	10.00	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 11:30 PM	183.00	6.70	9.70	37.80	28.10	37.80	8.40	9.70	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/13 11:45 PM	176.00	8.70	7.50	12.30	4.80	37.70	7.50	10.20	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

Cerex Unit (Naphthalene) Thermo Unit (Particles) PID Monitor

Date & Time of alarm: 5/08/2013 7:00 AM Email sent to site Technician? (Yes or No)

Technician responded to the alarm; Scott Peterson

1. Was dredging occurring at the time of the alarm? (Yes or No)

2. Alarm caused by:

- Loss of Power
- Loss of Radio Communication
- Out of Calibration
- UV Alignment
- Blockage in Air Tube
- Air Quality
- Other: Weather

3. Corrective Actions taken? (Yes or No)

4. Dredging suspended? (Yes or No)

5. Alarm logged in air monitoring action spreadsheet? (Yes or No)

Description of Action Taken:

M1 Thermo Unit alarm was caused by spiders inside of the nephelometer and paper filter. The spiders were vacuumed out of the inlet tube and nephelometer. Unit was recalibrated at 8:30 AM 5/08/13 and inspected at 15:00 AM 5/08/13 to confirm proper function.



Spiders

