



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

Table with columns: Reading Time (EST), Wind Direction (Degrees Clockwise from North), Wind Speed (mph), Particulates (ug/m^3) [Upwind, Downwind, CDF Contribution, M1, M2, M3, M4], and Naphthalene (ug/m^3) [Upwind, Downwind, CDF Contribution, M1, M2, M3, M4]. Rows represent hourly data from 10/2/13 1:00 AM to 10/3/13 1:30 AM.



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

Table with columns for Reading Time (EST), Wind Direction, Wind Speed, Particulates (ug/m3), and Naphthalene (ug/m3). Rows include timestamps from 10/4/13 2:30 AM to 10/5/13 3:00 AM.



US Army Corps of Engineers

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October, 2013

Table with columns: Reading Time (EST), Wind Direction, Wind Speed, Particulates (µg/m³) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4), and Naphthalene (µg/m³) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4). Rows represent hourly data from 10/6/13 4:00 AM to 10/7/13 4:30 AM.



US Army Corps of Engineers

Indiana Harbor and Canal
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October, 2013

Table with columns: Reading Time (EST), Wind Direction (Degrees Clockwise from North), Wind Speed (mph), Particulates (ug/m^3) [Upwind, Downwind, CDF Contribution, M1, M2, M3, M4], and Naphthalene (ug/m^3) [Upwind, Downwind, CDF Contribution, M1, M2, M3, M4]. Rows represent hourly data from 10/7/13 4:45 AM to 10/8/13 5:15 AM.



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		
10/9/13 6:15 AM	175.00	1.60	42.00	22.70	0.00	28.50	42.00	26.60	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 6:30 AM	186.00	1.70	29.50	29.40	0.00	29.40	22.10	29.50	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 6:45 AM	191.00	1.70	26.30	34.70	8.40	34.70	26.50	26.30	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 7:00 AM	179.00	2.30	21.60	21.00	0.00	32.40	21.60	30.70	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 7:15 AM	186.00	2.50	37.60	24.80	0.00	24.80	22.40	37.60	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 7:30 AM	178.00	2.30	28.60	30.00	1.40	29.30	28.60	32.10	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 7:45 AM	193.00	3.20	33.80	28.40	0.00	28.40	33.20	33.80	35.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 8:00 AM	175.00	2.60	81.20	53.20	0.00	28.60	81.20	30.20	53.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 8:15 AM	170.00	1.90	52.10	55.60	3.50	26.60	52.10	27.90	55.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 8:30 AM	174.00	2.20	33.80	33.60	0.00	34.90	33.80	25.60	33.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 8:45 AM	190.00	1.90	24.20	49.80	25.60	49.80	24.80	24.20	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 9:00 AM	218.00	1.90	24.60	48.00	23.40	48.00	23.90	24.60	26.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 9:15 AM	175.00	1.90	22.40	24.10	1.70	34.70	22.40	24.80	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 9:30 AM	194.00	2.50	33.00	36.80	3.80	36.80	23.40	33.00	28.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 9:45 AM	177.00	3.30	23.30	31.50	8.20	38.70	23.30	38.10	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 10:00 AM	190.00	1.50	22.80	40.80	18.00	40.80	21.90	22.80	28.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 10:15 AM	166.00	2.80	21.90	20.40	0.00	59.70	21.90	21.10	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 10:30 AM	156.00	2.80	20.60	20.00	0.00	38.70	20.60	19.40	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 10:45 AM	166.00	3.20	18.00	18.20	0.20	29.40	18.00	18.00	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 11:00 AM	178.00	3.90	17.70	15.10	0.00	27.60	17.70	15.40	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 11:15 AM	185.00	3.50	11.90	19.70	7.80	19.70	14.30	11.90	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 11:30 AM	143.00	2.10	12.40	14.50	2.10	12.30	12.40	8.40	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 11:45 AM	173.00	2.00	9.20	8.20	0.00	11.10	9.20	4.30	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 12:00 PM	170.00	2.30	10.50	6.20	0.00	11.30	10.50	4.10	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 12:15 PM	59.00	2.30	6.80	2.10	0.00	6.80	15.20	2.10	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 12:30 PM	144.00	1.50	10.50	7.10	0.00	6.40	10.50	9.70	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 12:45 PM	89.00	2.10	9.50	3.90	0.00	9.50	9.40	3.90	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 1:00 PM	160.00	3.10	34.00	11.20	0.00	22.00	34.00	5.10	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 1:15 PM	155.00	2.20	9.20	10.00	0.80	9.80	9.20	5.60	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 1:30 PM	138.00	3.10	15.20	8.10	0.00	7.40	15.20	23.40	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 1:45 PM	63.00	1.70	11.50	7.40	0.00	11.50	15.00	7.40	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 2:00 PM	63.00	3.30	16.00	9.60	0.00	16.00	17.30	9.60	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 2:15 PM	85.00	2.60	11.10	8.50	0.00	11.10	16.40	8.50	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 2:30 PM	87.00	2.00	16.40	15.00	0.00	16.40	23.70	15.00	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 2:45 PM	74.00	2.70	21.70	12.20	0.00	21.70	18.60	12.20	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 3:00 PM	55.00	3.90	24.70	18.90	0.00	24.70	22.40	18.90	22.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 3:15 PM	88.00	2.10	38.30	20.60	0.00	38.30	27.50	20.60	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 3:30 PM	85.00	3.70	34.60	19.90	0.00	34.60	19.30	19.90	29.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 3:45 PM	80.00	3.50	47.70	21.60	0.00	47.70	37.60	21.60	26.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 4:00 PM	36.00	5.00	53.70	38.80	0.00	53.70	29.50	38.80	35.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 4:15 PM	60.00	4.80	61.40	36.90	0.00	61.40	35.20	36.90	38.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 4:30 PM	91.00	2.50	39.00	26.30	0.00	38.20	39.00	21.90	26.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 4:45 PM	70.00	4.80	51.50	30.50	0.00	51.50	52.90	30.50	39.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 5:00 PM	61.00	2.80	52.30	49.80	0.00	52.30	40.90	49.80	41.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 5:15 PM	88.00	3.60	52.50	60.90	8.40	52.50	46.90	60.90	38.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 5:30 PM	70.00	5.00	69.60	42.90	0.00	69.60	44.60	42.90	71.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 5:45 PM	90.00	3.90	37.70	30.20	0.00	54.40	37.70	61.80	30.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 6:00 PM	87.00	4.40	82.40	55.30	0.00	82.40	64.50	55.30	69.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 6:15 PM	79.00	4.50	25.30	27.30	2.00	25.30	34.60	27.30	34.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 6:30 PM	81.00	4.60	41.80	27.80	0.00	41.80	34.10	27.80	36.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 6:45 PM	89.00	4.10	39.80	15.60	0.00	39.80	20.50	15.60	36.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 7:00 PM	81.00	4.30	0.00	16.40	0.00	0.00	27.30	16.40	46.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 7:15 PM	91.00	4.30	30.70	66.30	35.60	17.10	30.70	21.00	66.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 7:30 PM	71.00	4.80	64.20	19.10	0.00	64.20	29.20	19.10	77.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 7:45 PM	85.00	3.70	42.80	20.00	0.00	42.80	47.90	20.00	48.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 8:00 PM	72.00	3.00	45.20	17.40	0.00	45.20	36.90	17.40	43.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 8:15 PM	68.00	2.60	42.00	11.00	0.00	42.00	39.80	11.00	33.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 8:30 PM	58.00	2.60	19.90	14.60	0.00	19.90	40.10	14.60	42.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 8:45 PM	101.00	1.60	37.00	31.30	0.00	12.30	37.00	14.70	31.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 9:00 PM	135.00	2.70	60.20	16.50	0.00	11.60	60.20	21.00	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 9:15 PM	182.00	0.70	12.20	0.00	0.00	0.00	52.30	12.20	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 9:30 PM	156.00	1.50	34.60	26.20	0.00	14.70	34.60	7.60	26.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 9:45 PM	188.00	0.80	9.90	15.40	5.50	15.40	34.10	9.90	27.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 10:00 PM	211.00	0.80	29.00	17.10	0.00	17.10	50.00	29.00	19.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 10:15 PM	246.00	0.90	13.20	37.50	24.30	37.50	26.00	13.20	44.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/9/13 10:30 PM	205.00	0.90	15.10	30.70	15.60	30.70</												



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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		
10/12/13 8:45 AM	199.00	5.60	25.50	35.10	9.60	35.10	26.90	25.50	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 9:00 AM	158.00	4.70	27.70	22.20	0.00	35.80	27.70	27.50	22.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 9:15 AM	187.00	4.20	27.60	32.20	4.60	32.20	28.30	27.60	22.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 9:30 AM	171.00	5.30	26.50	20.90	0.00	31.80	26.50	25.30	20.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 9:45 AM	168.00	5.10	28.10	18.10	0.00	35.80	28.10	24.60	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 10:00 AM	186.00	4.10	24.60	25.50	0.90	25.50	25.60	24.60	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 10:15 AM	188.00	6.80	22.00	25.50	3.50	25.50	23.80	22.00	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 10:30 AM	213.00	5.30	18.70	23.50	4.80	23.50	24.60	18.70	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 10:45 AM	173.00	7.60	25.60	17.00	0.00	23.20	25.60	17.10	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 11:00 AM	169.00	6.90	22.00	16.60	0.00	35.80	22.00	15.30	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 11:15 AM	191.00	3.80	14.30	21.60	7.30	21.60	21.00	14.30	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 11:30 AM	184.00	3.60	14.40	22.30	7.90	22.30	20.90	14.40	15.20	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.00	
10/12/13 11:45 AM	199.00	5.90	14.60	20.30	5.70	20.30	20.90	14.60	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 12:00 PM	216.00	8.40	15.80	22.20	6.40	22.20	22.10	15.80	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 12:15 PM	206.00	5.60	16.80	28.20	11.40	28.20	22.90	16.80	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 12:30 PM	211.00	6.90	17.00	23.10	6.10	23.10	21.80	17.00	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 12:45 PM	214.00	6.90	20.20	23.10	2.90	23.10	21.10	20.20	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 1:00 PM	213.00	6.80	20.10	23.90	3.80	23.90	22.80	20.10	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 1:15 PM	234.00	7.60	31.30	26.20	0.00	26.20	24.00	31.30	26.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 1:30 PM	189.00	4.20	27.40	26.80	0.00	26.80	24.60	27.40	23.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 1:45 PM	243.00	7.10	26.80	29.40	2.60	29.40	24.60	26.80	25.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 2:00 PM	243.00	7.70	32.10	31.20	0.00	31.20	28.10	32.10	28.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 2:15 PM	262.00	5.20	34.20	30.60	0.00	30.60	28.40	34.20	29.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 2:30 PM	211.00	7.30	27.00	30.70	3.70	30.70	29.00	27.00	27.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 2:45 PM	235.00	3.90	25.70	30.90	5.20	30.90	30.70	25.70	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 3:00 PM	220.00	6.50	26.30	31.60	5.30	31.60	31.30	26.30	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 3:15 PM	227.00	5.10	26.30	31.10	4.80	31.10	35.70	26.30	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 3:30 PM	217.00	4.90	29.50	35.00	5.50	35.00	36.20	29.50	26.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 3:45 PM	240.00	6.00	29.30	32.60	3.30	32.60	35.50	29.30	26.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 4:00 PM	249.00	4.40	30.10	31.60	1.50	31.60	41.10	30.10	27.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 4:15 PM	212.00	2.00	29.10	30.60	1.50	30.60	39.70	29.10	28.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 4:30 PM	226.00	3.00	39.10	31.40	0.00	31.40	42.00	39.10	27.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 4:45 PM	219.00	2.50	31.90	39.50	7.60	39.50	47.30	31.90	33.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 5:00 PM	210.00	2.10	31.70	31.80	0.10	31.80	49.90	31.70	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 5:15 PM	243.00	2.00	28.50	31.20	2.70	31.20	58.90	28.50	27.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 5:30 PM	268.00	3.10	29.20	31.90	2.70	31.90	64.00	29.20	29.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 5:45 PM	294.00	4.40	29.70	62.50	32.80	31.10	62.50	28.80	29.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 6:00 PM	281.00	3.90	28.40	71.30	42.90	31.60	71.30	27.30	28.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 6:15 PM	276.00	2.90	26.90	69.70	42.80	32.00	69.70	27.60	26.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 6:30 PM	271.00	2.20	29.60	66.10	36.50	29.90	66.10	26.10	29.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 6:45 PM	286.00	4.20	32.90	54.70	21.80	31.50	54.70	25.70	32.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 7:00 PM	278.00	2.20	33.40	49.50	16.10	32.50	49.50	26.40	33.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 7:15 PM	266.00	2.70	26.50	33.20	6.70	33.20	50.50	26.50	33.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 7:30 PM	252.00	2.00	26.20	34.10	7.90	34.10	48.70	26.20	35.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 7:45 PM	245.00	1.10	26.80	34.90	8.10	34.90	47.10	26.80	36.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 8:00 PM	268.00	1.90	27.20	33.10	5.90	33.10	44.20	27.20	34.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 8:15 PM	298.00	2.60	33.40	40.90	7.50	32.40	40.90	26.10	33.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 8:30 PM	271.00	2.60	34.60	36.80	2.20	32.80	36.80	26.20	34.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 8:45 PM	289.00	2.40	34.00	35.70	1.70	34.20	35.70	26.30	34.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 9:00 PM	307.00	2.30	31.10	37.20	6.10	31.60	37.20	30.30	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 9:15 PM	298.00	2.90	26.40	35.30	8.90	27.90	35.30	30.30	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 9:30 PM	296.00	2.20	23.00	23.70	0.70	22.30	23.70	19.20	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 9:45 PM	306.00	1.70	19.30	21.70	2.40	19.50	21.70	18.30	19.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 10:00 PM	329.00	2.60	17.40	19.80	2.40	18.20	19.80	14.80	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 10:15 PM	325.00	2.40	17.50	17.00	0.00	16.20	17.00	12.80	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 10:30 PM	332.00	2.00	17.10	16.80	0.00	17.10	16.80	13.20	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 10:45 PM	325.00	1.50	16.80	15.50	0.00	14.60	15.50	13.50	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 11:00 PM	305.00	1.70	15.20	14.90	0.00	13.20	14.90	12.50	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 11:15 PM	320.00	1.70	14.70	14.20	0.00	12.90	14.20	12.40	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 11:30 PM	296.00	1.20	14.20	13.70	0.00	15.10	13.70	11.80	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/12/13 11:45 PM	308.00	1.50	15.70	14.40	0.00	15.90	14.40	12.40	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/13/13 12:00 AM	307.00	1.70	15.70	14.40	0.00	15.90	14.40	12.40	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/13/13 12:15 AM	305.00	2.40	16.90	15.60	0.00	16.30	15.60	23.00	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/13/13 12:30 AM	293.00	2.30	18.50	19.80	1.30	18.90	19.80	21.60	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10/13/13 12:45 AM	309.00	1.70	20.40	20.30	0.00	18.80	20.30	18.70	20.40	0.								



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

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	
10/13/13 9:45 AM	11.00	6.80	34.40	20.40	0.00	34.40	19.30	20.40	22.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 10:00 AM	358.00	5.10	20.20	18.50	0.00	23.20	18.50	18.70	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 10:15 AM	11.00	6.00	18.10	12.30	0.00	18.10	13.40	12.30	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 10:30 AM	11.00	6.20	13.80	10.10	0.00	13.80	10.00	10.10	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 10:45 AM	25.00	4.70	9.60	4.00	0.00	9.60	7.90	4.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 11:00 AM	11.00	3.90	9.90	3.90	0.00	9.90	7.40	3.90	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 11:15 AM	24.00	4.10	7.70	6.00	0.00	7.70	7.40	6.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 11:30 AM	19.00	4.30	7.80	3.50	0.00	7.80	7.00	3.50	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 11:45 AM	14.00	4.40	9.30	5.00	0.00	9.30	8.20	5.00	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 12:00 PM	3.00	4.50	11.30	5.70	0.00	11.30	8.30	5.70	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 12:15 PM	1.00	5.90	10.10	4.20	0.00	10.10	7.80	4.20	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 12:30 PM	3.00	5.10	11.00	5.20	0.00	11.00	8.00	5.20	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 12:45 PM	17.00	6.10	10.50	3.90	0.00	10.50	7.90	3.90	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 1:00 PM	19.00	6.80	11.50	4.40	0.00	11.50	7.90	4.40	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 1:15 PM	22.00	4.20	8.40	3.00	0.00	8.40	8.30	3.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 1:30 PM	9.00	5.80	8.20	3.00	0.00	8.20	7.00	3.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 1:45 PM	27.00	5.80	7.60	2.30	0.00	7.60	7.00	2.30	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 2:00 PM	29.00	5.90	9.10	2.90	0.00	9.10	6.60	2.90	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 2:15 PM	42.00	6.00	5.60	1.50	0.00	5.60	6.50	1.50	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 2:30 PM	30.00	6.30	5.30	0.80	0.00	5.30	6.00	0.80	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 2:45 PM	63.00	7.30	5.70	1.10	0.00	5.70	5.80	1.10	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 3:00 PM	61.00	5.90	7.20	1.60	0.00	7.20	6.50	1.60	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 3:15 PM	55.00	6.40	9.00	2.50	0.00	9.00	6.20	2.50	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 3:30 PM	48.00	5.70	7.50	13.60	6.10	7.50	6.20	13.60	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 3:45 PM	66.00	6.10	5.50	2.00	0.00	5.50	6.10	2.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 4:00 PM	47.00	4.80	6.10	8.80	2.70	6.10	5.70	8.80	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 4:15 PM	56.00	6.10	6.10	6.90	0.80	6.10	5.50	6.90	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 4:30 PM	56.00	4.20	4.90	2.20	0.00	4.90	5.90	2.20	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 4:45 PM	66.00	4.30	5.60	0.90	0.00	5.60	5.30	0.90	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 5:00 PM	58.00	6.60	4.80	1.40	0.00	4.80	5.50	1.40	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 5:15 PM	64.00	5.60	6.00	1.70	0.00	6.00	5.60	1.70	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 5:30 PM	48.00	4.80	6.30	2.60	0.00	6.30	5.90	2.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 5:45 PM	48.00	5.00	6.10	2.20	0.00	6.10	6.20	2.20	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 6:00 PM	34.00	3.70	9.60	1.90	0.00	9.60	6.60	1.90	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 6:15 PM	61.00	3.00	6.80	2.50	0.00	6.80	6.00	2.50	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 6:30 PM	52.00	2.80	5.90	3.70	0.00	5.90	7.60	3.70	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 6:45 PM	70.00	4.30	7.90	3.50	0.00	7.90	6.10	3.50	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 7:00 PM	68.00	3.70	7.10	1.90	0.00	7.10	7.20	1.90	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 7:15 PM	52.00	3.10	8.70	4.20	0.00	8.70	8.60	4.20	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 7:30 PM	47.00	3.80	9.30	4.50	0.00	9.30	8.50	4.50	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 7:45 PM	69.00	2.80	7.80	3.10	0.00	7.80	8.60	3.10	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 8:00 PM	45.00	3.40	11.20	6.20	0.00	11.20	8.50	6.20	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 8:15 PM	53.00	5.10	13.10	10.70	0.00	13.10	10.80	10.70	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 8:30 PM	67.00	3.00	11.50	4.30	0.00	11.50	6.90	4.30	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 8:45 PM	47.00	4.70	11.10	5.90	0.00	11.10	8.30	5.90	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 9:00 PM	60.00	3.90	11.70	5.70	0.00	11.70	7.70	5.70	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 9:15 PM	39.00	3.50	10.10	4.80	0.00	10.10	7.10	4.80	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 9:30 PM	53.00	3.90	11.10	6.90	0.00	11.10	7.80	6.90	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 9:45 PM	64.00	4.50	10.80	5.20	0.00	10.80	7.90	5.20	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 10:00 PM	48.00	3.90	11.20	7.00	0.00	11.20	6.80	7.00	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 10:15 PM	41.00	3.30	12.30	7.20	0.00	12.30	6.30	7.20	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 10:30 PM	66.00	4.90	11.50	6.80	0.00	11.50	6.80	6.80	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 10:45 PM	32.00	3.40	13.20	6.60	0.00	13.20	6.20	6.60	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 11:00 PM	54.00	2.80	10.10	6.80	0.00	10.10	6.90	6.80	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 11:15 PM	64.00	2.80	8.90	4.40	0.00	8.90	5.90	4.40	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 11:30 PM	233.00	1.70	4.70	8.50	3.80	8.50	5.80	4.70	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/13/13 11:45 AM	221.00	1.50	4.50	8.20	3.70	8.20	5.80	4.50	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 12:00 AM	239.00	2.10	3.60	6.00	2.40	6.00	5.40	3.60	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 12:15 AM	164.00	1.70	4.90	6.00	1.10	6.00	4.90	16.40	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 12:30 AM	248.00	1.50	23.10	8.10	0.00	8.10	9.30	23.10	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 12:45 AM	235.00	2.00	28.50	6.30	0.00	6.30	14.00	28.50	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 1:00 AM	223.00	0.90	42.60	45.40	2.80	45.40	15.00	42.60	25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 1:15 AM	231.00	1.70	42.60	45.40	2.80	45.40	15.50	42.60	26.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 1:30 AM	279.00	0.90	30.70	14.90	0.00	30.30	14.90	29.20	30.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 1:45 AM	227.00	1.20	30.40	23.20	0.00	23.20	16.90	30.40	31.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 2:00 AM	317.00	0.50	27.80	16.90	0.00	21.00	16.90	28.20	27.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 2:15 AM	263.00	2.10	27.10	22.00	0.00												



Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

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
10/14/13 10:30 AM	80.00	4.90	7.10	6.80	0.00	7.10	16.90	6.80	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 10:45 AM	81.00	3.90	16.40	15.50	0.00	16.40	23.50	15.50	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 11:00 AM	107.00	3.90	20.60	12.90	0.00	13.70	20.60	13.80	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 11:15 AM	126.00	5.10	27.60	14.90	0.00	19.40	27.60	14.90	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 11:30 AM	191.00	3.70	13.70	15.90	2.20	15.90	27.30	13.70	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 11:45 AM	93.00	3.40	14.80	10.20	0.00	11.90	14.80	8.50	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 12:00 PM	54.00	3.70	10.50	6.40	0.00	10.50	16.60	6.40	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 12:15 PM	62.00	3.10	10.20	5.50	0.00	10.20	15.00	5.50	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 12:30 PM	95.00	2.70	15.00	9.10	0.00	10.30	15.00	5.10	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 12:45 PM	65.00	3.90	7.90	3.40	0.00	7.90	12.00	3.40	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 1:00 PM	79.00	2.30	11.20	6.70	0.00	11.20	22.30	6.70	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 1:15 PM	60.00	3.90	9.50	2.40	0.00	9.50	12.00	2.40	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 1:30 PM	108.00	2.60	18.60	7.70	0.00	11.80	18.60	3.40	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 1:45 PM	79.00	2.60	9.40	4.70	0.00	9.40	14.00	4.70	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 2:00 PM	80.00	5.90	10.40	4.90	0.00	10.40	18.10	4.90	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 2:15 PM	84.00	3.90	12.80	6.20	0.00	12.80	25.90	6.20	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 2:30 PM	29.00	7.20	21.30	6.70	0.00	21.30	35.40	6.70	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 2:45 PM	24.00	6.40	17.50	7.40	0.00	17.50	20.00	7.40	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 3:00 PM	42.00	7.20	15.00	15.10	0.10	15.00	28.60	15.10	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 3:15 PM	62.00	6.20	18.80	16.30	0.00	18.80	28.50	16.30	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 3:30 PM	61.00	6.50	18.90	15.50	0.00	18.90	19.20	15.50	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 3:45 PM	68.00	4.90	16.60	15.70	0.00	16.60	24.60	15.70	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 4:00 PM	38.00	5.20	15.70	14.50	0.00	15.70	17.80	14.50	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 4:15 PM	61.00	4.10	19.50	15.30	0.00	19.50	29.10	15.30	30.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 4:30 PM	91.00	5.30	35.90	23.30	0.00	15.90	35.90	14.70	23.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 4:45 PM	77.00	5.00	14.50	24.00	9.50	14.50	34.30	24.00	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 5:00 PM	76.00	5.70	37.70	32.90	0.00	37.70	38.60	32.90	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 5:15 PM	66.00	6.70	12.50	32.00	19.50	12.50	31.90	32.00	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 5:30 PM	73.00	6.30	22.20	27.40	5.20	22.20	35.00	27.40	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 5:45 PM	65.00	5.30	36.90	29.80	0.00	36.90	27.20	29.80	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 6:00 PM	51.00	4.20	54.60	16.40	0.00	54.60	16.10	16.40	34.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 6:15 PM	62.00	4.50	32.60	16.30	0.00	32.60	21.40	16.30	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 6:30 PM	56.00	5.00	22.80	11.10	0.00	22.80	16.50	11.10	23.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 6:45 PM	66.00	5.90	19.30	11.30	0.00	19.30	16.80	11.30	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 7:00 PM	73.00	3.50	15.70	9.20	0.00	15.70	17.10	9.20	20.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 7:15 PM	86.00	4.20	15.90	12.90	0.00	15.90	17.10	12.90	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 7:30 PM	88.00	4.40	12.50	12.40	0.00	12.50	17.10	12.40	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 7:45 PM	86.00	3.60	15.30	12.30	0.00	15.30	23.60	12.30	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 8:00 PM	79.00	4.70	10.90	7.90	0.00	10.90	29.90	7.90	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 8:15 PM	77.00	4.50	12.40	8.00	0.00	12.40	22.90	8.00	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 8:30 PM	111.00	3.10	22.30	11.90	0.00	10.00	22.30	7.00	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 8:45 PM	122.00	3.90	22.40	10.10	0.00	11.00	22.40	7.80	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 9:00 PM	118.00	2.50	24.50	9.70	0.00	9.50	24.50	13.10	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 9:15 PM	144.00	3.30	46.10	6.80	0.00	8.80	46.10	16.10	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 9:30 PM	136.00	5.00	45.60	9.00	0.00	11.00	45.60	23.50	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 9:45 PM	149.00	3.00	25.40	10.50	0.00	13.80	25.40	12.90	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 10:00 PM	126.00	4.80	31.20	27.70	0.00	37.10	31.20	27.70	27.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 10:15 PM	128.00	3.90	60.00	25.40	0.00	28.80	60.00	19.20	25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 10:30 PM	126.00	3.10	21.80	19.10	0.00	23.70	21.80	13.60	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 10:45 PM	135.00	3.80	21.90	21.80	0.00	26.00	21.90	14.20	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 11:00 PM	133.00	4.20	21.20	26.10	4.90	25.60	21.20	16.60	26.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 11:15 PM	138.00	4.30	21.90	28.50	6.60	28.50	21.90	18.60	28.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 11:30 PM	144.00	3.50	32.50	25.80	0.00	35.20	32.50	21.30	25.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/13 11:45 PM	131.00	3.70	22.20	31.80	9.60	27.40	22.20	20.80	31.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 12:00 AM	137.00	3.20	22.30	37.60	15.30	38.90	22.30	21.40	37.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 12:15 AM	145.00	2.90	22.10	51.60	29.50	61.20	22.10	21.10	51.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 12:30 AM	134.00	2.80	21.80	34.70	12.90	33.70	21.80	21.90	34.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 12:45 AM	148.00	2.30	22.00	37.30	15.30	32.80	22.00	22.20	37.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 1:00 AM	169.00	2.30	21.10	34.20	13.10	36.10	21.10	23.30	34.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 1:15 AM	161.00	3.00	21.00	33.90	12.90	38.80	21.00	23.30	33.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 1:30 AM	159.00	3.00	20.60	28.60	8.00	36.80	20.60	22.80	28.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 1:45 AM	155.00	4.40	20.60	34.30	13.70	37.60	20.60	22.70	34.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 2:00 AM	177.00	4.70	18.20	31.00	12.80	31.70	18.20	19.60	31.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00
10/15/13 2:15 AM	158.00	6.00	17.50	24.30	6.80	36.90	17.50	19.00	24.30	0.00	0.00	0.00	3.20	0.00	0.00	0.00
10/15/13 2:30 AM	153.00	3.80	16.80	18.10	1.30	32.10	16.80	19.30	18.10	0.00	0.00	0.00	3.10	0.00	0.00	0.00
10/15/13 2:45 AM	145.00	5.50	16.50	13.30	0.00	30.20	16.50	19.20	13.30	0.00	0.00	0.00	3.10	0.00	0.00	0.00
10/15/13 3:00 AM	175.00	3.90	17.00	47679.80	47662.80	20.70	17.00	22.70	47679.80	0.00	0.00	0.00	2.80	0.00	0.00	0.00
10/15/13 3:15 AM	159.00	5.20	17.10	47681.40	47664.30	16.70	17.10	16.90	47681.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/13 3:30 AM	163.00	3.80	15.40	47681.80												



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

Table with columns: Reading Time (EST), Wind Direction, Wind Speed, Particulates (µg/m³), and Naphthalene (µg/m³). Rows include data for various times from 10/15/13 11:15 AM to 10/16/13 11:45 AM.



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
10/16/13 12:00 PM	289.00	6.10	10.30	9.10	0.00	0.00	9.10	9.50	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 12:15 PM	285.00	4.10	12.10	8.60	0.00	11.00	8.60	10.10	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 12:30 PM	268.00	3.10	11.80	12.60	0.80	12.60	9.70	11.80	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 12:45 PM	265.00	4.90	12.70	12.90	0.20	12.90	10.20	12.70	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 1:00 PM	265.00	6.50	12.60	12.80	0.20	12.80	9.30	12.60	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 1:15 PM	258.00	7.50	12.60	11.30	0.00	11.30	9.20	12.60	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 1:30 PM	303.00	4.60	15.00	8.60	0.00	10.60	8.60	12.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 1:45 PM	247.00	5.20	9.80	7.90	0.00	7.90	7.50	9.80	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 2:00 PM	273.00	4.90	11.60	6.60	0.00	8.20	6.60	9.20	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 2:15 PM	262.00	4.10	9.30	9.90	0.60	9.90	6.50	9.30	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 2:30 PM	253.00	6.60	10.00	10.60	0.60	10.60	6.90	10.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 2:45 PM	273.00	6.60	9.10	7.10	0.00	9.60	7.10	12.00	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 3:00 PM	271.00	4.50	11.20	8.80	0.00	10.70	8.80	12.80	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 3:15 PM	274.00	5.80	9.30	7.70	0.00	11.50	7.70	9.40	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 3:30 PM	254.00	5.40	10.60	9.90	0.00	9.90	7.30	10.60	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 3:45 PM	265.00	6.70	12.20	10.70	0.00	10.70	7.90	12.20	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 4:00 PM	283.00	3.80	14.80	9.10	0.00	13.70	9.10	13.50	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 4:15 PM	279.00	5.40	19.10	8.40	0.00	11.30	8.40	14.30	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 4:30 PM	261.00	5.60	14.80	11.40	0.00	11.40	9.30	14.80	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 4:45 PM	265.00	3.40	16.50	12.80	0.00	12.80	10.80	16.50	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 5:00 PM	264.00	4.30	17.60	12.80	0.00	12.80	12.20	17.60	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 5:15 PM	288.00	4.40	17.00	9.50	0.00	11.00	9.50	14.60	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 5:30 PM	256.00	5.10	15.30	12.40	0.00	12.40	9.70	15.30	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 5:45 PM	265.00	3.80	16.00	12.20	0.00	12.20	9.80	16.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 6:00 PM	273.00	3.90	16.40	10.00	0.00	12.30	10.00	15.20	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 6:15 PM	256.00	5.20	15.50	11.90	0.00	11.90	9.60	15.50	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 6:30 PM	271.00	3.50	13.70	9.80	0.00	13.20	9.80	14.30	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 6:45 PM	284.00	2.70	13.20	10.00	0.00	13.10	10.00	15.30	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 7:00 PM	260.00	2.80	15.30	12.70	0.00	12.70	9.70	15.30	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 7:15 PM	267.00	5.00	16.90	12.90	0.00	12.90	11.00	16.90	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 7:30 PM	278.00	5.20	15.00	12.50	0.00	13.10	12.50	17.70	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 7:45 PM	257.00	6.10	17.70	16.00	0.00	16.00	12.60	17.70	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 8:00 PM	261.00	5.30	18.20	16.80	0.00	16.80	12.90	18.20	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 8:15 PM	283.00	3.20	14.60	13.10	0.00	17.40	13.10	18.20	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 8:30 PM	285.00	2.30	12.40	12.50	0.10	16.00	12.50	16.60	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 8:45 PM	274.00	4.10	12.00	13.20	1.20	15.80	13.20	16.90	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 9:00 PM	268.00	4.30	16.60	15.60	0.00	15.60	12.80	16.60	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 9:15 PM	278.00	2.50	12.30	11.80	0.00	14.90	11.80	15.10	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 9:30 PM	288.00	2.50	11.70	11.10	0.00	14.50	11.10	13.50	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 9:45 PM	241.00	2.70	13.20	14.70	1.50	14.70	11.30	13.20	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 10:00 PM	259.00	4.40	14.10	14.30	0.20	14.30	11.40	14.10	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 10:15 PM	269.00	3.20	13.40	13.00	0.00	13.00	10.80	13.40	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 10:30 PM	267.00	3.90	12.80	12.40	0.00	12.40	11.10	12.80	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 10:45 PM	253.00	3.60	14.00	12.60	0.00	12.60	11.40	14.00	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 11:00 PM	264.00	2.90	15.20	12.90	0.00	12.90	11.70	15.20	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 11:15 PM	254.00	3.30	16.30	13.40	0.00	13.40	12.60	16.30	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 11:30 PM	266.00	2.80	17.40	14.60	0.00	14.60	13.40	17.40	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/16/13 11:45 PM	276.00	3.20	10.50	13.40	2.90	13.70	13.40	15.10	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 12:00 AM	278.00	2.00	9.00	11.70	2.70	13.30	11.70	13.40	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 12:15 AM	274.00	4.00	8.60	10.90	2.30	12.30	10.90	12.30	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 12:30 AM	277.00	2.60	8.80	11.00	2.20	12.30	11.00	12.50	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 12:45 AM	235.00	2.40	12.10	11.60	0.00	11.60	10.50	12.10	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 1:00 AM	265.00	2.10	10.60	10.70	0.10	10.70	9.70	10.60	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 1:15 AM	247.00	3.20	11.30	10.80	0.00	10.80	10.40	11.30	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 1:30 AM	244.00	3.90	12.40	10.70	0.00	10.70	10.80	12.40	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 1:45 AM	241.00	2.40	12.20	11.40	0.00	11.40	10.90	12.20	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 2:00 AM	243.00	2.40	10.70	9.40	0.00	9.40	9.60	10.70	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 2:15 AM	261.00	2.80	10.20	8.50	0.00	8.50	9.50	10.20	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 2:30 AM	248.00	2.80	10.30	8.80	0.00	8.80	9.40	10.30	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 2:45 AM	261.00	2.80	9.60	8.40	0.00	8.40	10.20	9.60	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 3:00 AM	249.00	4.80	10.00	8.20	0.00	8.20	11.40	10.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 3:15 AM	254.00	3.70	11.30	10.30	0.00	10.30	13.30	11.30	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 3:30 AM	247.00	2.00	10.60	9.90	0.00	9.90	13.10	10.60	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 3:45 AM	254.00	2.90	10.10	10.00	0.00	10.00	13.60	10.10	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 4:00 AM	277.00	3.70	8.60	13.90	5.30	9.70	13.90	8.10	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 4:15 AM	282.00	3.90	8.50	13.10	4.60	9.40	13.10	6.90	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 4:30 AM	268.00	3.30	5.90	8.70	2.80	8.70	11.90	5.90	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 4:45 AM	288.00	2.40	4.70	11.50	6.80	8.40	11.50	4.90	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/13 5:00 AM	281.00	2.50	4.60	9.80	5.20	7.70	9.80	4.30	4.6							



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

Table with columns: Reading Time (EST), Wind Direction, Wind Speed, Particulates (µg/m³), and Naphthalene (µg/m³). The table contains 48 rows of monitoring data.



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		
10/18/13 1:30 PM	255.00	5.00	41.30	18.40	0.00	18.40	31.00	41.30	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 1:45 PM	259.00	4.90	34.90	13.00	0.00	13.00	24.20	34.90	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 2:00 PM	240.00	4.10	21.30	8.40	0.00	8.40	17.00	21.30	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 2:15 PM	260.00	5.60	12.50	6.80	0.00	6.80	12.30	12.50	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 2:30 PM	256.00	4.20	8.20	6.60	0.00	6.60	8.70	8.20	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 2:45 PM	272.00	6.40	5.90	9.40	3.50	5.70	9.40	8.10	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 3:00 PM	252.00	4.80	6.20	5.20	0.00	5.20	7.20	6.20	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 3:15 PM	271.00	5.40	9.00	7.20	0.00	4.20	7.20	5.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 3:30 PM	267.00	4.50	7.80	5.90	0.00	5.90	7.80	7.80	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 3:45 PM	290.00	5.30	6.70	7.10	0.40	4.90	7.10	6.40	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 4:00 PM	291.00	3.80	4.70	5.70	1.00	3.80	5.70	3.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 4:15 PM	262.00	5.20	3.40	4.20	0.80	4.20	5.50	3.40	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 4:30 PM	256.00	5.40	4.80	5.40	0.60	5.40	7.00	4.80	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 4:45 PM	274.00	5.00	6.80	7.30	0.50	5.80	7.30	5.20	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 5:00 PM	270.00	4.20	6.70	7.30	0.60	5.60	7.30	6.00	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 5:15 PM	263.00	3.30	4.80	5.10	0.30	5.10	6.20	4.80	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 5:30 PM	270.00	3.70	6.00	5.80	0.00	4.50	5.80	3.60	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 5:45 PM	253.00	2.40	2.50	3.30	0.80	3.30	4.60	2.50	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 6:00 PM	258.00	3.70	1.70	3.40	1.70	3.40	4.30	1.70	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 6:15 PM	262.00	3.30	1.80	3.30	1.50	3.30	4.30	1.80	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 6:30 PM	252.00	3.10	2.50	3.40	0.90	3.40	4.70	2.50	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 6:45 PM	258.00	2.20	1.00	2.40	1.40	2.40	3.60	1.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 7:00 PM	278.00	3.00	3.30	3.50	0.20	2.50	3.50	1.10	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 7:15 PM	273.00	2.80	3.20	3.70	0.50	2.80	3.70	0.50	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 7:30 PM	282.00	3.40	3.10	3.70	0.60	2.30	3.70	0.90	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 7:45 PM	278.00	2.00	3.70	3.80	0.10	2.20	3.80	1.00	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 8:00 PM	259.00	2.70	1.20	2.50	1.30	2.50	4.20	1.20	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 8:15 PM	280.00	2.80	4.10	4.50	0.00	2.30	4.00	1.20	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 8:30 PM	264.00	3.10	1.00	2.30	1.30	2.30	3.90	1.00	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 8:45 PM	273.00	3.10	2.90	3.70	0.80	2.00	3.70	0.70	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 9:00 PM	275.00	2.10	3.10	4.20	1.10	2.40	4.20	1.10	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 9:15 PM	274.00	1.60	8.20	5.30	0.00	2.60	5.30	0.90	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 9:30 PM	267.00	2.70	0.80	2.80	2.00	2.80	5.50	0.80	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 9:45 PM	261.00	1.90	0.70	2.90	2.20	2.90	5.40	0.70	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 10:00 PM	252.00	3.10	0.80	3.10	2.30	3.10	5.50	0.80	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 10:15 PM	237.00	2.80	1.20	3.10	1.90	3.10	5.90	1.20	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 10:30 PM	253.00	2.10	1.40	0.00	0.00	0.00	5.30	1.40	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 10:45 PM	0.00	0.00	0.00	0.00	0.00	3.40	5.60	1.60	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 11:00 PM	260.00	2.10	2.20	4.10	1.90	4.10	6.40	2.20	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 11:15 PM	278.00	2.70	5.80	6.60	0.80	4.40	6.60	2.60	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 11:30 PM	266.00	2.40	2.20	5.00	2.80	5.00	6.10	2.20	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/18/13 11:45 PM	252.00	2.50	2.50	4.80	2.30	4.80	6.10	2.50	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 12:00 AM	245.00	2.80	2.80	5.10	2.30	5.10	6.30	2.80	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 12:15 AM	262.00	2.40	2.80	5.30	2.50	5.30	6.10	2.80	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 12:30 AM	267.00	3.20	3.80	5.70	1.90	5.70	6.40	3.80	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 12:45 AM	265.00	2.80	3.80	5.80	2.00	5.80	6.60	3.80	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 1:00 AM	271.00	2.70	6.40	6.10	0.00	5.70	6.10	3.30	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 1:15 AM	253.00	2.30	3.50	6.20	2.70	6.20	6.40	3.50	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 1:30 AM	224.00	2.30	3.60	6.20	2.60	6.20	6.10	3.60	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 1:45 AM	276.00	1.90	6.80	6.40	0.00	6.30	6.40	4.00	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 2:00 AM	255.00	1.90	4.20	6.80	2.60	6.80	6.70	4.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 2:15 AM	213.00	1.40	4.70	7.10	2.40	7.10	6.80	4.70	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 2:30 AM	254.00	1.90	4.60	7.40	2.80	7.40	6.80	4.60	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 2:45 AM	248.00	1.60	4.40	7.50	3.10	7.50	7.20	4.40	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 3:00 AM	238.00	3.60	5.60	8.20	2.60	8.20	7.40	5.60	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 3:15 AM	240.00	2.50	6.50	7.90	1.40	7.90	7.90	6.50	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 3:30 AM	245.00	2.80	6.20	8.00	1.80	8.00	7.80	6.20	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 3:45 AM	251.00	2.80	6.30	9.20	2.90	9.20	8.00	6.30	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 4:00 AM	244.00	2.80	6.90	9.20	2.30	9.20	8.30	6.90	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 4:15 AM	255.00	2.40	6.60	9.60	3.00	9.60	8.60	6.60	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 4:30 AM	236.00	2.40	6.90	9.30	2.40	9.30	8.50	6.90	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 4:45 AM	240.00	2.00	7.60	9.70	2.10	9.70	8.70	7.60	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 5:00 AM	234.00	2.10	7.90	10.00	2.10	10.00	8.50	7.90	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 5:15 AM	223.00	3.00	7.20	10.10	2.90	10.10	8.40	7.20	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 5:30 AM	219.00	3.80	7.40	9.90	2.50	9.90	8.50	7.40	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 5:45 AM	238.00	2.40	7.60	10.70	3.10	10.70	8.70	7.60	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 6:00 AM	233.00	2.40	8.60	11.30	2.70	11.30	9.50	8.60	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 6:15 AM	224.00	2.50	9.90	12.20	2.30	12.20	9.60	9.90	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 6:30 AM	241.00	3.20	10.00	11.10	1.10	11.10	9.70	10.00	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 6:45 AM	239.00	3.20	10.70	10.80	0.10	10.80	10.20	10.70	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
10/19/13 7:00 AM	243.00	3.7																



US Army Corps
of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

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
10/19/13 2:15 PM	239.00	7.00	1.10	5.00	3.90	5.00	8.00	1.10	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 2:30 PM	288.00	6.70	5.80	7.90	2.10	4.40	7.90	0.50	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 2:45 PM	266.00	6.30	2.10	6.80	4.70	6.80	9.60	2.10	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 3:00 PM	246.00	5.20	3.20	7.20	4.00	7.20	10.80	3.20	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 3:15 PM	264.00	5.10	2.70	5.50	2.80	5.50	9.20	2.70	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 3:30 PM	276.00	7.70	7.80	9.20	1.40	7.40	9.20	3.00	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 3:45 PM	290.00	5.30	7.00	8.80	1.80	4.80	8.80	1.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 4:00 PM	240.00	5.10	2.10	4.70	2.60	4.70	8.60	2.10	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 4:15 PM	259.00	4.40	1.20	5.40	4.20	5.40	8.20	1.20	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 4:30 PM	282.00	4.50	6.70	8.80	2.10	5.50	8.80	1.20	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 4:45 PM	269.00	3.90	0.30	4.40	4.10	4.40	8.30	0.30	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 5:00 PM	230.00	4.10	0.90	4.60	3.70	4.60	8.10	0.90	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 5:15 PM	248.00	5.50	0.10	4.40	4.30	4.40	8.70	0.10	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 5:30 PM	230.00	5.90	0.50	4.50	4.00	4.50	8.30	0.50	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 5:45 PM	240.00	3.30	0.00	4.60	4.60	4.60	7.90	0.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 6:00 PM	247.00	4.60	0.40	4.70	4.30	4.70	8.00	0.40	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 6:15 PM	276.00	8.90	6.60	8.70	2.10	5.60	8.70	0.90	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 6:30 PM	280.00	6.50	7.20	9.30	2.10	5.30	9.30	0.70	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 6:45 PM	285.00	3.00	7.10	9.00	1.90	5.70	9.00	0.30	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 7:00 PM	277.00	3.80	7.00	9.10	2.10	5.80	9.10	1.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 7:15 PM	278.00	5.60	7.80	9.50	1.70	6.00	9.50	1.80	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 7:30 PM	280.00	5.20	8.60	10.60	2.00	6.80	10.60	3.20	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 7:45 PM	256.00	6.70	3.50	10.40	6.90	10.40	11.60	3.50	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 8:00 PM	247.00	4.70	4.10	10.50	6.40	10.50	13.60	4.10	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 8:15 PM	254.00	3.90	4.70	9.60	4.90	9.60	12.20	4.70	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 8:30 PM	255.00	2.80	4.60	9.30	4.70	9.30	12.50	4.60	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 8:45 PM	225.00	3.50	4.60	9.40	4.80	9.40	12.40	4.60	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 9:00 PM	215.00	2.30	4.80	9.80	5.00	9.80	12.80	4.80	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 9:15 PM	214.00	2.90	5.60	10.00	4.40	10.00	15.40	5.60	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 9:30 PM	210.00	3.30	5.50	10.70	5.20	10.70	16.00	5.50	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 9:45 PM	217.00	3.50	11.70	11.30	0.00	11.30	18.50	11.70	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 10:00 PM	201.00	3.10	13.40	0.00	0.00	0.00	18.00	13.40	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 10:15 PM	230.00	3.90	8.50	13.40	4.90	13.40	19.30	8.50	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 10:30 PM	208.00	4.00	10.60	15.10	4.50	15.10	19.60	10.60	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 10:45 PM	226.00	4.40	15.50	21.90	6.40	21.90	26.60	15.50	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 11:00 PM	242.00	5.50	25.50	25.40	0.00	25.40	24.20	25.50	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 11:15 PM	234.00	3.40	16.70	20.40	3.70	20.40	21.60	16.70	21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 11:30 PM	209.00	2.80	10.50	16.80	6.30	16.80	17.10	10.50	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/19/13 11:45 PM	214.00	3.80	8.60	12.60	4.00	12.60	15.80	8.60	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 12:00 AM	250.00	3.10	8.00	12.20	4.20	12.20	15.60	8.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 12:15 AM	213.00	4.40	6.60	10.10	3.50	10.10	13.70	6.60	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 12:30 AM	220.00	5.60	5.90	10.10	4.20	10.10	12.50	5.90	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 12:45 AM	222.00	5.60	6.70	10.30	3.60	10.30	14.90	6.70	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 1:15 AM	198.00	2.80	6.20	9.50	3.30	9.50	17.10	6.20	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 1:30 AM	212.00	2.50	7.40	10.60	3.20	10.60	16.00	7.40	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 1:45 AM	214.00	2.70	13.90	15.50	1.60	15.50	20.10	13.90	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 2:00 AM	229.00	3.30	8.20	11.00	2.80	11.00	15.90	8.20	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 2:15 AM	241.00	3.50	9.60	12.30	2.70	12.30	16.00	9.60	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 2:30 AM	227.00	3.00	14.60	16.20	1.60	16.20	17.30	14.60	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 2:45 AM	231.00	4.00	13.80	15.10	1.30	15.10	17.40	13.80	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 3:00 AM	247.00	3.40	14.20	14.90	0.70	14.90	16.20	14.20	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 3:15 AM	241.00	2.40	9.20	12.10	2.90	12.10	13.00	9.20	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 3:30 AM	236.00	2.30	8.70	12.20	3.50	12.20	13.00	8.70	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 3:45 AM	251.00	1.10	9.30	12.60	3.30	12.60	13.60	9.30	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 4:00 AM	232.00	3.20	11.00	12.60	1.60	12.60	13.50	11.00	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 4:15 AM	239.00	4.20	9.10	12.20	3.10	12.20	12.50	9.10	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 4:30 AM	249.00	3.50	8.20	11.10	2.90	11.10	11.30	8.20	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 4:45 AM	220.00	2.80	7.80	10.70	2.90	10.70	11.00	7.80	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 5:00 AM	228.00	1.90	7.80	10.60	2.80	10.60	10.60	7.80	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 5:15 AM	212.00	2.00	8.60	11.20	2.60	11.20	11.10	8.60	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 5:30 AM	207.00	2.50	9.40	11.40	2.00	11.40	10.90	9.40	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 5:45 AM	213.00	2.60	10.60	13.90	3.30	13.90	10.40	10.60	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 6:00 AM	215.00	1.20	8.50	13.50	5.00	13.50	10.00	8.50	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 6:15 AM	258.00	2.70	9.50	11.70	2.20	11.70	10.10	9.50	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 6:30 AM	240.00	2.00	9.60	11.10	1.50	11.10	10.10	9.60	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 6:45 AM	214.00	1.80	8.40	11.60	3.20	11.60	10.70	8.40	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 7:00 AM	234.00	2.50	10.70	11.30	0.60	11.30	11.80	10.70	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 7:15 AM	218.00	1.90	10.50	11.10	0.60	11.10	10.10	10.50	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 7:30 AM	216.00	1.20	12.20	11.00	0.00	11.00	10.40	12.20	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 7:45 AM	203.00	1.														



**US Army Corps
of Engineers**

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
10/20/13 3:15 PM	212.00	6.60	6.70	7.00	0.30	7.00	7.70	6.70	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 3:30 PM	194.00	5.00	7.20	7.30	0.10	7.30	7.70	7.20	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 3:45 PM	207.00	5.10	6.10	7.00	0.90	7.00	7.40	6.10	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 4:00 PM	174.00	6.00	7.80	7.70	0.00	7.10	7.80	6.40	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 4:15 PM	184.00	4.10	6.80	7.10	0.30	7.10	7.60	6.80	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 4:30 PM	207.00	3.40	6.80	0.00	0.00	0.00	7.60	6.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 4:45 PM	193.00	4.20	6.40	7.00	0.60	7.00	7.80	6.40	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 5:00 PM	197.00	8.60	6.50	6.50	0.00	6.50	7.50	6.50	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 5:15 PM	217.00	5.70	5.40	5.70	0.30	5.70	7.40	5.40	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 5:30 PM	224.00	3.60	6.10	6.30	0.20	6.30	7.50	6.10	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 5:45 PM	203.00	8.00	6.10	6.70	0.60	6.70	8.50	6.10	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 6:00 PM	210.00	7.30	7.20	7.10	0.00	7.10	8.80	7.20	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 6:15 PM	206.00	6.90	7.70	8.40	0.70	8.40	9.50	7.70	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 6:30 PM	240.00	6.20	9.70	0.00	0.00	0.00	11.00	9.70	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 6:45 PM	214.00	7.30	11.20	9.10	0.00	9.10	11.10	11.20	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 7:00 PM	215.00	5.50	13.60	11.20	0.00	11.20	12.20	13.60	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 7:15 PM	220.00	6.20	14.00	9.40	0.00	9.40	11.50	14.00	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 7:30 PM	211.00	8.10	13.00	10.90	0.00	10.90	12.60	13.00	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 7:45 PM	200.00	10.30	16.10	11.80	0.00	11.80	12.30	16.10	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 8:00 PM	208.00	7.20	16.30	12.90	0.00	12.90	13.00	16.30	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 8:15 PM	238.00	6.30	15.20	12.80	0.00	12.80	13.20	15.20	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 8:30 PM	236.00	4.10	16.80	13.20	0.00	13.20	12.80	16.80	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 8:45 PM	249.00	6.00	19.50	14.10	0.00	14.10	14.40	19.50	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 9:00 PM	234.00	4.70	14.80	13.10	0.00	13.10	13.30	14.80	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 9:15 PM	233.00	4.80	14.30	12.60	0.00	12.60	13.50	14.30	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 9:30 PM	210.00	3.90	15.40	14.00	0.00	14.00	13.20	15.40	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 9:45 PM	248.00	4.40	18.30	14.40	0.00	14.40	13.50	18.30	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 10:00 PM	236.00	3.80	16.70	13.80	0.00	13.80	13.90	16.70	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 10:15 PM	236.00	4.80	16.10	12.30	0.00	12.30	12.90	16.10	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 10:30 PM	249.00	5.50	16.40	12.60	0.00	12.60	14.10	16.40	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 10:45 PM	219.00	5.80	15.70	11.50	0.00	11.50	13.90	15.70	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 11:00 PM	246.00	5.50	16.50	11.30	0.00	11.30	13.80	16.50	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 11:15 PM	225.00	4.30	18.00	10.00	0.00	10.00	14.00	18.00	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 11:30 PM	238.00	3.90	16.10	9.80	0.00	9.80	13.90	16.10	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/13 11:45 PM	233.00	4.80	15.90	8.60	0.00	8.60	15.00	15.90	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 12:00 AM	222.00	3.50	15.60	8.80	0.00	8.80	17.10	15.60	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 12:15 AM	224.00	3.50	14.20	8.90	0.00	8.90	16.70	14.20	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 12:30 AM	230.00	2.50	15.40	8.50	0.00	8.50	17.20	15.40	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 12:45 AM	219.00	2.40	14.50	9.70	0.00	9.70	15.60	14.50	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 1:00 AM	238.00	3.20	17.10	12.30	0.00	12.30	15.10	17.10	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 1:15 AM	241.00	2.80	15.20	11.00	0.00	11.00	15.90	15.20	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 1:30 AM	229.00	2.50	15.30	10.10	0.00	10.10	16.50	15.30	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 1:45 AM	240.00	3.30	14.70	10.90	0.00	10.90	15.50	14.70	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 2:00 AM	221.00	3.30	14.40	11.40	0.00	11.40	14.70	14.40	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 2:15 AM	214.00	2.50	14.60	11.20	0.00	11.20	13.90	14.60	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 2:30 AM	214.00	3.20	13.40	11.90	0.00	11.90	13.40	13.40	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 2:45 AM	212.00	2.90	13.80	11.70	0.00	11.70	13.20	13.80	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 3:00 AM	226.00	3.20	13.80	12.00	0.00	12.00	12.30	13.80	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 3:15 AM	250.00	3.10	15.70	12.60	0.00	12.60	14.40	15.70	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 3:30 AM	252.00	3.00	18.70	16.20	0.00	16.20	15.80	18.70	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 3:45 AM	251.00	4.30	13.40	11.50	0.00	11.50	13.80	13.40	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 4:00 AM	254.00	2.60	18.30	12.80	0.00	12.80	13.70	18.30	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 4:15 AM	246.00	2.30	28.90	16.30	0.00	16.30	16.40	28.90	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 4:30 AM	221.00	1.70	30.60	18.00	0.00	18.00	19.30	30.60	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 4:45 AM	266.00	2.50	19.40	12.60	0.00	12.60	14.10	19.40	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 5:00 AM	272.00	3.80	8.50	13.70	5.20	11.30	13.70	16.60	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 5:15 AM	288.00	3.40	7.40	13.60	6.20	9.90	13.60	14.30	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 5:30 AM	264.00	3.60	11.60	9.50	0.00	9.50	13.90	11.60	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 5:45 AM	260.00	4.10	9.30	9.20	0.00	9.20	14.40	9.30	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 6:00 AM	278.00	4.00	7.60	14.60	7.00	8.20	14.60	7.80	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 6:15 AM	267.00	3.00	6.10	8.10	2.00	8.10	13.50	6.10	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 6:30 AM	287.00	4.90	8.80	12.80	4.00	8.00	12.80	4.80	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 6:45 AM	281.00	2.80	9.20	13.20	4.00	8.00	13.20	5.80	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 7:00 AM	277.00	3.50	10.10	13.40	3.30	9.00	13.40	6.30	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 7:15 AM	263.00	3.00	7.60	10.10	2.50	10.10	13.90	7.60	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 7:30 AM	280.00	2.50	12.20	13.50	1.30	10.00	13.50	7.40	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 7:45 AM	273.00	5.50	12.00	12.20	0.20	9.50	12.20	6.70	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 8:00 AM	276.00	3.70	13.30	11.50	0.00	11.40	11.50	7.20	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/21/13 8:15 AM	290.00	6.50	14.10	12.30	0.00	10.80	12.30	8.60	14.10	0.00	0.00</					



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

Table with columns: Reading Time (EST), Wind Direction, Wind Speed, Particulates (µg/m³), and Naphthalene (µg/m³). The table contains multiple rows of monitoring data for various times throughout the day.



**US Army Corps
of Engineers**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

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
10/22/13 4:45 PM	213.00	1.80	36.70	24.50	0.00	24.50	28.10	36.70	36237.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 5:00 PM	237.00	1.40	32.90	24.50	0.00	24.50	24.90	32.90	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 5:15 PM	217.00	1.60	27.80	21.50	0.00	21.50	23.80	27.80	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 5:30 PM	184.00	1.30	28.70	21.10	0.00	21.10	23.50	28.70	36240.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 5:45 PM	223.00	1.30	33.20	21.90	0.00	21.90	23.90	33.20	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 6:00 PM	233.00	1.00	34.90	25.00	0.00	25.00	23.50	34.90	36239.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 6:15 PM	212.00	1.10	34.50	24.20	0.00	24.20	24.20	34.50	36240.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 6:30 PM	210.00	1.10	31.00	24.00	0.00	24.00	22.00	31.00	36240.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 6:45 PM	191.00	1.60	29.70	22.80	0.00	22.80	19.90	29.70	36240.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 7:00 PM	218.00	1.10	28.70	20.90	0.00	20.90	18.70	28.70	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 7:15 PM	217.00	1.20	26.10	17.90	0.00	17.90	17.80	26.10	36238.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 7:30 PM	229.00	1.30	25.30	20.00	0.00	20.00	17.20	25.30	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 7:45 PM	239.00	1.60	24.90	20.20	0.00	20.20	16.40	24.90	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 8:00 PM	204.00	2.50	24.00	20.60	0.00	20.60	16.40	24.00	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 8:15 PM	203.00	1.60	25.60	22.30	0.00	22.30	17.80	25.60	36240.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 8:30 PM	203.00	1.60	28.20	23.00	0.00	23.00	18.70	28.20	36241.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 8:45 PM	190.00	1.50	26.50	22.70	0.00	22.70	18.00	26.50	36240.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 9:00 PM	313.00	1.70	36239.60	18.70	0.00	22.60	18.70	27.00	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 9:15 PM	295.00	2.10	36240.10	19.50	0.00	25.60	19.50	26.50	36240.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 9:30 PM	273.00	1.80	36239.40	21.10	0.00	28.40	21.10	35.30	36239.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 9:45 PM	263.00	1.20	35.00	27.40	0.00	27.40	21.00	35.00	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 10:00 PM	234.00	1.90	34.70	28.60	0.00	28.60	21.20	34.70	36240.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 10:15 PM	263.00	2.50	30.30	26.90	0.00	26.90	21.60	30.30	36240.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 10:30 PM	272.00	2.40	36240.40	20.80	0.00	26.00	20.80	29.10	36240.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 10:45 PM	271.00	2.60	36240.30	20.70	0.00	24.50	20.70	31.70	36240.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 11:00 PM	275.00	2.50	36240.50	20.70	0.00	24.90	20.70	32.60	36240.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 11:15 PM	263.00	2.40	32.00	25.70	0.00	25.70	20.60	32.00	36240.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 11:30 PM	259.00	2.10	30.50	25.60	0.00	25.60	20.40	30.50	36240.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/22/13 11:45 PM	285.00	1.90	36239.70	25.20	0.00	28.30	25.20	31.60	36239.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 12:00 AM	279.00	2.20	36240.30	34.00	0.00	30.90	34.00	37.40	36240.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 12:15 AM	277.00	2.80	36240.30	34.60	0.00	31.20	34.60	36.50	36240.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 12:30 AM	270.00	2.10	36239.60	35.20	0.00	29.60	35.20	36.10	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 12:45 AM	285.00	2.60	36240.50	35.80	0.00	31.40	35.80	37.90	36240.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 1:00 AM	299.00	2.00	36238.90	33.00	0.00	29.90	33.00	31.50	36238.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 1:15 AM	299.00	2.50	36240.60	28.00	0.00	25.70	28.00	30.30	36240.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 1:30 AM	295.00	2.60	36240.20	26.20	0.00	24.60	26.20	28.60	36240.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 1:45 AM	287.00	3.20	36239.90	25.30	0.00	24.30	25.30	27.50	36239.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 2:00 AM	292.00	3.30	36240.10	23.10	0.00	22.50	23.10	24.50	36240.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 2:15 AM	309.00	3.90	36240.00	21.40	0.00	22.00	21.40	23.80	36240.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 2:30 AM	304.00	3.70	36240.10	20.20	0.00	20.80	20.20	22.80	36240.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 2:45 AM	317.00	3.80	36240.40	19.00	0.00	19.90	19.00	20.70	36240.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 3:00 AM	321.00	3.20	36239.50	17.40	0.00	19.70	17.40	19.10	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 3:15 AM	326.00	3.80	36240.00	16.10	0.00	18.90	16.10	18.60	36240.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 3:30 AM	325.00	3.00	36240.10	15.40	0.00	16.90	15.40	17.00	36240.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 3:45 AM	321.00	3.70	36239.70	15.30	0.00	16.50	15.30	17.00	36239.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 4:00 AM	320.00	3.60	36239.40	14.90	0.00	14.90	14.90	17.60	36239.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 4:15 AM	332.00	3.40	36240.20	13.10	0.00	13.70	13.10	15.20	36240.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 4:30 AM	340.00	3.90	36240.60	12.30	0.00	12.50	12.30	13.30	36240.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 4:45 AM	326.00	3.30	36240.00	12.30	0.00	12.90	12.30	13.50	36240.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 5:00 AM	320.00	3.60	36239.80	12.00	0.00	12.30	12.00	13.00	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 5:15 AM	323.00	3.30	36239.60	10.30	0.00	10.50	10.30	10.50	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 5:30 AM	310.00	2.60	36239.90	9.60	0.00	8.70	9.60	8.50	36239.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 5:45 AM	325.00	4.30	36239.90	8.70	0.00	8.20	8.70	6.80	36239.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 6:00 AM	311.00	4.50	36239.90	0.00	0.00	7.40	0.00	6.50	36239.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 6:15 AM	323.00	4.30	36239.70	7.80	0.00	7.00	7.80	6.10	36239.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 6:30 AM	334.00	2.90	36240.20	7.40	0.00	6.50	7.40	5.20	36240.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 6:45 AM	324.00	3.40	36240.20	7.10	0.00	6.60	7.10	5.30	36240.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 7:00 AM	296.00	3.50	36239.40	7.50	0.00	6.90	7.50	5.90	36239.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 7:15 AM	287.00	4.10	36239.50	7.50	0.00	8.00	7.50	6.30	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 7:30 AM	314.00	3.60	36240.00	7.40	0.00	8.10	7.40	6.00	36240.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 7:45 AM	322.00	3.70	36239.70	7.20	0.00	7.00	7.20	5.60	36239.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 8:00 AM	330.00	3.60	36239.50	7.00	0.00	6.80	7.00	5.30	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 8:15 AM	310.00	3.40	36240.10	6.90	0.00	6.90	6.90	5.50	36240.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 8:30 AM	313.00	3.70	36239.10	7.20	0.00	6.50	7.20	6.00	36239.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 8:45 AM	301.00	3.40	36239.50	7.70	0.00	0.00	7.70	5.90	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 9:00 AM	344.00	2.30	36239.50	7.30	0.00	6.60	7.30	5.80	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 9:15 AM	323.00	4.00	36239.40	7.40	0.00	6.90	7.40	6.40								



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

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
10/23/13 5:30 PM	276.00	3.40	36220.90	3.90	0.00	2.90	3.90	2.40	36220.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 5:45 PM	279.00	1.90	36220.60	3.30	0.00	3.20	3.30	0.20	36220.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 6:00 PM	269.00	5.30	0.70	3.20	2.50	3.20	3.50	0.70	36220.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 6:15 PM	323.00	4.80	36220.40	3.60	0.00	3.40	3.60	0.60	36220.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 6:30 PM	321.00	2.70	36220.00	3.70	0.00	0.00	3.70	0.30	36220.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 6:45 PM	338.00	3.90	36220.40	3.80	0.00	3.20	3.80	0.80	36220.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 7:00 PM	287.00	2.20	36221.00	4.40	0.00	4.20	4.40	3.00	36221.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 7:15 PM	254.00	2.00	1.70	4.00	2.30	4.00	4.50	1.70	36179.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 7:30 PM	265.00	2.30	1.30	3.50	2.20	3.50	4.20	1.30	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 7:45 PM	284.00	2.60	36240.10	4.90	0.00	4.60	4.90	2.80	36240.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 8:00 PM	319.00	2.80	36239.50	6.20	0.00	7.40	6.20	6.10	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 8:15 PM	330.00	3.70	36239.40	6.40	0.00	7.60	6.40	4.20	36239.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 8:30 PM	296.00	4.70	36239.60	7.40	0.00	9.20	7.40	5.60	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 8:45 PM	301.00	4.20	36239.10	7.60	0.00	9.80	7.60	5.40	36239.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 9:00 PM	320.00	3.20	36240.10	8.00	0.00	10.00	8.00	6.20	36240.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 9:15 PM	284.00	3.70	36239.40	8.00	0.00	9.50	8.00	6.50	36239.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 9:30 PM	267.00	3.60	5.40	8.80	3.40	8.80	8.10	5.40	36239.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 9:45 PM	284.00	2.30	36240.00	7.10	0.00	8.80	7.10	4.50	36240.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 10:00 PM	290.00	3.00	36239.60	7.60	0.00	9.10	7.60	5.30	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 10:15 PM	251.00	2.50	6.60	9.80	3.20	9.80	8.10	6.60	36239.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 10:30 PM	271.00	3.40	36239.20	7.40	0.00	0.00	7.40	6.00	36239.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 10:45 PM	265.00	3.00	9.70	12.10	2.40	12.10	9.90	9.70	36239.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 11:00 PM	282.00	1.80	36239.70	9.00	0.00	10.50	9.00	8.20	36239.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 11:15 PM	276.00	3.80	36239.80	8.50	0.00	11.30	8.50	7.50	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 11:30 PM	267.00	2.90	6.60	9.60	3.00	9.60	8.30	6.60	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/23/13 11:45 PM	265.00	4.80	5.90	8.70	2.80	8.70	8.00	5.90	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 12:00 AM	274.00	4.30	36240.10	13.00	0.00	9.50	13.00	5.50	36240.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 12:15 AM	274.00	3.40	36239.30	13.90	0.00	7.60	13.90	5.50	36239.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 12:30 AM	297.00	3.30	36239.30	15.30	0.00	8.60	15.30	6.30	36239.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 12:45 AM	298.00	3.40	36239.60	14.60	0.00	8.20	14.60	5.90	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 1:00 AM	313.00	4.70	36239.80	13.00	0.00	7.80	13.00	5.30	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 1:15 AM	302.00	2.70	36239.80	12.90	0.00	8.30	12.90	5.90	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 1:30 AM	282.00	3.50	36240.90	12.20	0.00	0.00	12.20	5.10	36240.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 1:45 AM	277.00	2.30	36239.30	10.90	0.00	6.90	10.90	5.70	36239.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 2:00 AM	296.00	2.80	36239.30	10.00	0.00	7.40	10.00	4.60	36239.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 2:15 AM	291.00	2.50	36239.10	9.60	0.00	7.40	9.60	4.70	36239.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 2:30 AM	299.00	4.50	36239.50	9.10	0.00	7.80	9.10	5.30	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 2:45 AM	298.00	3.80	36239.30	9.80	0.00	8.50	9.80	6.00	36239.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 3:00 AM	291.00	2.40	36239.40	10.30	0.00	8.10	10.30	8.30	36239.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 3:15 AM	281.00	2.10	36239.80	9.70	0.00	8.50	9.70	7.10	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 3:30 AM	269.00	4.50	6.10	9.60	3.50	9.60	9.30	6.10	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 3:45 AM	278.00	2.70	36239.50	9.60	0.00	9.20	9.60	7.30	36239.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 4:00 AM	291.00	3.60	36239.30	10.90	0.00	12.00	10.90	9.70	36239.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 4:15 AM	281.00	3.30	36239.30	10.60	0.00	11.70	10.60	9.30	36239.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 4:30 AM	285.00	2.40	36239.30	9.30	0.00	11.10	9.30	9.00	36239.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 4:45 AM	289.00	1.90	36239.40	9.20	0.00	11.40	9.20	8.30	36239.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 5:00 AM	266.00	3.80	8.70	11.50	2.80	11.50	9.40	8.70	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 5:15 AM	291.00	3.40	36239.60	9.80	0.00	10.90	9.80	9.80	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 5:30 AM	306.00	3.20	36239.90	9.50	0.00	11.90	9.50	9.80	36239.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 5:45 AM	323.00	3.60	36239.70	9.50	0.00	11.10	9.50	9.30	36239.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 6:00 AM	338.00	2.80	36239.70	9.60	0.00	10.80	9.60	9.40	36239.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 6:15 AM	299.00	3.60	36240.30	9.60	0.00	11.60	9.60	10.40	36240.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 6:30 AM	321.00	2.30	36239.60	10.40	0.00	11.80	10.40	10.30	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 6:45 AM	317.00	2.30	36239.40	10.20	0.00	12.30	10.20	10.20	36239.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 7:00 AM	330.00	3.40	36239.40	10.60	0.00	12.80	10.60	10.50	36239.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 7:15 AM	317.00	2.70	36239.10	10.10	0.00	12.00	10.10	10.40	36239.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 7:30 AM	316.00	2.90	36239.20	10.40	0.00	12.70	10.40	10.60	36239.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 7:45 AM	337.00	4.40	36239.80	10.60	0.00	12.70	10.60	11.90	36239.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 8:00 AM	315.00	2.80	36239.10	10.90	0.00	16.50	10.90	12.70	36239.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 8:15 AM	302.00	3.00	36239.60	11.50	0.00	17.30	11.50	12.40	36239.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 8:30 AM	323.00	4.30	60.40	11.70	0.00	15.80	11.70	12.70	60.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 8:45 AM	328.00	4.20	61.40	12.50	0.00	15.70	12.50	15.60	61.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 9:00 AM	307.00	3.90	52.90	10.10	0.00	10.70	10.10	9.00	52.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 9:15 AM	315.00	4.00	56.80	12.20	0.00	11.60	12.20	13.20	56.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 9:30 AM	322.00	5.50	54.10	10.00	0.00	10.00	10.00	8.30	54.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 9:45 AM	319.00	3.60	60.10	10.50	0.00	13.70	10.50	8.80	60.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 10:00 AM	333.00	4.90	59.80	10.80	0.00	14.90	10.80	11.30	59.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 10:15 AM	340.00															



**US Army Corps
of Engineers**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

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
10/24/13 6:15 PM	348.00	2.70	9.60	5.80	0.00	4.60	5.80	0.30	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 6:30 PM	327.00	4.40	11.50	6.00	0.00	4.10	6.00	0.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 6:45 PM	316.00	2.30	10.00	5.10	0.00	4.20	5.10	0.60	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 7:00 PM	343.00	4.00	9.90	5.80	0.00	3.10	5.80	-0.40	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 7:15 PM	313.00	4.10	9.30	5.40	0.00	2.70	5.40	-0.70	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 7:30 PM	284.00	4.70	11.20	4.90	0.00	2.10	4.90	-0.70	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 7:45 PM	307.00	3.30	12.00	6.10	0.00	3.00	6.10	0.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 8:00 PM	313.00	4.70	12.70	8.80	0.00	4.10	8.80	0.50	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 8:15 PM	320.00	3.80	12.60	10.90	0.00	4.10	10.90	1.50	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 8:30 PM	292.00	3.10	12.50	8.90	0.00	5.40	8.90	0.40	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 8:45 PM	330.00	4.80	12.10	8.50	0.00	3.70	8.50	0.30	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 9:00 PM	284.00	4.90	11.90	8.00	0.00	4.40	8.00	0.50	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 9:15 PM	310.00	2.70	12.00	8.10	0.00	3.50	8.10	0.60	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 9:30 PM	301.00	4.70	11.70	7.40	0.00	3.50	7.40	0.70	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 9:45 PM	318.00	2.80	11.50	6.80	0.00	3.00	6.80	0.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 10:00 PM	300.00	3.90	11.60	6.90	0.00	3.80	6.90	0.10	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 10:15 PM	295.00	2.90	11.20	6.70	0.00	3.20	6.70	0.10	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 10:30 PM	275.00	2.30	11.60	6.50	0.00	3.10	6.50	0.10	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 10:45 PM	294.00	4.30	10.90	6.50	0.00	3.60	6.50	0.30	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 11:00 PM	272.00	3.00	10.90	6.60	0.00	3.70	6.60	0.60	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 11:15 PM	279.00	4.50	11.60	7.70	0.00	5.00	7.70	3.50	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 11:30 PM	271.00	4.40	12.80	7.70	0.00	11.80	7.70	2.80	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/24/13 11:45 PM	303.00	3.50	12.10	7.70	0.00	8.30	7.70	3.60	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 12:00 AM	288.00	4.30	12.60	7.80	0.00	11.00	7.80	4.50	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 12:15 AM	284.00	3.80	13.00	8.40	0.00	13.40	8.40	5.20	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 12:30 AM	289.00	4.00	12.70	8.60	0.00	12.20	8.60	6.60	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 12:45 AM	288.00	4.00	12.90	10.90	0.00	13.90	10.90	10.60	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 1:00 AM	294.00	3.10	13.00	11.50	0.00	11.60	11.50	11.60	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 1:15 AM	277.00	3.30	12.50	10.90	0.00	11.20	10.90	12.20	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 1:30 AM	277.00	2.60	12.90	10.60	0.00	12.20	10.60	10.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 1:45 AM	288.00	3.40	12.90	11.10	0.00	12.40	11.10	10.80	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 2:00 AM	289.00	3.00	13.00	10.80	0.00	12.90	10.80	10.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 2:15 AM	284.00	2.90	13.20	13.40	0.20	13.60	13.40	10.10	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 2:30 AM	274.00	3.00	13.40	15.10	1.70	13.70	15.10	11.70	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 2:45 AM	268.00	3.20	12.00	14.30	2.30	14.30	16.30	12.00	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 3:00 AM	278.00	3.40	15.60	14.70	0.00	13.70	14.70	11.50	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 3:15 AM	273.00	2.80	14.30	14.60	0.30	0.00	14.60	12.50	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 3:30 AM	278.00	3.20	13.10	14.90	1.80	14.60	14.90	13.00	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 3:45 AM	290.00	2.70	12.90	13.70	0.80	16.50	13.70	12.30	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 4:00 AM	266.00	2.50	14.00	15.30	1.30	15.30	13.60	14.00	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 4:15 AM	270.00	2.90	12.10	14.40	2.30	18.60	14.40	16.50	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 4:30 AM	274.00	2.00	14.10	13.80	0.00	17.90	13.80	14.50	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 4:45 AM	284.00	2.80	14.40	13.10	0.00	18.70	13.10	15.00	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 5:00 AM	289.00	3.10	15.60	13.80	0.00	17.10	13.80	17.50	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 5:15 AM	288.00	2.90	14.20	13.90	0.00	20.10	13.90	19.00	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 5:30 AM	274.00	3.20	12.90	12.00	0.00	18.10	12.00	16.10	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 5:45 AM	263.00	2.60	13.70	16.30	2.60	16.30	11.00	13.70	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 6:00 AM	262.00	3.10	14.60	19.20	4.60	19.20	11.40	14.60	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 6:15 AM	270.00	2.70	11.50	12.30	0.80	16.10	12.30	19.20	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 6:30 AM	256.00	2.40	20.60	22.80	2.20	22.80	13.10	20.60	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 6:45 AM	251.00	2.50	19.10	20.70	1.60	20.70	12.50	19.10	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 7:00 AM	257.00	3.40	15.30	18.20	2.90	18.20	11.10	15.30	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 7:15 AM	244.00	2.60	18.50	22.10	3.60	22.10	11.80	18.50	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 7:30 AM	249.00	2.00	17.90	26.20	8.30	26.20	12.40	17.90	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 7:45 AM	246.00	2.50	17.20	22.30	5.10	22.30	12.60	17.20	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 8:00 AM	244.00	2.80	18.10	18.00	0.00	18.00	12.70	18.10	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 8:15 AM	264.00	2.80	18.30	16.80	0.00	16.80	12.00	18.30	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 8:30 AM	261.00	3.00	20.30	17.40	0.00	17.40	12.10	20.30	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 8:45 AM	248.00	3.80	21.80	22.60	0.80	22.60	13.60	21.80	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 9:00 AM	249.00	3.70	21.40	30.20	8.80	30.20	13.70	21.40	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 9:15 AM	250.00	3.30	34.90	31.70	0.00	31.70	15.70	34.90	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 9:30 AM	274.00	4.70	15.50	16.40	0.90	22.90	16.40	21.60	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 9:45 AM	230.00	2.80	21.00	23.60	2.60	23.60	15.80	21.00	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 10:00 AM	231.00	3.80	23.80	24.70	0.90	24.70	17.10	23.80	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 10:15 AM	245.00	2.70	25.70	25.60	0.00	25.60	17.60	25.70	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 10:30 AM	219.00	3.00	22.20	23.90	1.70	23.90	16.90	22.20	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 10:45 AM	253.00	4.60	22.00	23.60	1.60	23.60	17.00	22.00	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 11:00 AM	257.00	3.80	21.20	24.90	3.70	24.90	17.00	21.20	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/25/13 11:15 AM	264.00	4.00	18.40	25.60	7.20	25.60	14.70	18.40								



US Army Corps of Engineers

Indiana Harbor and Canal Confined Disposal Facility Real-Time Air Monitoring Data October, 2013

Table with columns: Reading Time (EST), Wind Direction (Degrees Clockwise from North), Wind Speed (mph), Particulates (µg/m³) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4), Naphthalene (µg/m³) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4). Rows represent hourly data from 10/26/13 7:45 PM to 10/27/13 8:15 PM.



US Army Corps of Engineers

Indiana Harbor and Canal Confined Disposal Facility Real-Time Air Monitoring Data October, 2013

Table with columns: Reading Time (EST), Wind Direction, Wind Speed, Particulates (µg/m³) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4), and Naphthalene (µg/m³) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4). Rows represent hourly readings from 10/28/13 9:15 PM to 10/29/13 9:45 PM.



**US Army Corps
of Engineers**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
October, 2013

Reading Time (EST)	Wind Direction Degree 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
10/31/13 11:30 PM	250.00	7.00	8.50	9.20	0.70	9.20	8.10	8.50	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/31/13 11:45 PM	284.00	9.00	6.40	7.80	1.40	8.70	7.80	9.50	6.40	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: 10/21/2013 to-10/24/2013 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:

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:

A) M4 Thermo Unit hi reading 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 8:00 AM 10/24/13 and inspected at 14:00 PM 10/24/13 to confirm proper function.

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: 10/15/2013 3:00AM 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:

A) M4 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 9:45 AM 10/15/13 and inspected at 14:00 PM 10/15/13 to confirm proper function.

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: 10/11/2013 9:00 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:

A) No problems were found.