



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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
8/1/15 12:00 AM	256.00	1.80	21.00	20.70	0.00	20.70	6.60	21.00	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 12:15 AM	235.00	1.50	22.40	20.70	0.00	0.00	4.10	22.40	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 12:30 AM	259.00	2.30	33.60	18.50	0.00	18.50	10.40	33.60	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 12:45 AM	270.00	2.30	8.90	13.80	4.90	0.00	13.80	31.90	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 1:00 AM	242.00	2.00	33.60	19.00	0.00	19.00	17.80	33.60	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 1:15 AM	251.00	1.80	37.00	22.20	0.00	22.20	11.60	37.00	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 1:30 AM	257.00	2.00	46.80	20.30	0.00	20.30	13.80	46.80	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 1:45 AM	255.00	1.80	39.20	21.80	0.00	21.80	21.20	39.20	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 2:00 AM	244.00	1.80	41.10	0.00	0.00	0.00	24.10	41.10	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 2:15 AM	250.00	2.00	48.60	23.00	0.00	23.00	27.90	48.60	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 2:30 AM	245.00	2.40	44.00	24.20	0.00	24.20	30.40	44.00	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 2:45 AM	248.00	2.30	45.70	23.70	0.00	23.70	29.20	45.70	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 3:00 AM	250.00	2.00	48.70	0.00	0.00	0.00	34.00	48.70	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 3:15 AM	262.00	2.90	48.80	29.30	0.00	29.30	32.00	48.80	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 3:30 AM	266.00	2.40	42.70	24.10	0.00	24.10	26.50	42.70	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 3:45 AM	267.00	2.40	44.00	19.20	0.00	19.20	26.30	44.00	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 4:00 AM	275.00	2.60	10.00	26.00	16.00	18.40	26.00	43.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 4:15 AM	264.00	2.90	42.80	21.60	0.00	21.60	28.20	42.80	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 4:30 AM	263.00	3.00	40.50	23.90	0.00	23.90	27.50	40.50	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 4:45 AM	279.00	2.20	13.10	26.30	13.20	22.80	26.30	36.70	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 5:00 AM	272.00	2.30	13.20	27.10	13.90	20.60	27.10	35.20	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 5:15 AM	263.00	2.30	35.50	0.00	0.00	0.00	25.10	35.50	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 5:30 AM	258.00	2.30	32.50	22.50	0.00	22.50	23.30	32.50	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 5:45 AM	263.00	2.90	33.80	21.60	0.00	21.60	22.40	33.80	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 6:00 AM	265.00	2.60	33.00	20.50	0.00	20.50	23.10	33.00	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 6:15 AM	266.00	2.10	31.30	19.60	0.00	19.60	21.00	31.30	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 6:30 AM	255.00	1.90	37.30	17.40	0.00	17.40	25.10	37.30	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 6:45 AM	256.00	2.30	34.10	22.80	0.00	22.80	21.40	34.10	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 7:00 AM	258.00	2.50	30.20	20.50	0.00	20.50	17.50	30.20	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 7:15 AM	259.00	2.50	31.70	19.00	0.00	19.00	20.00	31.70	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 7:30 AM	254.00	3.30	32.40	20.20	0.00	20.20	20.20	32.40	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 7:45 AM	250.00	2.80	33.50	21.40	0.00	21.40	24.50	33.50	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 8:00 AM	246.00	3.40	32.20	23.60	0.00	23.60	24.30	32.20	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 8:15 AM	258.00	2.20	29.20	22.40	0.00	22.40	25.40	29.20	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 8:30 AM	258.00	2.60	29.10	21.70	0.00	21.70	23.50	29.10	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 8:45 AM	270.00	3.10	9.20	27.00	17.80	21.30	27.00	27.70	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 9:00 AM	255.00	2.20	28.00	19.60	0.00	19.60	23.80	28.00	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 9:15 AM	282.00	2.40	8.90	22.00	13.10	18.70	22.00	24.70	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 9:30 AM	259.00	1.80	21.70	19.50	0.00	19.50	17.30	21.70	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 9:45 AM	268.00	2.40	22.40	21.30	0.00	21.30	17.70	22.40	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 10:00 AM	289.00	2.70	10.50	18.60	8.10	22.70	18.60	20.90	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 10:15 AM	246.00	2.90	19.00	22.10	3.10	22.10	21.90	19.00	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 10:30 AM	254.00	3.40	18.70	19.20	0.50	19.20	15.90	18.70	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 10:45 AM	315.00	4.90	8.00	16.10	8.10	15.60	16.10	18.70	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 11:00 AM	279.00	5.90	8.00	13.70	5.70	18.20	13.70	15.80	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 11:15 AM	300.00	4.30	8.10	8.00	0.00	18.20	8.00	13.50	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 11:30 AM	293.00	4.40	8.50	6.70	0.00	19.50	6.70	12.30	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 11:45 AM	270.00	2.50	8.50	7.90	0.00	17.70	7.90	13.90	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 12:00 PM	265.00	1.90	13.30	18.60	5.30	18.60	8.00	13.30	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 12:15 PM	256.00	3.80	14.30	18.40	4.10	18.40	8.20	14.30	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 12:30 PM	262.00	3.20	12.80	15.00	2.20	15.00	4.70	12.80	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 12:45 PM	296.00	3.30	8.60	5.70	0.00	16.40	5.70	13.40	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 1:00 PM	321.00	2.60	9.20	4.40	0.00	14.20	4.40	14.00	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 1:15 PM	299.00	4.50	9.20	4.40	0.00	13.50	4.40	14.10	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 1:30 PM	274.00	4.00	9.70	6.00	0.00	15.50	6.00	14.70	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 1:45 PM	300.00	4.60	9.30	7.80	0.00	0.00	7.80	14.20	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 2:00 PM	259.00	5.70	14.30	15.60	1.30	15.60	5.00	14.30	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 2:15 PM	241.00	2.10	14.50	12.30	0.00	12.30	6.20	14.50	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 2:30 PM	258.00	5.30	14.70	12.50	0.00	12.50	8.00	14.70	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 2:45 PM	276.00	4.00	7.00	5.90	0.00	11.70	5.90	14.50	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 3:00 PM	263.00	5.20	14.10	11.50	0.00	11.50	5.40	14.10	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 3:15 PM	265.00	4.50	14.60	11.30	0.00	11.30	8.20	14.60	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 3:30 PM	237.00	6.50	14.10	11.10	0.00	11.10	5.60	14.10	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 3:45 PM	249.00	4.90	14.80	10.40	0.00	10.40	4.30	14.60	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 4:00 PM	257.00	5.40	15.00	12.50	0.00	12.50	1.80	15.00	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 4:15 PM	249.00	4.00	14.40	12.10	0.00	12.10	0.70	14.40	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 4:30 PM	274.00	5.80	7.80	0.50	0.00	12.70	0.50	15.00	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 4:45 PM	276.00	6.60	8.00	1.50	0.00	11.50	1.50	14.10	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 5:00 PM	244.00	6.30	13.30	9.80	0.00	9.80	0.00	13.30	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/15 5:15 PM	263.00	8.50	15.60	10.10	0.00	10.10										



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August 2015

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		
8/2/15 1:15 AM	226.00	2.70	36.50	16.40	0.00	16.40	36.30	36.50	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 1:30 AM	232.00	4.00	38.20	16.30	0.00	16.30	37.90	38.20	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 1:45 AM	214.00	3.50	40.30	17.10	0.00	17.10	44.70	40.30	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 2:00 AM	231.00	3.40	40.10	14.10	0.00	14.10	42.70	40.10	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 2:15 AM	232.00	3.20	40.00	14.80	0.00	14.80	43.00	40.00	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 2:30 AM	228.00	3.30	39.20	15.30	0.00	15.30	40.50	39.20	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 2:45 AM	238.00	3.70	35.70	14.80	0.00	14.80	37.50	35.70	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 3:00 AM	227.00	3.40	34.30	14.00	0.00	0.00	35.30	34.30	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 3:15 AM	227.00	3.80	32.90	14.60	0.00	14.60	33.30	32.90	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 3:30 AM	233.00	2.60	36.40	13.90	0.00	13.90	36.00	36.40	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 3:45 AM	233.00	3.20	40.80	17.60	0.00	17.60	38.00	40.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 4:00 AM	229.00	2.50	41.30	17.00	0.00	17.00	39.10	41.30	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 4:15 AM	234.00	3.10	41.50	16.40	0.00	16.40	40.70	41.50	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 4:30 AM	236.00	2.70	42.40	16.20	0.00	16.20	41.70	42.40	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 4:45 AM	198.00	2.30	44.50	16.30	0.00	16.30	43.70	44.50	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 5:00 AM	215.00	3.10	47.60	15.90	0.00	15.90	46.20	47.60	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 5:15 AM	218.00	2.30	50.90	16.00	0.00	16.00	50.70	50.90	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 5:30 AM	205.00	3.20	54.40	16.10	0.00	16.10	50.60	54.40	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 5:45 AM	209.00	3.10	55.20	15.50	0.00	15.50	50.40	55.20	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 6:00 AM	218.00	2.70	49.60	14.50	0.00	14.50	48.90	49.60	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 6:15 AM	199.00	2.80	53.00	15.20	0.00	15.20	49.90	53.00	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 6:30 AM	197.00	4.30	53.80	13.70	0.00	13.70	49.30	53.80	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 6:45 AM	208.00	4.10	53.50	14.60	0.00	14.60	48.60	53.50	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 7:00 AM	199.00	4.10	53.60	14.40	0.00	14.40	47.70	53.60	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 7:15 AM	204.00	4.10	52.20	14.60	0.00	14.60	45.60	52.20	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 7:30 AM	213.00	4.50	44.20	14.90	0.00	14.90	41.60	44.20	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 7:45 AM	209.00	3.40	39.10	16.20	0.00	16.20	40.20	39.10	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 8:00 AM	205.00	4.20	35.40	17.50	0.00	17.50	37.30	35.40	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 8:15 AM	195.00	4.00	32.50	15.50	0.00	15.50	34.30	32.50	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 8:30 AM	190.00	4.00	29.80	15.80	0.00	15.80	33.00	29.80	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 8:45 AM	227.00	5.90	28.70	16.70	0.00	16.70	31.40	28.70	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 9:00 AM	231.00	4.70	25.20	17.10	0.00	17.10	28.70	25.20	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 9:15 AM	239.00	5.30	22.40	16.40	0.00	16.40	26.50	22.40	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 9:30 AM	235.00	4.70	16.30	15.10	0.00	15.10	23.10	16.30	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 9:45 AM	222.00	7.60	12.80	14.90	2.10	14.90	22.20	12.80	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 10:00 AM	225.00	7.20	7.50	15.20	7.70	15.20	18.40	7.50	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 10:15 AM	239.00	7.60	8.90	14.90	6.00	14.90	18.40	8.90	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 10:30 AM	241.00	9.90	13.70	13.70	0.00	0.00	20.70	13.70	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 10:45 AM	243.00	9.10	18.20	16.40	0.00	16.40	23.00	18.20	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 11:00 AM	232.00	6.20	19.00	18.00	0.00	18.00	22.90	19.00	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 11:15 AM	246.00	8.10	12.00	17.30	5.30	17.30	21.10	12.00	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 11:30 AM	231.00	8.40	5.80	18.80	13.00	18.80	19.40	5.80	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 11:45 AM	216.00	8.30	3.70	16.20	12.50	16.20	15.30	3.70	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 12:00 PM	237.00	8.00	3.10	0.00	0.00	0.00	15.70	3.10	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 12:15 PM	249.00	9.60	0.30	14.70	14.40	14.70	13.60	0.30	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 12:30 PM	234.00	9.80	0.50	13.00	12.50	13.00	12.80	0.50	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 12:45 PM	252.00	7.70	1.10	14.80	13.70	14.80	13.80	1.10	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 1:00 PM	231.00	11.70	0.60	15.50	14.90	15.50	14.90	0.60	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 1:15 PM	238.00	10.90	0.20	18.00	17.80	18.00	14.30	0.20	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 1:30 PM	241.00	8.50	-0.40	18.40	18.80	18.40	14.40	-0.40	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 1:45 PM	224.00	7.60	-0.40	19.50	19.90	19.50	12.20	-0.40	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 2:00 PM	232.00	9.60	0.40	0.00	0.00	0.00	11.40	0.40	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 2:15 PM	217.00	8.20	0.00	17.00	17.00	17.00	10.70	0.00	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 2:30 PM	198.00	7.60	-0.50	19.10	19.60	19.10	10.70	-0.50	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 2:45 PM	230.00	8.00	0.30	19.50	19.20	19.50	10.70	0.30	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 3:00 PM	226.00	7.50	2.20	18.80	16.60	18.80	14.40	2.20	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 3:15 PM	227.00	9.60	3.40	22.30	18.90	22.30	15.60	3.40	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 3:30 PM	233.00	5.80	2.10	18.60	16.50	18.60	14.60	2.10	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 3:45 PM	230.00	7.30	4.10	19.80	15.70	19.80	15.40	4.10	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 4:00 PM	221.00	6.10	6.50	21.60	15.10	21.60	16.40	6.50	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 4:15 PM	218.00	6.40	10.60	0.00	0.00	0.00	18.30	10.60	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 4:30 PM	209.00	7.00	16.40	22.10	5.70	22.10	23.30	16.40	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 4:45 PM	215.00	7.80	24.80	22.40	0.00	22.40	25.90	24.80	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 5:00 PM	233.00	9.80	31.20	24.70	0.00	24.70	27.90	31.20	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 5:15 PM	205.00	9.80	39.80	23.80	0.00	23.80	28.40	39.80	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 5:30 PM	222.00	10.30	39.30	26.90	0.00	26.90	27.00	39.30	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 5:45 PM	217.00	8.30	38.60	24.80	0.00	24.80	26.20	38.60	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 6:00 PM	231.00	10.00	38.40	27.30	0.00	27.30	27.90	38.40	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 6:15 PM	240.00	8.50	36.50	26.20	0.00	26.20	26.70	36.50	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/2/15 6:30 PM	219.00	10.40	3															



US Army Corps
of Engineers®

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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		
8/4/15 3:45 AM	259.00	2.20	28.30	17.80	0.00	17.80	10.80	28.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 4:00 AM	239.00	1.90	31.80	18.20	0.00	18.20	11.30	31.80	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 4:15 AM	269.00	1.90	33.60	16.20	0.00	16.20	12.40	33.60	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 4:30 AM	260.00	2.40	33.20	16.20	0.00	16.20	12.60	33.20	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 4:45 AM	252.00	2.00	32.00	16.30	0.00	16.30	12.00	32.00	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 5:00 AM	237.00	1.70	31.40	0.00	0.00	0.00	13.60	31.40	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 5:15 AM	245.00	1.70	36.10	34.90	0.00	34.90	15.10	36.10	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 5:30 AM	230.00	2.00	37.10	0.00	0.00	0.00	22.70	37.10	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 5:45 AM	267.00	1.80	38.20	37.70	0.00	37.70	21.80	38.20	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 6:00 AM	234.00	1.50	40.70	29.70	0.00	29.70	17.80	40.70	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 6:15 AM	240.00	1.90	41.60	27.20	0.00	27.20	20.80	41.60	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 6:30 AM	231.00	2.10	38.00	25.80	0.00	25.80	20.20	38.00	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 6:45 AM	231.00	1.70	37.10	0.00	0.00	0.00	18.80	37.10	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 7:00 AM	241.00	1.90	35.40	0.00	0.00	0.00	20.00	35.40	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 7:15 AM	246.00	2.50	38.20	23.50	0.00	23.50	22.50	38.20	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 7:30 AM	256.00	2.70	38.50	20.70	0.00	20.70	22.90	38.50	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 7:45 AM	254.00	2.30	34.50	22.00	0.00	22.00	23.40	34.50	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 8:00 AM	253.00	2.60	36.00	23.10	0.00	23.10	25.60	36.00	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 8:15 AM	268.00	2.20	36.30	27.80	0.00	27.80	29.70	36.30	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 8:30 AM	284.00	1.20	11.30	33.40	22.10	27.90	33.40	34.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 8:45 AM	259.00	3.20	31.50	29.20	0.00	29.20	30.30	31.50	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 9:00 AM	230.00	2.20	33.10	29.60	0.00	29.60	34.10	33.10	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 9:15 AM	228.00	1.90	33.00	30.60	0.00	30.60	35.60	33.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 9:30 AM	288.00	2.80	13.90	234.40	220.50	40.20	234.40	32.10	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 9:45 AM	257.00	4.20	27.10	30.40	3.30	30.40	30.10	27.10	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 10:00 AM	222.00	3.90	19.40	22.00	2.60	22.00	22.20	19.40	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 10:15 AM	242.00	3.60	13.50	17.40	2.90	17.40	8.70	13.50	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 10:30 AM	294.00	4.00	7.70	13.00	5.30	14.10	13.00	13.50	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 10:45 AM	252.00	4.30	11.70	17.10	5.40	17.10	4.40	11.70	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 11:00 AM	278.00	3.70	8.40	3.70	0.00	16.90	3.70	12.20	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 11:15 AM	300.00	5.90	7.70	10.30	2.60	16.00	10.30	12.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 11:30 AM	288.00	5.60	9.10	119.30	110.20	16.80	119.30	10.30	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 11:45 AM	247.00	5.70	10.00	415.60	405.60	415.60	2.40	10.00	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 12:00 PM	263.00	3.10	11.20	79.80	68.60	79.80	639.50	11.20	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 12:15 PM	266.00	5.30	11.30	19.00	7.70	19.00	8.80	11.30	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 12:30 PM	306.00	3.40	9.30	8.50	0.00	19.00	8.50	11.20	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 12:45 PM	253.00	4.90	11.70	18.80	7.10	18.80	4.30	11.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 1:00 PM	262.00	4.50	12.50	18.40	5.90	18.40	4.00	12.50	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 1:15 PM	266.00	3.20	12.90	21.20	8.30	21.20	6.70	12.90	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 1:30 PM	233.00	5.30	13.60	29.00	15.40	29.00	9.00	13.60	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 1:45 PM	257.00	3.30	13.60	19.70	6.10	19.70	9.20	13.60	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 2:00 PM	298.00	2.90	10.70	7.50	0.00	17.40	7.50	12.90	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 2:15 PM	257.00	3.10	13.30	16.90	3.60	16.90	8.70	13.30	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 2:30 PM	323.00	5.10	10.20	8.70	0.00	16.90	8.70	13.00	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 2:45 PM	263.00	5.20	13.50	936.50	923.00	936.50	5.60	13.50	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 3:00 PM	268.00	4.20	13.00	16.80	3.80	16.80	7.90	13.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 3:15 PM	245.00	3.80	13.80	21.20	7.40	21.20	110.20	13.80	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 3:30 PM	270.00	3.10	9.40	6.50	0.00	18.70	6.50	13.30	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 3:45 PM	296.00	3.60	9.80	380.20	370.40	26.40	380.20	15.10	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 4:00 PM	331.00	2.70	9.20	8.90	0.00	18.00	8.90	13.50	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 4:15 PM	254.00	5.00	13.70	17.10	3.40	17.10	21.80	13.70	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 4:30 PM	324.00	3.30	9.30	6.70	0.00	0.00	6.70	13.80	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 4:45 PM	10.00	0.80	19.70	14.90	0.00	19.70	9.20	14.90	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 5:00 PM	8.00	4.50	17.70	15.70	0.00	17.70	9.20	15.70	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 5:15 PM	21.00	1.10	17.40	15.50	0.00	17.40	8.10	15.50	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 5:30 PM	337.00	1.10	8.60	8.40	0.00	19.00	8.40	15.50	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 5:45 PM	76.00	4.20	16.30	15.80	0.00	16.30	10.40	15.80	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 6:00 PM	57.00	3.50	16.30	15.40	0.00	16.30	8.20	15.40	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 6:15 PM	34.00	4.70	15.30	15.40	0.10	15.30	11.30	15.40	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 6:30 PM	39.00	4.40	17.50	16.30	0.00	17.50	7.50	16.30	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 6:45 PM	46.00	6.70	36.20	23.70	0.00	36.20	15.50	23.70	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 7:00 PM	55.00	5.40	42.60	26.50	0.00	42.60	25.50	26.50	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 7:15 PM	59.00	4.20	38.30	27.90	0.00	38.30	28.10	27.90	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 7:30 PM	40.00	4.20	0.00	19.90	0.00	0.00	16.40	19.90	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 7:45 PM	81.00	2.90	18.60	22.40	3.80	18.60	17.20	22.40	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 8:00 PM	61.00	1.70	16.20	23.00	6.80	16.20	5.50	23.00	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 8:15 PM	42.00	2.70	17.10	23.50	6.40	17.10	5.20	23.50	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 8:30 PM	58.00	3.10	17.90	24.50	6.60	17.90	6.00	24.50	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 8:45 PM	61.00	2.10	15.40	26.90	11.50	15.40	11.00	26.90	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/4/15 9:00 PM	50.00	3.20	20.80	27.80	7.													



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (ug/m ³)							Naphthalene (ug/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/5/15 5:00 AM	220.00	2.30	31.00	22.40	0.00	22.40	27.40	31.00	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 5:15 AM	209.00	1.40	32.40	22.00	0.00	22.00	30.10	32.40	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 5:30 AM	250.00	0.60	43.50	21.40	0.00	21.40	32.60	43.50	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 5:45 AM	239.00	0.90	36.10	21.40	0.00	21.40	31.80	36.10	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 6:00 AM	276.00	0.70	13.20	25.20	12.00	18.80	25.20	26.50	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 6:15 AM	208.00	1.10	26.60	20.40	0.00	20.40	26.00	26.60	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 6:30 AM	210.00	0.80	27.00	19.70	0.00	19.70	27.30	27.00	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 6:45 AM	221.00	1.10	25.30	21.00	0.00	21.00	28.70	25.30	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 7:00 AM	218.00	1.30	26.90	21.20	0.00	21.20	29.00	26.90	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 7:15 AM	245.00	1.20	29.30	23.50	0.00	23.50	33.90	29.30	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 7:30 AM	244.00	1.20	35.80	23.50	0.00	23.50	39.60	35.80	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 7:45 AM	322.00	0.40	14.60	36.50	21.90	26.40	36.50	34.30	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 8:00 AM	275.00	0.70	14.00	33.10	19.10	26.80	33.10	30.70	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 8:15 AM	245.00	1.10	27.80	26.70	0.00	26.70	84.00	27.80	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 8:30 AM	274.00	1.20	13.40	47.20	33.80	29.30	47.20	23.80	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 8:45 AM	255.00	0.70	19.00	25.50	6.50	25.50	30.10	19.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 9:00 AM	354.00	1.00	12.80	29.30	16.50	23.60	29.30	17.60	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 9:15 AM	349.00	1.30	12.70	37.20	24.50	24.00	37.20	15.60	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 9:30 AM	308.00	0.90	11.80	26.70	14.90	23.50	26.70	14.40	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 9:45 AM	328.00	1.00	11.60	23.90	12.30	23.70	23.90	13.90	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 10:00 AM	143.00	1.50	25.10	11.30	0.00	28.50	25.10	13.70	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 10:15 AM	93.00	2.70	19.20	10.80	0.00	26.20	19.20	12.70	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 10:30 AM	39.00	2.10	30.50	13.40	0.00	30.50	24.60	13.40	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 10:45 AM	51.00	2.10	44.70	15.90	0.00	44.70	34.20	15.90	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 11:00 AM	41.00	3.50	48.00	15.70	0.00	48.00	37.90	15.70	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 11:15 AM	358.00	3.00	18.10	9.70	0.00	51.80	9.70	16.10	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 11:30 AM	321.00	1.90	18.40	3.20	0.00	151.80	3.20	7.80	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 11:45 AM	126.00	2.10	9.70	17.70	8.00	0.00	9.70	8.40	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 12:00 PM	119.00	2.60	212.10	19.10	0.00	36.20	212.10	10.90	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 12:15 PM	129.00	2.50	43.00	14.50	0.00	33.70	43.00	12.60	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 12:30 PM	50.00	4.80	28.00	11.70	0.00	28.00	1813.30	11.70	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 12:45 PM	75.00	4.80	12.60	9.00	0.00	12.60	24.70	9.00	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 1:00 PM	67.00	4.80	21.10	6.80	0.00	21.10	3.40	6.80	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 1:15 PM	72.00	4.20	14.80	10.70	0.00	14.80	18.10	10.70	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 1:30 PM	44.00	5.10	33.90	18.20	0.00	33.90	20.90	18.20	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 1:45 PM	90.00	3.70	50.80	12.90	0.00	28.30	50.80	18.50	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 2:00 PM	98.00	4.00	13.50	8.40	0.00	25.10	13.50	15.30	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 2:15 PM	113.00	3.90	21.10	10.00	0.00	16.80	21.10	15.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 2:30 PM	55.00	4.90	22.10	21.20	0.00	22.10	46.40	21.20	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 2:45 PM	75.00	4.90	19.90	19.70	0.00	19.90	25.20	19.70	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 3:00 PM	65.00	4.60	17.20	19.80	2.60	17.20	26.90	19.80	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 3:15 PM	88.00	4.50	14.20	20.50	6.30	14.20	25.30	20.50	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 3:30 PM	61.00	5.10	16.60	20.20	3.60	16.60	17.30	20.20	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 3:45 PM	63.00	5.20	0.00	23.50	0.00	0.00	18.60	23.50	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 4:00 PM	75.00	5.20	0.00	29.50	0.00	0.00	21.60	29.50	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 4:15 PM	55.00	5.90	21.00	23.80	2.80	21.00	19.40	23.80	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 4:30 PM	62.00	7.20	34.00	32.70	0.00	34.00	24.30	32.70	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 4:45 PM	61.00	5.30	26.80	40.70	13.90	26.80	39.70	40.70	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 5:00 PM	77.00	5.20	20.20	42.00	21.80	20.20	18.90	42.00	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 5:15 PM	70.00	5.30	21.30	50.10	28.80	21.30	126.10	50.10	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 5:30 PM	60.00	6.00	27.80	41.40	13.60	27.80	33.60	41.40	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 5:45 PM	75.00	4.90	31.60	47.60	16.00	31.60	25.10	47.60	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 6:00 PM	83.00	5.10	30.20	42.60	12.40	30.20	24.00	42.60	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 6:15 PM	81.00	4.40	0.00	31.40	0.00	0.00	21.30	31.40	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 6:30 PM	81.00	6.10	20.50	24.60	4.10	20.50	8.40	24.60	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 6:45 PM	82.00	5.60	0.00	27.40	0.00	0.00	18.60	27.40	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 7:00 PM	83.00	5.20	19.50	27.80	8.30	19.50	23.10	27.80	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 7:15 PM	69.00	6.20	25.40	25.30	0.00	25.40	11.70	25.30	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 7:30 PM	76.00	6.00	26.00	30.80	4.80	26.00	12.30	30.80	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 7:45 PM	78.00	4.60	22.00	32.80	10.80	22.00	14.60	32.80	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 8:00 PM	75.00	5.30	17.80	34.00	16.20	17.80	12.40	34.00	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 8:15 PM	75.00	4.50	21.90	34.00	12.10	21.90	35.00	34.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 8:30 PM	81.00	5.10	0.00	35.00	0.00	0.00	13.00	35.00	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 8:45 PM	74.00	4.60	25.00	38.20	13.20	25.00	17.70	38.20	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 9:00 PM	84.00	5.10	22.30	41.00	18.70	22.30	20.60	41.00	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 9:15 PM	78.00	4.80	25.50	42.50	17.00	25.50	18.70	42.50	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 9:30 PM	79.00	4.80	23.80	44.00	20.20	23.80	23.90	44.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 9:45 PM	77.00	4.00	20.90	40.30	19.40	20.90	21.20	40.30	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 10:00 PM	78.00	5.00	20.10	43.90	23.80	20.10	21.30	43.90	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/5/15 10:15 PM	77.00	6.00														



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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 8/6/15 6:15 AM to 8/7/15 7:15 AM.



US Army Corps
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Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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		
8/7/15 7:30 AM	157.00	3.80	11.60	6.40	0.00	13.60	11.60	13.30	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 7:45 AM	157.00	3.20	10.70	8.60	0.00	10.90	10.70	15.60	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 8:00 AM	153.00	3.30	0.00	8.70	0.00	15.50	0.00	14.60	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 8:15 AM	165.00	3.60	12.30	6.70	0.00	17.60	12.30	6.70	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 8:30 AM	157.00	4.30	14.00	5.90	0.00	21.40	14.00	8.10	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 8:45 AM	170.00	3.10	6.00	6.50	0.50	13.10	6.00	7.10	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 9:00 AM	165.00	3.90	6.30	5.80	0.00	15.40	6.30	6.00	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 9:15 AM	173.00	4.10	6.30	5.60	0.00	14.50	6.30	2.90	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 9:30 AM	168.00	4.20	0.00	6.60	0.00	2036.30	0.00	5.50	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 9:45 AM	165.00	3.80	4.50	5.80	1.30	354.30	4.50	5.80	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 10:00 AM	170.00	3.70	4.90	6.00	1.10	44.60	4.90	3.40	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 10:15 AM	150.00	5.10	11.90	6.40	0.00	16.40	11.90	3.90	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 10:30 AM	165.00	3.10	80.20	6.50	0.00	16.80	80.20	4.60	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 10:45 AM	144.00	3.50	6.80	6.10	0.00	17.90	6.80	2.70	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 11:00 AM	147.00	3.50	4.50	5.80	1.30	156.00	4.50	4.70	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 11:15 AM	190.00	3.90	3.30	99.40	96.10	99.40	4.80	3.30	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 11:30 AM	132.00	3.40	7.30	7.30	0.00	1767.20	7.30	5.20	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 11:45 AM	103.00	1.40	65.80	8.00	0.00	0.00	65.80	5.70	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 12:00 PM	135.00	4.60	8.00	8.40	0.40	182.10	8.00	6.20	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 12:15 PM	150.00	3.40	10.80	8.40	0.00	262.90	10.80	9.50	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 12:30 PM	141.00	3.00	36.90	6.90	0.00	32.90	36.90	8.20	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 12:45 PM	129.00	3.90	9.00	5.90	0.00	151.60	9.00	8.60	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 1:00 PM	95.00	3.50	8.80	4.80	0.00	32.20	8.80	18.90	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 1:15 PM	99.00	3.20	12.90	4.30	0.00	15.30	12.90	10.60	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 1:30 PM	128.00	2.60	10.40	4.10	0.00	18.40	10.40	9.40	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 1:45 PM	125.00	5.70	10.90	4.50	0.00	19.50	10.90	10.10	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 2:00 PM	187.00	4.40	17.10	13.90	0.00	13.90	17.10	17.10	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 2:15 PM	106.00	3.70	15.10	4.50	0.00	16.60	15.10	21.80	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 2:30 PM	196.00	4.60	9.90	112.40	102.50	112.40	32.70	9.90	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 2:45 PM	178.00	3.90	9.60	6.20	0.00	106.80	9.60	9.20	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 3:00 PM	172.00	4.00	17.30	5.80	0.00	356.70	17.30	8.80	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 3:15 PM	172.00	4.60	15.50	5.80	0.00	15.60	15.50	10.70	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 3:30 PM	140.00	4.40	8.10	6.40	0.00	16.60	8.10	8.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 3:45 PM	156.00	5.90	7.20	6.50	0.00	182.90	7.20	15.60	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 4:00 PM	147.00	4.10	11.60	8.10	0.00	13.70	11.60	8.80	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 4:15 PM	144.00	3.70	6.70	7.00	0.30	13.80	6.70	8.40	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 4:30 PM	191.00	3.80	11.50	16.60	5.10	16.60	10.10	11.50	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 4:45 PM	178.00	3.00	9.30	6.60	0.00	14.20	9.30	8.40	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 5:00 PM	169.00	3.80	22.50	6.70	0.00	14.00	22.50	9.40	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 5:15 PM	159.00	4.90	7.70	5.80	0.00	14.40	7.70	9.30	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 5:30 PM	184.00	5.20	11.60	14.80	3.20	14.80	12.40	11.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 5:45 PM	209.00	5.50	12.20	15.50	3.30	15.50	9.90	12.20	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 6:00 PM	192.00	3.90	11.40	15.10	3.70	15.10	15.90	11.40	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 6:15 PM	187.00	3.80	11.00	14.90	3.90	14.90	20.90	11.00	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 6:30 PM	192.00	3.60	11.20	14.60	3.40	14.60	11.80	11.20	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 6:45 PM	194.00	5.10	12.30	14.40	2.10	14.40	11.90	12.30	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 7:00 PM	197.00	3.50	9.90	13.50	3.60	13.50	25.10	9.90	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 7:15 PM	198.00	3.60	10.80	14.70	3.90	14.70	10.00	10.80	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 7:30 PM	183.00	3.00	10.90	15.40	4.50	15.40	8.90	10.90	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 7:45 PM	197.00	4.20	11.90	13.30	1.40	13.30	9.40	11.90	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 8:00 PM	188.00	3.20	12.40	0.00	0.00	0.00	10.00	12.40	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 8:15 PM	189.00	3.70	14.70	15.20	0.50	15.20	11.80	14.70	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 8:30 PM	173.00	2.20	12.00	6.50	0.00	14.40	12.00	14.90	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 8:45 PM	171.00	3.70	12.60	7.30	0.00	14.40	12.60	16.90	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 9:00 PM	186.00	2.80	17.10	14.80	0.00	14.80	12.10	17.10	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 9:15 PM	176.00	2.90	13.10	6.60	0.00	15.10	13.10	19.00	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 9:30 PM	180.00	2.40	21.30	19.40	0.00	19.40	18.10	21.30	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 9:45 PM	210.00	3.80	24.20	21.30	0.00	21.30	18.30	24.20	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 10:00 PM	190.00	2.50	23.60	16.90	0.00	16.90	15.80	23.60	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 10:15 PM	192.00	3.10	24.80	18.80	0.00	18.80	18.40	24.80	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 10:30 PM	186.00	3.10	23.20	16.90	0.00	16.90	17.30	23.20	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 10:45 PM	184.00	2.70	23.80	21.50	0.00	21.50	17.90	23.80	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 11:00 PM	163.00	3.10	19.10	4.20	0.00	18.80	19.10	27.60	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 11:15 PM	183.00	2.90	27.10	20.60	0.00	20.60	19.80	27.10	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 11:30 PM	182.00	3.10	26.60	18.20	0.00	18.20	18.80	26.60	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/7/15 11:45 PM	193.00	2.50	27.50	15.90	0.00	15.90	19.90	27.50	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/8/15 12:00 AM	174.00	3.50	21.30	6.00	0.00	17.20	21.30	30.70	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/8/15 12:15 AM	170.00	3.10	21.70	5.20	0.00	17.80	21.70	28.90	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/8/15 12:30 AM	168.00	3.00	20.40	5.10	0.00	17.40	20.40	30.50	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/8/15 12:45 AM	192.00	2.40	30.50	17.40	0.00	17.40	20.40	30.50	5.00	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
August 2015

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
8/10/15 11:15 AM	357.00	4.00	11.50	34.50	23.00	244.50	34.50	4.60	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 11:30 AM	29.00	3.40	36.50	4.20	0.00	36.50	33.70	4.20	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 11:45 AM	31.00	4.50	33.90	4.60	0.00	33.90	43.00	4.60	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 12:00 PM	52.00	3.00	34.10	4.00	0.00	34.10	34.40	4.00	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 12:15 PM	18.00	3.60	35.30	3.90	0.00	35.30	36.80	3.90	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 12:30 PM	39.00	4.10	39.50	3.20	0.00	39.50	36.30	3.20	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 12:45 PM	42.00	3.50	34.80	5.00	0.00	34.80	24.80	5.00	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 1:00 PM	32.00	3.50	28.60	5.10	0.00	28.60	20.00	5.10	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 1:15 PM	55.00	3.20	31.40	4.80	0.00	31.40	92.70	4.80	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 1:30 PM	9.00	2.20	30.00	4.50	0.00	30.00	22.70	4.50	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 1:45 PM	18.00	6.70	30.00	4.60	0.00	30.00	24.50	4.60	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 2:00 PM	26.00	5.90	51.00	4.50	0.00	51.00	22.10	4.50	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 2:15 PM	23.00	6.00	34.90	5.10	0.00	34.90	30.00	5.10	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 2:30 PM	32.00	4.50	34.20	3.80	0.00	34.20	24.40	3.80	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 2:45 PM	56.00	3.40	121.10	3.10	0.00	121.10	18.80	3.10	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 3:00 PM	27.00	8.90	24.50	3.20	0.00	24.50	11.90	3.20	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 3:15 PM	22.00	10.30	34.50	4.30	0.00	34.50	51.70	4.30	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 3:30 PM	22.00	4.50	28.70	5.80	0.00	28.70	29.70	5.80	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 3:45 PM	33.00	4.00	34.80	14.20	0.00	34.80	35.70	14.20	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 4:00 PM	345.00	6.00	13.10	35.90	22.80	28.80	35.90	14.70	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 4:15 PM	346.00	5.80	4.40	19.50	15.10	8.90	19.50	6.70	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 4:30 PM	339.00	5.20	9.00	17.30	8.30	14.30	17.30	10.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 4:45 PM	339.00	3.80	7.40	11.90	4.50	13.90	11.90	8.90	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 5:00 PM	278.00	2.80	4.40	5.50	1.10	9.70	5.50	0.60	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 5:15 PM	275.00	1.50	4.00	3.10	0.00	7.70	3.10	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 5:30 PM	298.00	2.20	3.80	3.00	0.00	6.80	3.00	1.40	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 5:45 PM	314.00	3.30	4.40	3.70	0.00	0.00	3.70	3.00	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 6:00 PM	332.00	3.10	4.90	5.10	0.20	7.50	5.10	4.70	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 6:15 PM	320.00	3.30	5.10	5.90	0.80	7.70	5.90	8.20	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 6:30 PM	337.00	4.20	5.90	9.90	4.00	9.70	9.90	23.60	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 6:45 PM	8.00	5.60	11.50	29.20	17.70	11.50	12.50	29.20	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 7:00 PM	351.00	7.20	5.90	14.10	8.20	12.70	14.10	23.80	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 7:30 PM	349.00	4.70	4.40	10.30	5.90	9.20	10.30	21.00	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 7:45 PM	344.00	4.40	3.90	8.20	4.30	18.00	8.20	10.30	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 8:00 PM	337.00	3.50	3.80	6.60	2.80	8.70	6.60	8.10	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 8:15 PM	346.00	5.00	4.10	9.20	5.10	8.40	9.20	11.00	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 8:30 PM	345.00	4.50	4.50	13.10	8.60	9.60	13.10	15.70	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 8:45 PM	347.00	4.90	5.10	16.30	11.20	11.60	16.30	20.80	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 9:00 PM	339.00	3.00	5.90	22.70	16.80	16.60	22.70	31.40	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 9:15 PM	339.00	3.10	8.30	38.60	30.30	21.60	38.60	45.30	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 9:30 PM	340.00	2.90	9.00	57.30	48.30	23.90	57.30	45.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 9:45 PM	330.00	3.00	10.30	59.70	49.40	26.10	59.70	98.70	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 10:00 PM	335.00	3.10	10.30	62.50	52.20	26.40	62.50	115.40	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 10:15 PM	323.00	2.70	10.90	72.20	61.30	28.00	72.20	137.10	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 10:30 PM	344.00	3.00	10.50	69.30	58.80	27.80	69.30	142.10	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 10:45 PM	334.00	2.10	10.50	67.10	56.60	27.40	67.10	122.20	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 11:00 PM	319.00	1.80	9.60	61.40	51.80	26.00	61.40	101.90	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 11:15 PM	286.00	1.80	10.00	55.80	45.80	25.40	55.80	94.60	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 11:30 PM	275.00	1.80	10.10	59.60	49.50	28.00	59.60	93.30	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/15 11:45 AM	197.00	1.00	85.50	24.40	0.00	24.40	52.50	85.50	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 12:00 AM	200.00	0.50	73.30	22.10	0.00	22.10	47.10	73.30	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 12:15 AM	204.00	0.90	77.50	25.10	0.00	25.10	50.00	77.50	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 12:30 AM	236.00	1.60	72.20	24.80	0.00	24.80	42.40	72.20	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 12:45 AM	270.00	1.20	12.50	41.60	29.10	23.50	41.60	65.50	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 1:00 AM	166.00	0.90	40.90	12.40	0.00	24.60	40.90	57.00	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 1:15 AM	192.00	1.20	84.80	27.10	0.00	27.10	44.90	84.80	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 1:30 AM	208.00	0.80	119.50	33.10	0.00	33.10	46.00	119.50	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 1:45 AM	269.00	0.30	124.30	31.30	0.00	31.30	49.60	124.30	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 2:00 AM	118.00	0.70	53.80	13.30	0.00	29.90	53.80	107.20	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 2:15 AM	263.00	0.50	115.10	29.60	0.00	29.60	53.20	115.10	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 2:30 AM	146.00	0.80	50.50	13.40	0.00	28.90	50.50	113.00	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 2:45 AM	232.00	0.60	101.60	27.40	0.00	27.40	46.30	101.60	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 3:00 AM	253.00	0.60	91.60	25.80	0.00	25.80	47.60	91.60	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 3:15 AM	289.00	2.20	12.30	45.00	32.70	25.80	45.00	96.30	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 3:30 AM	283.00	2.10	10.70	38.00	27.30	21.10	38.00	85.00	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 3:45 AM	278.00	1.90	10.50	30.80	20.30	20.20	30.80	89.20	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 4:00 AM	231.00	0.90	82.30	20.20	0.00	20.20	29.20	82.30	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 4:15 AM	275.00	1.50	9.90	26.00	16.10	19.40	26.00	66.60	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 4:30 AM	356.00	1.30	9.80	23.70	13.90	20.40	23.70	50.60	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00



US Army Corps
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Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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
8/11/15 12:45 PM	18.00	6.80	6.60	0.30	0.00	6.60	5.20	0.30	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 1:00 PM	13.00	5.30	6.70	0.30	0.00	6.70	12.80	0.30	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 1:15 PM	28.00	5.80	13.40	0.00	0.00	13.40	6.20	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 1:30 PM	41.00	6.90	25.80	0.10	0.00	25.80	8.10	0.10	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 1:45 PM	33.00	8.30	8.40	0.60	0.00	8.40	10.80	0.60	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 2:00 PM	26.00	7.00	8.00	0.60	0.00	8.00	7.30	0.60	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 2:15 PM	26.00	6.30	6.80	0.50	0.00	6.80	6.60	0.50	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 2:30 PM	20.00	7.30	7.50	0.30	0.00	7.50	0.00	0.30	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 2:45 PM	11.00	8.20	6.40	0.40	0.00	6.40	3.70	0.40	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 3:00 PM	36.00	5.90	6.70	0.30	0.00	6.70	11.70	0.30	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 3:15 PM	33.00	6.60	7.60	0.20	0.00	7.60	9.40	0.20	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 3:30 PM	36.00	6.80	8.30	0.90	0.00	8.30	5.70	0.90	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 3:45 PM	23.00	9.10	7.70	0.70	0.00	7.70	8.00	0.70	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 4:00 PM	46.00	8.70	8.50	0.90	0.00	8.50	5.80	0.90	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 4:15 PM	17.00	8.50	8.00	1.70	0.00	8.00	11.30	1.70	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 4:30 PM	27.00	6.50	9.60	1.80	0.00	9.60	8.90	1.80	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 4:45 PM	39.00	8.50	8.10	2.90	0.00	8.10	8.40	2.90	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 5:00 PM	43.00	7.00	17.50	2.80	0.00	17.50	16.50	2.80	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 5:15 PM	38.00	6.20	7.50	3.20	0.00	7.50	8.60	3.20	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 5:30 PM	23.00	6.90	6.50	1.20	0.00	6.50	1.90	1.20	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 5:45 PM	36.00	7.60	5.60	0.00	0.00	5.60	2.50	0.00	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 6:00 PM	33.00	5.60	5.70	0.40	0.00	5.70	0.80	0.40	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 6:15 PM	18.00	7.60	4.70	-0.40	0.00	4.70	-0.30	-0.40	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 6:30 PM	38.00	5.80	4.80	0.00	0.00	4.80	1.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 6:45 PM	48.00	5.40	5.30	0.10	0.00	5.30	0.70	0.10	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 7:00 PM	40.00	5.90	5.20	-0.20	0.00	5.20	0.30	-0.20	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 7:15 PM	28.00	5.60	5.00	0.20	0.00	5.00	-0.70	0.20	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 7:30 PM	35.00	3.20	6.00	0.10	0.00	6.00	-0.60	0.10	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 7:45 PM	37.00	3.90	5.30	0.00	0.00	5.30	0.30	0.00	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 8:00 PM	35.00	3.30	5.70	0.40	0.00	5.70	-0.60	0.40	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 8:15 PM	32.00	3.70	0.00	0.10	0.00	0.00	-0.20	0.10	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 8:30 PM	28.00	2.40	5.80	0.40	0.00	5.80	2.70	0.40	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 8:45 PM	56.00	1.40	5.50	0.50	0.00	5.50	2.00	0.50	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 9:00 PM	225.00	1.00	1.40	6.00	4.60	6.00	1.30	1.40	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 9:15 PM	220.00	1.00	1.30	7.20	5.90	7.20	1.60	1.30	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 9:30 PM	260.00	1.10	0.70	6.40	5.70	6.40	0.50	0.70	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 9:45 PM	228.00	0.80	2.40	6.80	4.40	6.80	8.00	2.40	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 10:00 PM	258.00	0.90	3.50	0.00	0.00	0.00	4.80	3.50	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 10:15 PM	282.00	0.70	6.00	3.60	0.00	4.60	3.60	3.80	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 10:30 PM	310.00	0.90	5.60	2.80	0.00	5.30	2.80	7.30	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 10:45 PM	252.00	0.90	3.60	4.40	0.80	4.40	3.40	3.60	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 11:00 PM	241.00	0.90	3.60	3.60	0.00	3.60	6.10	3.60	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 11:15 PM	259.00	1.70	4.10	3.70	0.00	3.70	4.80	4.10	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 11:30 PM	232.00	0.80	6.10	2.90	0.00	2.90	4.50	6.10	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/15 11:45 PM	292.00	0.90	2.30	3.30	1.00	2.70	3.30	5.10	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 12:00 AM	323.00	1.30	2.20	4.40	2.20	3.20	4.40	8.90	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 12:15 AM	216.00	0.70	14.90	3.30	0.00	3.30	5.10	14.90	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 12:30 AM	139.00	0.30	8.90	2.80	0.00	3.80	8.90	14.60	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 12:45 AM	185.00	0.40	19.40	3.70	0.00	3.70	9.60	19.40	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 1:00 AM	72.00	0.80	4.60	21.10	16.50	4.60	10.60	21.10	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 1:15 AM	332.00	0.40	3.70	11.70	8.00	8.10	11.70	20.50	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 1:30 AM	328.00	0.50	3.50	14.20	10.70	4.80	14.20	21.00	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 1:45 AM	206.00	0.90	24.30	5.00	0.00	5.00	15.50	24.30	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 2:00 AM	271.00	0.60	2.70	11.80	9.10	7.20	11.80	27.00	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 2:15 AM	46.00	2.80	6.20	31.30	25.10	6.20	10.80	31.30	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 2:30 AM	36.00	3.20	4.40	38.20	33.80	4.40	6.30	38.20	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 2:45 AM	48.00	2.90	4.00	31.50	27.50	4.00	3.20	31.50	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 3:00 AM	303.00	1.70	4.00	4.20	0.20	4.10	4.20	27.20	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 3:15 AM	20.00	1.90	4.00	22.90	18.90	4.00	5.40	22.90	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 3:30 AM	149.00	0.70	5.40	4.40	0.00	0.00	5.40	17.30	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 3:45 AM	335.00	1.00	3.80	7.20	3.40	4.20	7.20	20.50	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 4:00 AM	37.00	3.30	4.80	27.70	22.90	4.80	8.20	27.70	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 4:15 AM	44.00	3.70	4.20	23.40	19.20	4.20	9.30	23.40	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 4:30 AM	43.00	4.00	4.90	27.00	22.10	4.90	13.70	27.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 4:45 AM	34.00	3.60	4.60	24.80	20.20	4.60	12.60	24.80	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 5:00 AM	37.00	3.50	4.70	25.30	20.60	4.70	15.40	25.30	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 5:15 AM	24.00	2.40	5.20	23.40	18.20	5.20	18.00	23.40	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 5:30 AM	27.00	2.40	8.40	38.20	29.80	8.40	27.10	38.20	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 5:45 AM	345.00	1.70	2.60	28.30	25.70	0.00	28.30	32.30	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 6:00 AM	28.00	2.10	15.60	27.10	11.50	15.60	32.90	27.10	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 6:15 AM	33.00	3.10	5.00	21.20	16.20	5.00	20.20	21.20	2.00	0.00						



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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
8/12/15 2:00 PM	56.00	4.40	8.30	4.20	0.00	8.30	4.10	4.20	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 2:15 PM	71.00	5.80	6.40	2.80	0.00	6.40	8.70	2.80	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 2:30 PM	17.00	5.80	7.20	1.80	0.00	7.20	8.80	1.80	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 2:45 PM	50.00	3.60	6.40	2.00	0.00	6.40	140.10	2.00	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 3:00 PM	15.00	4.30	41.30	2.90	0.00	41.30	48.90	2.90	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 3:15 PM	42.00	3.80	6.90	1.70	0.00	6.90	8.00	1.70	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 3:30 PM	16.00	6.00	7.20	2.50	0.00	7.20	10.40	2.50	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 3:45 PM	64.00	3.70	7.70	3.10	0.00	7.70	3.80	3.10	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 4:00 PM	41.00	3.70	0.00	2.80	0.00	0.00	3.50	2.80	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 4:15 PM	31.00	5.00	0.00	1.30	0.00	0.00	7.30	1.30	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 4:30 PM	15.00	4.40	7.20	1.80	0.00	7.20	5.60	1.80	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 4:45 PM	26.00	4.00	7.10	2.20	0.00	7.10	3.60	2.20	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 5:00 PM	43.00	3.90	5.60	1.80	0.00	5.60	5.20	1.80	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 5:15 PM	59.00	2.20	5.70	2.40	0.00	5.70	2.50	2.40	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 5:30 PM	22.00	3.60	7.90	3.80	0.00	7.90	16.70	3.80	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 5:45 PM	60.00	4.10	9.60	2.40	0.00	9.60	10.80	2.40	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 6:00 PM	105.00	3.30	6.10	7.70	1.60	0.00	6.10	1.60	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 6:15 PM	64.00	3.60	10.30	3.00	0.00	10.30	16.20	3.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 6:30 PM	76.00	3.60	8.20	3.20	0.00	8.20	33.40	3.20	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 6:45 PM	70.00	4.10	9.90	2.00	0.00	9.90	23.20	2.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 7:00 PM	91.00	3.00	13.40	8.20	0.00	13.40	13.40	6.10	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 7:15 PM	134.00	3.30	14.20	11.40	0.00	10.00	14.20	4.20	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 7:30 PM	122.00	2.80	23.00	5.60	0.00	7.10	23.00	5.40	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 7:45 PM	120.00	2.50	17.90	4.20	0.00	6.90	17.90	7.80	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 8:00 PM	136.00	2.70	29.30	4.40	0.00	12.40	29.30	13.10	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 8:15 PM	130.00	2.40	15.20	7.60	0.00	0.00	15.20	15.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 8:30 PM	162.00	1.90	4.00	7.60	3.60	12.70	4.00	4.80	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 8:45 PM	187.00	1.50	5.40	0.00	0.00	0.00	10.90	5.40	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 9:00 PM	164.00	2.20	5.90	4.90	0.00	7.40	5.90	6.10	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 9:15 PM	178.00	1.80	11.90	4.80	0.00	7.10	11.90	8.20	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 9:30 PM	175.00	2.10	11.10	4.60	0.00	0.00	11.10	12.20	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 9:45 PM	182.00	0.80	16.40	7.60	0.00	7.60	15.80	16.40	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 10:00 PM	226.00	1.30	27.00	18.50	0.00	18.50	20.10	27.00	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 10:15 PM	182.00	1.20	15.70	0.00	0.00	0.00	34.50	15.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 10:30 PM	352.00	0.20	5.50	20.00	14.50	14.90	20.00	18.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 10:45 PM	159.00	1.20	17.60	6.00	0.00	0.00	17.60	15.80	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 11:00 PM	153.00	1.50	17.30	6.90	0.00	10.70	17.30	15.90	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 11:15 PM	182.00	2.00	15.80	14.30	0.00	14.30	18.90	15.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 11:30 PM	197.00	2.00	23.20	12.70	0.00	12.70	17.00	23.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/15 11:45 PM	210.00	0.80	23.80	0.00	0.00	0.00	15.60	23.80	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 12:00 AM	204.00	1.40	23.10	14.30	0.00	14.30	18.10	23.10	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 12:15 AM	196.00	1.70	15.60	0.00	0.00	0.00	13.60	15.60	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 12:30 AM	196.00	1.40	16.90	14.50	0.00	14.50	17.50	16.90	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 12:45 AM	193.00	1.70	15.40	13.80	0.00	13.80	15.10	15.40	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 1:00 AM	204.00	1.70	18.20	13.90	0.00	13.90	16.20	18.20	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 1:15 AM	205.00	1.40	17.20	13.90	0.00	13.90	18.10	17.20	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 1:30 AM	0.00	0.00	0.00	0.00	0.00	13.10	15.70	18.40	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 1:45 AM	0.00	0.00	0.00	0.00	0.00	13.20	14.30	19.30	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 2:00 AM	0.00	0.00	0.00	0.00	0.00	13.70	16.50	20.90	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 2:15 AM	0.00	0.00	0.00	0.00	0.00	15.00	19.80	22.80	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 2:30 AM	213.00	1.70	23.30	15.40	0.00	15.40	22.00	23.30	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 2:45 AM	213.00	1.80	22.30	15.60	0.00	15.60	20.90	22.30	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 3:00 AM	213.00	2.10	20.30	14.70	0.00	14.70	17.90	20.30	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 3:15 AM	218.00	2.10	18.80	13.40	0.00	13.40	14.40	18.80	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 3:30 AM	203.00	1.70	16.00	12.90	0.00	12.90	13.00	16.00	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 3:45 AM	216.00	1.70	15.50	12.00	0.00	12.00	13.20	15.50	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 4:00 AM	209.00	2.10	16.10	13.00	0.00	13.00	12.50	16.10	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 4:15 AM	208.00	2.20	21.10	16.90	0.00	16.90	14.10	21.10	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 4:30 AM	206.00	2.50	25.30	21.60	0.00	21.60	14.00	25.30	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 4:45 AM	206.00	2.30	19.80	13.60	0.00	13.60	14.30	19.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 5:00 AM	197.00	1.90	18.40	13.20	0.00	13.20	14.50	18.40	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 5:15 AM	206.00	2.20	19.20	13.50	0.00	13.50	13.90	19.20	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 5:30 AM	198.00	2.10	38.20	24.70	0.00	24.70	15.70	38.20	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 5:45 AM	207.00	2.50	31.10	23.30	0.00	23.30	18.20	31.10	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 6:00 AM	204.00	2.40	26.90	16.10	0.00	16.10	19.90	26.90	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 6:15 AM	203.00	2.40	61.70	34.00	0.00	34.00	31.90	61.70	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 6:30 AM	191.00	2.50	29.60	0.00	0.00	0.00	31.90	29.60	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 6:45 AM	198.00	2.80	21.30	13.30	0.00	13.30	18.40	21.30	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 7:00 AM	201.00	2.20	20.00	13.00	0.00	13.00	18.30	20.00	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 7:15 AM	225.00	2.50	22.60	13.90	0.00	13.90	22.20	22.60	6.30	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
August 2015

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
8/13/15 3:15 PM	231.00	6.80	5.80	14.90	9.10	14.90	9.70	5.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 3:30 PM	211.00	6.70	6.60	20.00	13.40	20.00	11.00	6.60	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 3:45 PM	232.00	4.60	8.50	27.70	19.20	27.70	27.00	8.50	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 4:00 PM	238.00	6.80	7.80	17.00	9.20	17.00	10.90	7.80	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 4:15 PM	219.00	4.00	12.60	18.20	5.60	18.20	10.20	12.60	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 4:30 PM	208.00	3.60	7.10	15.50	8.40	15.50	10.40	7.10	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 4:45 PM	220.00	4.70	7.90	15.00	7.10	15.00	7.60	7.90	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 5:00 PM	254.00	5.10	7.70	14.40	6.70	14.40	14.20	7.70	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 5:15 PM	227.00	4.80	8.60	15.00	6.40	15.00	13.10	8.60	8.30	0.00	2.60	2.60	0.00	2.60	0.00	0.00
8/13/15 5:30 PM	225.00	6.30	12.50	15.60	3.10	15.60	9.60	12.50	8.70	0.00	4.90	4.90	0.00	4.90	0.00	0.00
8/13/15 5:45 PM	217.00	5.40	14.00	15.50	1.50	15.50	11.40	14.00	7.70	0.00	0.00	0.00	0.00	5.20	0.00	0.00
8/13/15 6:00 PM	211.00	6.10	11.90	14.60	2.70	14.60	18.10	11.90	7.40	0.00	0.00	0.00	0.00	4.30	0.00	0.00
8/13/15 6:15 PM	207.00	4.40	8.40	14.90	6.50	14.90	12.90	8.40	6.50	0.00	0.00	0.00	0.00	3.20	0.00	0.00
8/13/15 6:30 PM	235.00	5.10	11.00	14.10	3.10	14.10	7.70	11.00	6.60	0.00	6.20	6.20	0.00	6.20	0.00	0.00
8/13/15 6:45 PM	225.00	5.80	10.20	14.30	4.10	14.30	10.90	10.20	6.80	0.00	5.80	5.80	0.00	5.80	0.00	0.00
8/13/15 7:00 PM	225.00	4.20	10.90	14.10	3.20	14.10	11.40	10.90	7.40	0.00	4.50	4.50	0.00	4.50	0.00	0.00
8/13/15 7:15 PM	212.00	4.20	13.20	15.30	2.10	15.30	11.40	13.20	7.90	0.00	0.00	0.00	0.00	7.30	0.00	0.00
8/13/15 7:30 PM	219.00	4.70	16.60	14.80	0.00	14.80	13.90	16.60	7.10	0.00	0.00	0.00	0.00	8.60	0.00	0.00
8/13/15 7:45 PM	223.00	4.90	12.90	13.00	0.10	13.00	13.70	12.90	6.70	0.00	0.00	0.00	0.00	7.40	0.00	0.00
8/13/15 8:00 PM	215.00	3.70	18.40	13.80	0.00	13.80	16.20	18.40	6.20	0.00	0.00	0.00	0.00	8.20	0.00	0.00
8/13/15 8:15 PM	214.00	3.60	17.80	14.70	0.00	14.70	19.90	17.80	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 8:30 PM	221.00	5.30	20.70	14.30	0.00	14.30	19.90	20.70	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 8:45 PM	213.00	4.10	24.40	14.20	0.00	14.20	18.90	24.40	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 9:00 PM	213.00	3.40	26.90	14.90	0.00	14.90	19.10	26.90	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 9:15 PM	217.00	3.00	0.00	14.40	0.00	14.40	20.90	0.00	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 9:30 PM	218.00	3.20	31.50	15.30	0.00	15.30	22.20	31.50	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 9:45 PM	219.00	3.10	30.50	14.10	0.00	14.10	21.80	30.50	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 10:00 PM	211.00	3.40	31.00	15.10	0.00	15.10	22.20	31.00	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 10:15 PM	219.00	3.90	31.30	14.00	0.00	14.00	21.60	31.30	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 10:30 PM	218.00	3.60	35.90	14.90	0.00	14.90	23.90	35.90	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 10:45 PM	206.00	4.00	38.00	14.30	0.00	14.30	26.00	38.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 11:00 PM	213.00	3.30	40.90	14.20	0.00	14.20	26.50	40.90	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 11:15 PM	231.00	3.70	41.60	14.90	0.00	14.90	27.70	41.60	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 11:30 PM	235.00	3.60	44.50	15.40	0.00	15.40	28.60	44.50	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/13/15 11:45 PM	243.00	4.00	42.30	14.00	0.00	14.00	28.90	42.30	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 12:00 AM	233.00	3.00	42.00	14.60	0.00	14.60	30.10	42.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 12:15 AM	228.00	3.60	42.30	13.60	0.00	13.60	29.80	42.30	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 12:30 AM	216.00	2.70	42.10	13.30	0.00	13.30	28.40	42.10	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 12:45 AM	220.00	2.90	42.50	12.70	0.00	12.70	27.70	42.50	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 1:00 AM	212.00	2.90	44.50	13.60	0.00	13.60	29.60	44.50	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 1:15 AM	224.00	2.80	45.80	14.00	0.00	14.00	30.90	45.80	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 1:30 AM	219.00	2.60	45.90	13.70	0.00	13.70	31.10	45.90	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 1:45 AM	209.00	2.60	46.00	14.40	0.00	14.40	31.60	46.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 2:00 AM	203.00	2.80	48.10	14.80	0.00	14.80	32.50	48.10	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 2:15 AM	211.00	2.20	46.70	14.50	0.00	14.50	32.70	46.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 2:30 AM	204.00	2.70	44.10	14.40	0.00	14.40	32.40	44.10	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 2:45 AM	207.00	2.30	41.60	14.60	0.00	14.60	30.80	41.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 3:00 AM	213.00	3.20	41.10	14.80	0.00	14.80	30.40	41.10	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 3:15 AM	213.00	3.50	36.00	15.60	0.00	15.60	29.20	36.00	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 3:30 AM	221.00	3.20	34.00	15.80	0.00	15.80	28.20	34.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 3:45 AM	222.00	4.90	33.10	15.10	0.00	15.10	27.40	33.10	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 4:00 AM	221.00	4.90	30.90	0.00	0.00	0.00	25.10	30.90	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 4:15 AM	230.00	4.30	27.90	12.60	0.00	12.60	23.00	27.90	8.30	1.50	0.00	0.00	0.00	0.00	0.00	1.50
8/14/15 4:30 AM	231.00	4.90	26.40	12.30	0.00	12.30	21.40	26.40	6.80	2.20	0.00	0.00	0.00	0.00	0.00	2.20
8/14/15 4:45 AM	226.00	3.10	27.40	12.90	0.00	12.90	20.70	27.40	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 5:00 AM	232.00	3.60	27.00	12.70	0.00	12.70	20.40	27.00	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 5:15 AM	231.00	3.80	27.50	12.80	0.00	12.80	20.60	27.50	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 5:30 AM	236.00	3.90	28.80	14.30	0.00	14.30	21.10	28.80	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 5:45 AM	240.00	4.10	28.80	14.10	0.00	14.10	20.90	28.80	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 6:00 AM	233.00	4.30	30.40	14.30	0.00	14.30	21.30	30.40	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 6:15 AM	226.00	4.60	29.50	13.40	0.00	13.40	21.70	29.50	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 6:30 AM	235.00	4.60	29.20	13.30	0.00	13.30	21.40	29.20	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 6:45 AM	225.00	5.00	28.10	13.80	0.00	13.80	20.40	28.10	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 7:00 AM	221.00	3.40	27.80	13.90	0.00	13.90	0.00	27.80	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 7:15 AM	228.00	4.20	28.10	14.20	0.00	14.20	21.10	28.10	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 7:30 AM	232.00	4.20	28.20	15.10	0.00	15.10	20.90	28.20	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 7:45 AM	241.00	4.30	28.00	15.60	0.00	15.60	20.60	28.00	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 8:00 AM	249.00	5.40	27.60	15.60	0.00	15.60	20.80	27.60	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 8:15 AM	250.00	5.60	41.30	0.00	0.00	0.00	22.40	41.30	6.60	0.00	0.00	0.00	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
August 2015

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
8/14/15 4:30 PM	228.00	4.60	14.40	29.10	14.70	29.10	25.50	14.40	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 4:45 PM	244.00	5.50	12.50	27.60	15.10	27.60	25.40	12.50	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 5:00 PM	257.00	3.20	11.00	0.00	0.00	0.00	18.70	11.00	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 5:15 PM	265.00	4.20	8.60	26.40	17.80	26.40	20.90	8.60	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 5:30 PM	274.00	3.40	19.20	24.00	4.80	28.20	24.00	11.20	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 5:45 PM	285.00	3.70	18.90	25.10	6.20	28.40	25.10	9.90	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 6:00 PM	263.00	3.20	8.00	28.40	20.40	28.40	21.80	8.00	19.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 6:15 PM	268.00	3.50	6.90	27.30	20.40	27.30	21.20	6.90	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 6:30 PM	269.00	4.20	9.00	24.00	15.00	24.00	22.80	9.00	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 6:45 PM	256.00	3.60	9.20	25.90	16.70	25.90	22.60	9.20	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 7:00 PM	260.00	3.70	10.70	23.80	13.10	23.80	24.90	10.70	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 7:15 PM	257.00	3.30	12.40	30.00	17.60	30.00	26.00	12.40	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 7:30 PM	256.00	3.70	16.00	26.10	10.10	26.10	27.00	16.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 7:45 PM	245.00	3.30	20.00	23.80	3.80	23.80	27.80	20.00	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 8:00 PM	237.00	4.60	21.40	22.80	1.40	22.80	45.30	21.40	19.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 8:15 PM	250.00	3.20	23.20	21.60	0.00	21.60	45.30	23.20	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 8:30 PM	256.00	3.50	30.00	22.40	0.00	22.40	28.60	30.00	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 8:45 PM	254.00	2.50	31.80	21.40	0.00	21.40	39.10	31.80	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 9:00 PM	251.00	2.90	34.30	20.70	0.00	20.70	0.00	34.30	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 9:15 PM	251.00	3.00	37.20	22.10	0.00	22.10	29.30	37.20	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 9:30 PM	252.00	3.30	35.50	22.40	0.00	22.40	29.10	35.50	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 9:45 PM	240.00	3.20	34.80	21.40	0.00	21.40	28.20	34.80	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 10:00 PM	0.00	11.40	21.40	36.10	14.70	21.40	29.40	36.10	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 10:15 PM	351.00	7.10	14.30	29.10	14.80	29.90	29.10	38.80	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 10:30 PM	347.00	6.10	13.70	29.90	15.60	22.90	29.30	44.30	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 10:45 PM	341.00	3.90	13.50	28.80	15.30	22.40	28.80	45.20	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 11:00 PM	207.00	2.30	45.20	0.00	0.00	0.00	28.40	45.20	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/15 11:15 PM	184.00	4.00	26.50	16.80	0.00	16.80	30.60	26.50	12.10	0.00	82.40	82.40	248.20	0.00	0.00	0.00
8/14/15 11:30 PM	171.00	4.30	20.50	10.50	0.00	14.90	20.50	17.50	10.50	0.00	0.00	0.00	0.00	93.50	0.00	0.00
8/14/15 11:45 PM	167.00	3.50	24.80	12.00	0.00	16.30	24.80	30.20	12.00	0.00	0.00	0.00	76.00	0.00	0.00	0.00
8/15/15 12:00 AM	158.00	3.40	26.70	13.00	0.00	16.30	26.70	43.50	13.00	0.00	0.00	0.00	41.40	0.00	0.00	0.00
8/15/15 12:15 AM	155.00	2.80	29.10	14.80	0.00	18.90	29.10	54.00	14.80	0.00	0.00	0.00	2.20	0.00	14.40	0.00
8/15/15 12:30 AM	170.00	2.10	32.00	15.30	0.00	18.90	32.00	62.10	15.30	0.00	0.00	0.00	0.00	0.00	16.90	0.00
8/15/15 12:45 AM	197.00	1.60	74.90	19.10	0.00	19.10	32.70	74.90	14.70	0.00	0.00	0.00	0.00	0.00	14.50	0.00
8/15/15 1:00 AM	146.00	2.00	33.10	14.00	0.00	19.90	33.10	74.20	14.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00
8/15/15 1:15 AM	174.00	2.70	30.40	13.20	0.00	19.00	30.40	69.60	13.20	0.00	0.00	0.00	0.00	0.00	3.60	0.00
8/15/15 1:30 AM	269.00	2.90	67.30	17.20	0.00	17.20	28.60	67.30	11.80	10.30	0.00	0.00	0.00	0.00	10.30	0.00
8/15/15 1:45 AM	256.00	3.40	68.20	17.80	0.00	17.80	29.80	68.20	11.60	10.30	0.00	0.00	0.00	0.00	10.30	0.00
8/15/15 2:00 AM	326.00	2.00	11.10	28.80	17.70	17.60	28.80	70.70	11.10	0.00	0.00	0.00	0.00	0.00	10.60	0.00
8/15/15 2:15 AM	162.00	2.00	27.20	10.40	0.00	17.00	27.20	67.50	10.40	0.00	0.00	0.00	0.00	0.00	13.70	0.00
8/15/15 2:30 AM	180.00	2.50	61.20	16.00	0.00	16.00	25.20	61.20	10.10	0.00	0.00	0.00	0.00	0.00	10.00	0.00
8/15/15 2:45 AM	184.00	1.30	56.40	15.50	0.00	15.50	23.80	56.40	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 3:00 AM	182.00	1.00	61.10	16.00	0.00	16.00	26.30	61.10	11.10	0.00	0.00	0.00	13.50	0.00	0.00	0.00
8/15/15 3:15 AM	186.00	2.20	61.50	18.80	0.00	18.80	30.60	61.50	11.00	0.00	0.00	0.00	8.60	0.00	0.00	0.00
8/15/15 3:30 AM	220.00	1.50	63.50	18.50	0.00	18.50	27.40	63.50	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 3:45 AM	177.00	1.50	28.30	11.00	0.00	18.40	28.30	69.70	11.00	0.00	0.00	0.00	0.00	0.00	10.20	0.00
8/15/15 4:00 AM	257.00	1.70	72.60	18.30	0.00	18.30	29.60	72.60	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 4:15 AM	207.00	1.40	75.70	19.40	0.00	19.40	30.80	75.70	11.50	0.00	0.00	0.00	0.00	0.00	11.50	0.00
8/15/15 4:30 AM	183.00	1.30	79.20	20.50	0.00	20.50	31.80	79.20	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 4:45 AM	215.00	2.00	82.70	20.40	0.00	20.40	31.70	82.70	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 5:00 AM	241.00	2.20	79.10	21.20	0.00	21.20	31.80	79.10	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 5:15 AM	233.00	3.20	76.20	19.90	0.00	19.90	32.20	76.20	11.20	2.40	0.00	0.00	0.00	0.00	2.40	0.00
8/15/15 5:30 AM	200.00	3.60	75.90	19.40	0.00	19.40	29.50	75.90	11.80	0.00	0.00	0.00	0.00	0.00	9.20	0.00
8/15/15 5:45 AM	196.00	3.50	66.60	18.80	0.00	18.80	27.80	66.60	12.00	0.00	0.00	0.00	0.00	0.00	9.10	0.00
8/15/15 6:00 AM	190.00	3.40	59.90	17.50	0.00	17.50	25.20	59.90	10.50	0.00	0.00	0.00	0.00	0.00	3.20	0.00
8/15/15 6:15 AM	177.00	3.00	25.50	9.80	0.00	15.80	25.50	56.20	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 6:30 AM	191.00	2.20	55.40	15.90	0.00	15.90	25.40	55.40	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 6:45 AM	193.00	2.10	45.40	17.00	0.00	17.00	22.60	45.40	9.30	0.00	0.00	0.00	0.00	0.00	5.90	0.00
8/15/15 7:00 AM	198.00	2.50	33.60	16.40	0.00	16.40	21.60	33.60	9.10	0.00	0.00	0.00	5.60	0.00	4.00	0.00
8/15/15 7:15 AM	211.00	3.10	24.20	13.50	0.00	13.50	16.30	24.20	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 7:30 AM	218.00	2.30	21.70	13.50	0.00	13.50	14.90	21.70	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 7:45 AM	214.00	2.80	19.20	13.00	0.00	13.00	14.90	19.20	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 8:00 AM	178.00	2.60	13.90	8.80	0.00	13.00	13.90	15.40	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 8:15 AM	180.00	3.60	13.70	0.00	0.00	0.00	11.90	13.70	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 8:30 AM	192.00	4.10	9.90	12.10	2.20	12.10	10.80	9.90	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 8:45 AM	171.00	3.70	10.30	8.20	0.00	12.00	10.30	8.70	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 9:00 AM	191.00	3.80	8.50	13.20	4.70	13.20	10.20	8.50	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/15 9:15 AM	197.00	4.70	8.20	12.80	4.60	12.80	9.80	8.20	7.50	0.00	0.00	0.00	0.00	6.40	0.00	7.20
8/15/15 9:30 AM	212.00	3.80	4.90	13.00	8.10	13.00	9.									



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August 2015

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
8/15/15 5:45 PM	243.00	2.80	14.80	18.10	3.30	18.10	13.20	14.80	10.60	18.40	0.00	0.00	0.00	0.00	18.40	
8/15/15 6:00 PM	224.00	2.90	28.30	18.60	0.00	18.60	16.00	28.30	10.40	0.00	26.60	26.60	0.00	0.00	6.20	
8/15/15 6:15 PM	211.00	3.30	23.20	13.70	0.00	13.70	15.30	23.20	9.20	0.00	48.20	48.20	0.00	0.00	0.00	
8/15/15 6:30 PM	191.00	5.30	20.80	13.50	0.00	13.50	11.50	20.80	8.00	0.00	0.00	0.00	0.00	0.00	10.40	
8/15/15 6:45 PM	209.00	3.00	23.70	13.30	0.00	13.30	13.40	23.70	8.50	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 7:00 PM	186.00	2.90	45.30	13.40	0.00	13.40	112.50	45.30	8.40	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 7:15 PM	216.00	1.70	57.10	17.40	0.00	17.40	19.50	57.10	9.30	0.00	0.00	0.00	6.80	0.00	0.00	
8/15/15 7:30 PM	141.00	2.10	20.10	10.20	0.00	17.30	20.10	74.00	10.20	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 7:45 PM	170.00	1.60	18.30	9.80	0.00	16.40	18.30	70.10	9.80	0.00	0.00	0.00	3.50	0.00	12.80	
8/15/15 8:00 PM	163.00	0.40	19.00	8.40	0.00	15.00	19.00	77.50	8.40	0.00	0.00	0.00	0.00	0.00	12.20	
8/15/15 8:15 PM	193.00	1.50	80.30	13.60	0.00	13.60	18.80	80.30	7.90	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 8:30 PM	198.00	1.40	86.20	0.00	0.00	0.00	19.00	86.20	7.90	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 8:45 PM	189.00	1.90	86.40	13.90	0.00	13.90	20.20	86.40	7.40	0.00	0.00	0.00	0.00	0.00	16.20	
8/15/15 9:00 PM	219.00	1.80	88.50	14.60	0.00	14.60	19.50	88.50	7.40	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 9:15 PM	196.00	2.80	94.90	0.00	0.00	0.00	20.80	94.90	7.50	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 9:30 PM	204.00	2.50	96.80	15.50	0.00	15.50	23.00	96.80	7.70	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 9:45 PM	204.00	2.00	99.10	16.90	0.00	16.90	24.10	99.10	7.80	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 10:00 PM	224.00	2.50	99.70	15.20	0.00	15.20	22.40	99.70	7.90	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 10:15 PM	210.00	2.20	92.50	14.10	0.00	14.10	20.40	92.50	7.80	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 10:30 PM	203.00	3.30	100.60	15.20	0.00	15.20	22.70	100.60	8.90	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 10:45 PM	200.00	3.20	100.90	14.80	0.00	14.80	23.50	100.90	8.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 11:00 PM	190.00	2.30	101.20	15.40	0.00	15.40	24.50	101.20	8.10	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 11:15 PM	195.00	3.40	99.20	14.70	0.00	14.70	24.00	99.20	7.70	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 11:30 PM	203.00	3.00	98.40	14.00	0.00	14.00	24.00	98.40	7.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/15/15 11:45 PM	191.00	1.80	96.20	13.90	0.00	13.90	23.80	96.20	7.20	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 12:00 AM	199.00	1.70	86.10	14.50	0.00	14.50	22.60	86.10	7.20	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 12:15 AM	204.00	1.90	65.90	13.00	0.00	13.00	16.60	65.90	7.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 12:30 AM	196.00	2.60	59.80	12.20	0.00	12.20	15.80	59.80	7.90	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 12:45 AM	205.00	2.00	51.40	12.90	0.00	12.90	14.70	51.40	8.20	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 1:15 AM	205.00	2.70	39.10	13.50	0.00	13.50	13.90	39.10	10.10	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 1:30 AM	190.00	2.40	40.20	13.60	0.00	13.60	13.90	40.20	10.30	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 1:45 AM	205.00	1.90	42.40	14.40	0.00	14.40	14.30	42.40	10.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 2:00 AM	209.00	2.60	46.30	14.90	0.00	14.90	16.20	46.30	9.90	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 2:15 AM	205.00	2.10	52.20	14.50	0.00	14.50	18.40	52.20	9.50	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 2:30 AM	207.00	2.00	57.30	15.30	0.00	15.30	19.40	57.30	9.10	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 2:45 AM	190.00	2.20	64.90	14.80	0.00	14.80	19.50	64.90	8.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 3:00 AM	196.00	1.70	66.40	15.20	0.00	15.20	20.70	66.40	8.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 3:15 AM	199.00	2.40	80.10	17.50	0.00	17.50	21.90	80.10	8.70	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 3:30 AM	215.00	2.20	76.10	16.90	0.00	16.90	22.10	76.10	9.80	0.00	0.00	0.00	0.00	0.00	2.50	
8/16/15 3:45 AM	196.00	1.90	74.00	16.50	0.00	16.50	22.90	74.00	9.20	0.00	0.00	0.00	0.00	0.00	2.50	
8/16/15 4:00 AM	201.00	2.50	77.10	16.70	0.00	16.70	23.40	77.10	8.60	0.00	0.00	0.00	0.00	0.00	3.10	
8/16/15 4:15 AM	209.00	2.30	79.20	16.80	0.00	16.80	23.60	79.20	8.90	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 4:30 AM	196.00	2.00	80.10	17.10	0.00	17.10	24.60	80.10	8.40	0.00	0.00	0.00	0.00	0.00	1.70	
8/16/15 4:45 AM	204.00	1.80	82.60	17.20	0.00	17.20	24.80	82.60	8.50	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 5:00 AM	200.00	1.80	82.60	17.50	0.00	17.50	25.60	82.60	8.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 5:15 AM	204.00	1.40	86.20	18.10	0.00	18.10	25.40	86.20	8.70	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 5:30 AM	206.00	1.60	87.90	19.50	0.00	19.50	25.60	87.90	8.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 5:45 AM	204.00	1.50	88.20	18.20	0.00	18.20	27.80	88.20	8.30	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 6:00 AM	191.00	1.00	93.40	18.50	0.00	18.50	28.30	93.40	8.40	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 6:15 AM	200.00	0.80	96.50	19.20	0.00	19.20	29.70	96.50	8.80	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 6:30 AM	207.00	0.80	102.60	20.70	0.00	20.70	30.90	102.60	8.40	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 6:45 AM	203.00	1.00	97.90	20.60	0.00	20.60	32.60	97.90	8.40	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 7:00 AM	250.00	1.60	91.30	21.20	0.00	21.20	33.70	91.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 7:15 AM	233.00	1.40	101.00	24.00	0.00	24.00	33.60	101.00	10.30	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 7:30 AM	250.00	2.10	119.00	22.80	0.00	22.80	35.90	119.00	11.40	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 7:45 AM	255.00	1.70	121.60	24.00	0.00	24.00	33.60	121.60	11.70	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 8:00 AM	247.00	2.60	91.60	23.70	0.00	23.70	31.80	91.60	11.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 8:15 AM	273.00	1.60	11.30	29.70	18.40	23.20	29.70	77.10	11.30	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 8:30 AM	219.00	1.70	59.70	22.20	0.00	22.20	26.80	59.70	10.20	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 8:45 AM	227.00	2.30	50.40	21.70	0.00	21.70	24.20	50.40	9.70	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 9:00 AM	224.00	1.90	34.70	19.30	0.00	19.30	20.60	34.70	9.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 9:15 AM	227.00	2.90	29.90	19.70	0.00	19.70	19.80	29.90	9.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 9:30 AM	197.00	3.70	23.50	20.90	0.00	20.90	20.60	23.50	9.50	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 9:45 AM	250.00	4.20	18.60	21.90	3.30	21.90	18.00	18.60	9.40	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 10:00 AM	224.00	4.30	9.90	20.60	10.70	20.60	16.80	9.90	9.10	0.00	0.00	0.00	0.70	0.00	0.00	
8/16/15 10:15 AM	232.00	3.00	6.40	21.00	14.60	21.00	15.40	6.40	8.90	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 10:30 AM	263.00	3.50	4.30	22.70	18.40	22.70	13.60	4.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 10:45 AM	243.00	2.60	2.40	20.10	17.70	20.10	12.70	2.40	8.60	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 11:00 AM	227.00	3.60	2.30	18.90	16.60	18.90	9.00	2.30	8.50	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 11:15 AM	220.00	4.90	2.30	18.80	16.50	18.80	8.20	2.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 11:30 AM	241.00	3.80	2.20	20.40	18.20	20.40	8.30	2.20	10.50	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 11:45 AM	241.00	4.80	2.00	19.50	17.50	19.50	6.50	2.00	10.80	0.00	0.00	0.00	0.00	0.00	0.00	
8/16/15 12:00 PM	208.00	3.80	2.10	18.40												



US Army Corps
of Engineers®

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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
8/16/15 7:15 PM	226.00	4.50	5.70	19.50	13.80	19.50	11.50	5.70	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 7:30 PM	234.00	3.40	7.40	20.10	12.70	20.10	12.70	7.40	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 7:45 PM	221.00	3.50	7.40	19.80	12.40	19.80	13.10	7.40	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 8:00 PM	235.00	2.80	8.80	19.20	10.40	19.20	12.40	8.80	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 8:15 PM	210.00	2.00	10.10	17.70	7.60	17.70	14.70	10.10	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 8:30 PM	200.00	3.60	11.90	18.60	6.70	18.60	14.70	11.90	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 8:45 PM	205.00	2.90	13.30	18.00	4.70	18.00	16.70	13.30	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 9:00 PM	208.00	2.90	15.20	18.80	3.60	18.80	18.70	15.20	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 9:15 PM	198.00	3.00	18.20	19.40	1.20	19.40	20.50	18.20	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 9:30 PM	201.00	2.60	19.20	20.00	0.80	20.00	22.10	19.20	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 9:45 PM	206.00	2.30	20.20	20.10	0.00	20.10	22.80	20.20	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 10:00 PM	200.00	2.30	24.30	21.00	0.00	21.00	25.10	24.30	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 10:15 PM	205.00	2.90	27.20	21.00	0.00	21.00	26.50	27.20	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 10:30 PM	206.00	3.30	28.60	0.00	0.00	0.00	31.00	28.60	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 10:45 PM	196.00	2.80	34.10	25.80	0.00	25.80	31.30	34.10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 11:00 PM	201.00	2.40	40.00	26.00	0.00	26.00	33.00	40.00	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 11:15 PM	205.00	2.50	43.30	25.80	0.00	25.80	35.60	43.30	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 11:30 PM	212.00	2.00	46.10	26.60	0.00	26.60	35.40	46.10	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/16/15 11:45 PM	240.00	1.40	47.90	27.50	0.00	27.50	34.30	47.90	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 12:00 AM	205.00	1.70	50.80	32.70	0.00	32.70	35.40	50.80	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 12:15 AM	185.00	1.70	52.40	30.80	0.00	30.80	35.40	52.40	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 12:30 AM	205.00	2.40	51.20	26.80	0.00	26.80	34.00	51.20	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 12:45 AM	196.00	2.00	56.10	24.20	0.00	24.20	34.20	56.10	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 1:00 AM	195.00	2.10	59.90	25.60	0.00	25.60	37.10	59.90	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 1:15 AM	196.00	2.10	61.20	24.40	0.00	24.40	35.40	61.20	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 1:30 AM	195.00	2.20	58.50	24.60	0.00	24.60	35.40	58.50	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 1:45 AM	198.00	2.90	58.00	24.60	0.00	24.60	37.00	58.00	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 2:00 AM	209.00	3.60	60.40	27.10	0.00	27.10	36.90	60.40	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 2:15 AM	205.00	2.70	67.40	26.60	0.00	26.60	41.40	67.40	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 2:30 AM	199.00	3.20	73.50	37.30	0.00	37.30	41.40	73.50	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 2:45 AM	185.00	2.80	74.60	41.20	0.00	41.20	43.90	74.60	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 3:00 AM	196.00	2.00	68.00	28.30	0.00	28.30	36.60	68.00	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 3:15 AM	198.00	1.90	67.30	23.80	0.00	23.80	35.90	67.30	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 3:30 AM	185.00	2.30	67.10	23.70	0.00	23.70	37.80	67.10	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 3:45 AM	178.00	2.20	37.10	12.10	0.00	23.50	37.10	67.60	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 4:00 AM	180.00	3.20	68.90	24.30	0.00	24.30	37.40	68.90	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 4:15 AM	209.00	1.40	72.00	24.80	0.00	24.80	38.30	72.00	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 4:30 AM	210.00	2.10	74.90	24.40	0.00	24.40	39.00	74.90	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 4:45 AM	188.00	1.80	76.80	24.70	0.00	24.70	39.70	76.80	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 5:00 AM	188.00	2.30	79.50	24.80	0.00	24.80	40.70	79.50	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 5:15 AM	195.00	1.70	82.00	24.90	0.00	24.90	41.70	82.00	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 5:30 AM	190.00	1.40	85.90	25.30	0.00	25.30	42.30	85.90	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 5:45 AM	184.00	1.60	88.20	26.80	0.00	26.80	42.50	88.20	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 6:00 AM	195.00	1.60	88.60	26.70	0.00	26.70	44.30	88.60	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 6:15 AM	191.00	2.10	91.30	27.90	0.00	27.90	43.90	91.30	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 6:30 AM	186.00	3.50	90.80	26.30	0.00	26.30	43.20	90.80	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 6:45 AM	189.00	3.10	96.40	26.90	0.00	26.90	45.60	96.40	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 7:00 AM	207.00	2.30	96.60	26.10	0.00	26.10	45.10	96.60	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 7:15 AM	211.00	1.90	101.60	26.70	0.00	26.70	45.90	101.60	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 7:30 AM	211.00	1.80	100.40	27.90	0.00	27.90	47.90	100.40	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 7:45 AM	211.00	2.50	88.20	26.80	0.00	26.80	46.20	88.20	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 8:00 AM	212.00	1.90	75.20	27.00	0.00	27.00	41.10	75.20	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 8:15 AM	216.00	3.20	62.10	27.10	0.00	27.10	38.70	62.10	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 8:30 AM	223.00	2.80	50.00	26.30	0.00	26.30	33.60	50.00	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 8:45 AM	195.00	2.90	41.50	26.20	0.00	26.20	29.30	41.50	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 9:00 AM	203.00	3.00	33.70	25.20	0.00	25.20	28.20	33.70	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 9:15 AM	194.00	4.10	23.70	23.80	0.10	23.80	21.60	23.70	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 9:30 AM	227.00	2.70	15.50	26.20	10.70	26.20	16.70	15.50	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 9:45 AM	231.00	3.80	11.80	22.40	10.60	22.40	15.40	11.80	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 10:00 AM	204.00	3.60	9.30	23.60	14.30	23.60	14.40	9.30	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 10:15 AM	227.00	3.20	7.80	22.70	14.90	22.70	13.60	7.80	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 10:30 AM	208.00	5.00	5.30	20.00	14.70	20.00	12.80	5.30	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 10:45 AM	223.00	4.50	4.20	20.20	16.00	20.20	11.20	4.20	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 11:00 AM	216.00	4.80	4.20	20.20	16.00	20.20	11.30	4.20	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 11:15 AM	186.00	6.10	3.60	19.90	16.30	19.90	11.90	3.60	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 11:30 AM	243.00	5.60	3.30	21.00	17.70	21.00	12.00	3.30	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 11:45 AM	244.00	3.80	3.40	22.00	18.60	22.00	11.90	3.40	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 12:00 PM	198.00	4.10	2.80	21.60	18.80	21.60	10.40	2.80	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 12:15 PM	218.00	3.40	2.60	21.00	18.40	21.00	10.90									



US Army Corps
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Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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
8/17/15 8:30 PM	177.00	5.70	11.20	8.20	0.00	16.30	11.20	8.40	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 8:45 PM	162.00	4.30	12.80	8.50	0.00	14.50	12.80	12.80	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 9:00 PM	178.00	6.60	13.80	7.70	0.00	13.80	13.80	14.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 9:15 PM	208.00	3.90	9.80	9.70	0.00	9.70	10.40	9.80	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 9:30 PM	196.00	3.00	12.20	6.80	0.00	6.80	7.90	12.20	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 9:45 PM	193.00	2.40	17.90	8.30	0.00	8.30	11.30	17.90	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 10:00 PM	326.00	2.90	6.80	12.30	5.50	7.70	12.30	21.60	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 10:15 PM	314.00	2.10	7.10	14.70	7.60	9.10	14.70	24.30	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 10:30 PM	187.00	1.50	32.20	10.90	0.00	10.90	16.50	32.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 10:45 PM	205.00	1.60	31.10	11.10	0.00	11.10	16.00	31.10	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 11:00 PM	333.00	1.20	7.00	16.80	9.80	12.40	16.80	29.50	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 11:15 PM	216.00	0.60	35.90	12.70	0.00	12.70	20.10	35.90	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 11:30 PM	166.00	1.10	20.60	6.80	0.00	11.80	20.60	50.40	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/15 11:45 PM	0.00	0.00	0.00	0.00	0.00	11.70	0.00	58.50	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 12:00 AM	0.00	0.00	0.00	0.00	0.00	12.10	25.40	66.10	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 12:15 AM	210.00	0.90	68.40	11.30	0.00	11.30	21.00	68.40	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 12:30 AM	0.00	0.00	0.00	0.00	0.00	11.30	23.40	72.20	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 12:45 AM	222.00	2.30	80.70	12.50	0.00	12.50	24.10	80.70	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 1:00 AM	269.00	5.30	82.20	12.80	0.00	12.80	24.80	82.20	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 1:15 AM	4.00	1.00	14.40	81.20	66.80	14.40	25.40	81.20	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 1:30 AM	122.00	1.90	27.60	8.00	0.00	15.40	27.60	74.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 1:45 AM	155.00	2.40	27.10	8.20	0.00	14.00	27.10	64.20	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 2:00 AM	181.00	2.40	68.20	13.10	0.00	13.10	25.70	68.20	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 2:15 AM	171.00	3.40	30.10	9.70	0.00	20.00	30.10	48.00	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 2:30 AM	163.00	2.80	26.60	10.70	0.00	16.10	26.60	70.20	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 2:45 AM	158.00	2.90	23.00	12.20	0.00	25.40	23.00	69.50	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 3:00 AM	168.00	3.70	24.50	10.20	0.00	14.40	24.50	77.00	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 3:15 AM	178.00	2.90	28.40	10.60	0.00	15.10	28.40	104.30	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 3:30 AM	212.00	2.90	84.30	14.40	0.00	14.40	28.10	84.30	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 3:45 AM	233.00	4.20	73.90	14.70	0.00	14.70	28.80	73.90	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 4:00 AM	180.00	3.80	67.20	13.70	0.00	13.70	26.20	67.20	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 4:15 AM	180.00	3.30	64.80	15.60	0.00	15.60	27.20	64.80	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 4:30 AM	182.00	2.60	69.50	15.20	0.00	15.20	26.00	69.50	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 4:45 AM	155.00	3.40	23.00	8.10	0.00	15.60	23.00	69.70	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 5:00 AM	129.00	3.50	17.40	6.80	0.00	0.00	17.40	59.30	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 5:15 AM	121.00	3.00	13.80	6.20	0.00	9.50	13.80	47.00	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 5:30 AM	122.00	2.80	13.40	5.40	0.00	8.80	13.40	40.90	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 5:45 AM	154.00	2.30	13.40	5.60	0.00	9.30	13.40	40.10	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 6:00 AM	152.00	2.40	13.40	6.00	0.00	9.40	13.40	37.90	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 6:15 AM	176.00	1.60	12.80	5.90	0.00	13.60	12.80	38.50	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 6:30 AM	168.00	1.40	11.90	6.10	0.00	8.20	11.90	32.70	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 6:45 AM	156.00	1.90	9.90	5.20	0.00	12.50	9.90	30.60	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 7:00 AM	178.00	1.70	8.90	4.90	0.00	7.10	8.90	25.10	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 7:15 AM	180.00	2.80	27.70	6.70	0.00	6.70	11.00	27.70	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 7:30 AM	181.00	1.70	28.40	7.80	0.00	7.80	11.30	28.40	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 7:45 AM	175.00	3.20	11.30	5.50	0.00	8.00	11.30	29.20	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 8:00 AM	192.00	3.20	28.80	9.90	0.00	9.90	10.40	28.80	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 8:15 AM	175.00	3.70	10.40	4.80	0.00	7.30	10.40	33.10	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 8:30 AM	190.00	2.80	32.00	7.10	0.00	7.10	10.60	32.00	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 8:45 AM	186.00	3.20	32.00	7.60	0.00	7.60	11.30	32.00	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 9:00 AM	195.00	4.00	31.00	7.40	0.00	7.40	13.70	31.00	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 9:15 AM	186.00	4.50	17.30	6.90	0.00	6.90	8.70	17.30	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 9:30 AM	194.00	5.30	13.30	6.50	0.00	6.50	7.50	13.30	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 9:45 AM	202.00	4.90	7.30	6.70	0.00	6.70	5.40	7.30	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 10:00 AM	195.00	5.40	2.60	6.40	3.80	6.40	3.40	2.60	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 10:15 AM	186.00	3.40	2.40	6.10	3.70	6.10	2.90	2.40	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 10:30 AM	207.00	4.20	2.20	5.80	3.60	5.80	2.10	2.20	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 10:45 AM	220.00	4.10	2.10	5.80	3.70	5.80	1.80	2.10	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 11:00 AM	195.00	3.70	1.90	5.80	3.90	5.80	1.40	1.90	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 11:15 AM	201.00	3.80	1.90	5.50	3.60	5.50	1.40	1.90	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 11:30 AM	191.00	4.80	2.10	6.60	4.50	6.60	1.50	2.10	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 11:45 AM	219.00	3.00	2.10	6.50	4.40	6.50	1.80	2.10	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 12:00 PM	207.00	4.40	1.90	6.40	4.50	6.40	1.60	1.90	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 12:15 PM	200.00	4.20	2.00	6.40	4.40	6.40	1.80	2.00	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 12:30 PM	193.00	5.00	1.90	6.90	5.00	6.90	1.70	1.90	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 12:45 PM	230.00	4.20	1.80	7.20	5.40	7.20	1.40	1.80	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 1:00 PM	205.00	4.60	2.00	7.50	5.50	7.50	1.20	2.00	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 1:15 PM	207.00	3.80	1.50	0.00	0.00	0.00	1.10	1.50	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 1:30 PM	228.00	4.10	1.50	7.30	5.80	7.30	0.90	1.50	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/15 1:45 PM	199.00	5.50	1.50	7.80	6.30	7.80	1.00	1.50	4.70	0.0						



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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		
8/18/15 9:45 PM	190.00	3.90	33.60	14.20	0.00	14.20	29.40	33.60	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/18/15 10:00 PM	155.00	3.00	7.40	4.20	0.00	6.10	7.40	14.10	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/18/15 10:15 PM	170.00	4.50	5.20	4.90	0.00	6.70	5.20	10.80	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/18/15 10:30 PM	168.00	4.50	5.20	5.00	0.00	5.10	5.20	11.80	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/18/15 10:45 PM	167.00	4.10	4.20	5.00	0.80	4.70	4.20	10.60	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/18/15 11:00 PM	166.00	3.50	5.20	5.20	0.00	0.00	5.20	11.00	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/18/15 11:15 PM	170.00	5.00	8.10	5.60	0.00	5.60	8.10	16.50	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/18/15 11:30 PM	176.00	4.90	8.00	5.00	0.00	5.00	8.00	17.80	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/18/15 11:45 PM	173.00	4.20	7.70	4.90	0.00	5.50	7.70	15.60	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 12:00 AM	173.00	5.80	7.10	4.90	0.00	4.90	7.10	15.90	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 12:15 AM	191.00	5.60	15.60	4.60	0.00	4.60	6.20	15.60	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 12:30 AM	183.00	5.20	15.60	4.30	0.00	4.30	5.70	15.60	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 12:45 AM	185.00	7.10	14.40	0.00	0.00	0.00	6.00	14.40	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 1:00 AM	193.00	5.90	15.70	4.90	0.00	4.90	6.40	15.70	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 1:15 AM	195.00	5.10	14.40	5.00	0.00	5.00	6.80	14.40	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 1:30 AM	195.00	5.10	13.40	5.90	0.00	5.90	8.20	13.40	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 1:45 AM	191.00	4.80	11.40	5.60	0.00	5.60	7.80	11.40	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 2:00 AM	194.00	3.30	10.90	5.10	0.00	5.10	7.30	10.90	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 2:15 AM	181.00	5.90	10.60	5.10	0.00	5.10	6.70	10.60	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 2:30 AM	199.00	6.00	10.70	6.00	0.00	6.00	6.50	10.70	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 2:45 AM	181.00	6.10	11.40	5.20	0.00	5.20	6.70	11.40	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 3:00 AM	204.00	6.00	10.70	5.30	0.00	5.30	6.80	10.70	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 3:15 AM	183.00	6.10	10.00	5.50	0.00	5.50	6.30	10.00	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 3:30 AM	190.00	4.60	9.30	5.80	0.00	5.80	6.60	9.30	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 3:45 AM	179.00	5.90	6.50	4.00	0.00	6.00	6.50	9.10	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 4:00 AM	184.00	4.40	8.20	0.00	0.00	0.00	6.20	8.20	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 4:15 AM	202.00	4.50	7.80	5.60	0.00	5.60	6.00	7.80	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 4:30 AM	183.00	4.40	7.40	5.70	0.00	5.70	5.80	7.40	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 4:45 AM	196.00	5.10	7.40	6.00	0.00	6.00	6.50	7.40	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 5:00 AM	190.00	4.70	7.90	6.60	0.00	6.60	6.50	7.90	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 5:15 AM	184.00	5.40	9.00	6.40	0.00	6.40	6.50	9.00	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 5:30 AM	191.00	5.40	10.60	6.60	0.00	6.60	7.10	10.60	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 5:45 AM	192.00	4.70	10.90	6.50	0.00	6.50	7.10	10.90	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 6:00 AM	191.00	6.00	10.10	6.20	0.00	6.20	6.90	10.10	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 6:15 AM	194.00	7.10	9.80	6.60	0.00	6.60	7.20	9.80	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 6:30 AM	174.00	7.10	7.30	3.70	0.00	6.70	7.30	10.10	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 6:45 AM	184.00	4.80	10.50	6.70	0.00	6.70	7.80	10.50	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 7:00 AM	209.00	4.80	13.40	6.70	0.00	6.70	8.50	13.40	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 7:15 AM	193.00	3.80	14.70	0.00	0.00	0.00	8.70	14.70	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 7:30 AM	205.00	4.30	14.20	0.00	0.00	0.00	8.50	14.20	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 7:45 AM	207.00	3.20	12.70	6.50	0.00	6.50	8.10	12.70	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 8:00 AM	207.00	5.30	10.40	6.50	0.00	6.50	7.00	10.40	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 8:15 AM	191.00	4.40	8.60	6.70	0.00	6.70	6.50	8.60	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 8:30 AM	192.00	5.30	6.00	7.20	1.20	7.20	6.00	6.00	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 8:45 AM	199.00	4.60	5.10	6.90	1.80	6.90	5.40	5.10	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 9:00 AM	200.00	6.50	2.40	6.90	4.50	6.90	5.00	2.40	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 9:15 AM	191.00	6.00	1.70	7.00	5.30	7.00	4.00	1.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 9:30 AM	204.00	6.90	1.70	7.00	5.30	7.00	3.60	1.70	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 9:45 AM	198.00	8.30	1.70	6.70	5.00	6.70	2.90	1.70	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 10:00 AM	190.00	6.30	1.70	7.30	5.60	7.30	3.00	1.70	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 10:30 AM	211.00	6.10	1.90	7.70	5.80	7.70	3.60	1.90	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 10:45 AM	218.00	4.80	1.80	7.60	5.80	7.60	3.60	1.80	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 11:00 AM	210.00	6.30	1.70	0.00	0.00	0.00	3.40	1.70	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 11:15 AM	206.00	6.30	1.60	7.00	5.40	7.00	3.50	1.60	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 11:30 AM	198.00	5.40	1.80	7.20	5.40	7.20	3.80	1.80	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 11:45 AM	224.00	5.10	1.90	7.60	5.70	7.60	4.30	1.90	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 12:00 PM	217.00	5.80	2.10	8.40	6.30	8.40	5.50	2.10	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 12:15 PM	236.00	5.30	2.10	8.30	6.20	8.30	5.60	2.10	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 12:30 PM	225.00	6.20	1.90	0.00	0.00	0.00	5.30	1.90	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 12:45 PM	197.00	7.10	1.80	7.60	5.80	7.60	4.60	1.80	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 1:00 PM	219.00	7.60	1.70	7.40	5.70	7.40	4.30	1.70	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 1:15 PM	240.00	7.70	1.60	7.10	5.50	7.10	3.50	1.60	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 1:30 PM	206.00	6.80	2.10	9.80	7.70	9.80	5.40	2.10	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 1:45 PM	224.00	7.60	1.70	10.00	8.30	10.00	4.90	1.70	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 2:00 PM	222.00	8.80	0.90	7.50	6.60	7.50	1.30	0.90	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 2:15 PM	233.00	8.80	0.70	5.80	5.10	5.80	0.90	0.70	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 2:30 PM	225.00	6.10	0.30	4.60	4.30	4.60	0.50	0.30	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 2:45 PM	212.00	7.10	0.20	4.70	4.50	4.70	0.40	0.20	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 3:00 PM	238.00	7.60	0.30	4.70	4.40	4.70	0.30	0.30	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 3:15 PM	218.00	9.30	0.50	5.80	5.30	5.80	0.60	0.50	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/19/15 3:30 PM	202.00	7.50	0.50	6.00	5.50	6.00	0.80											



**US Army Corps
of Engineers®**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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
8/19/15 11:15 PM	240.00	4.30	5.00	4.60	0.00	4.60	4.40	5.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/15 11:30 PM	232.00	4.30	5.40	4.70	0.00	4.70	4.30	5.40	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/15 11:45 PM	239.00	5.60	5.60	4.70	0.00	4.70	4.80	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 12:00 AM	226.00	4.80	6.80	5.30	0.00	5.30	5.40	6.80	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 12:15 AM	214.00	3.70	8.00	5.60	0.00	5.60	7.10	8.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 12:30 AM	222.00	5.40	8.30	0.00	0.00	0.00	6.00	8.30	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 12:45 AM	232.00	5.20	8.50	4.80	0.00	4.80	5.50	8.50	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 1:00 AM	225.00	5.00	8.30	4.00	0.00	4.00	5.30	8.30	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 1:15 AM	213.00	4.90	9.20	3.90	0.00	3.90	5.50	9.20	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 1:30 AM	233.00	4.70	10.20	0.00	0.00	0.00	5.70	10.20	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 1:45 AM	227.00	4.80	10.10	3.50	0.00	3.50	5.80	10.10	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 2:00 AM	221.00	4.50	10.90	3.90	0.00	3.90	6.10	10.90	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 2:15 AM	214.00	4.70	12.00	3.80	0.00	3.80	6.00	12.00	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 2:30 AM	218.00	5.50	12.50	3.60	0.00	3.60	6.90	12.50	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 2:45 AM	221.00	4.10	12.70	4.10	0.00	4.10	7.20	12.70	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 3:00 AM	217.00	5.10	13.40	0.00	0.00	0.00	8.00	13.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 3:15 AM	223.00	6.40	14.20	4.90	0.00	4.90	8.40	14.20	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 3:30 AM	231.00	3.70	15.10	4.60	0.00	4.60	8.50	15.10	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 3:45 AM	226.00	6.00	15.50	4.60	0.00	4.60	8.70	15.50	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 4:00 AM	216.00	4.20	16.00	5.00	0.00	5.00	9.00	16.00	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 4:15 AM	224.00	5.10	15.90	5.00	0.00	5.00	10.20	15.90	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 4:30 AM	228.00	3.80	17.60	5.30	0.00	5.30	10.10	17.60	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 4:45 AM	221.00	4.50	18.70	5.40	0.00	5.40	11.10	18.70	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 5:00 AM	233.00	5.60	19.50	5.60	0.00	5.60	11.90	19.50	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 5:15 AM	234.00	4.20	18.60	6.00	0.00	6.00	11.50	18.60	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 5:30 AM	222.00	5.70	16.90	5.70	0.00	5.70	10.80	16.90	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 5:45 AM	220.00	4.60	17.30	5.40	0.00	5.40	10.30	17.30	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 6:00 AM	228.00	5.40	17.30	6.40	0.00	6.40	10.10	17.30	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 6:15 AM	233.00	4.80	17.20	6.80	0.00	6.80	10.60	17.20	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 6:30 AM	239.00	5.60	16.70	6.70	0.00	6.70	10.70	16.70	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 6:45 AM	226.00	4.80	15.70	6.70	0.00	6.70	9.90	15.70	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 7:00 AM	225.00	5.50	15.00	6.40	0.00	6.40	8.90	15.00	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 7:15 AM	245.00	5.50	15.20	0.00	0.00	0.00	8.50	15.20	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 7:30 AM	240.00	5.40	13.70	6.80	0.00	6.80	8.40	13.70	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 7:45 AM	243.00	6.50	14.30	0.00	0.00	0.00	8.30	14.30	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 8:00 AM	252.00	7.20	14.30	6.30	0.00	6.30	7.80	14.30	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 8:15 AM	253.00	8.10	13.60	7.50	0.00	7.50	8.20	13.60	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 8:30 AM	261.00	7.10	12.80	7.60	0.00	7.60	8.90	12.80	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 8:45 AM	239.00	7.70	11.30	7.20	0.00	7.20	6.60	11.30	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 9:00 AM	265.00	7.30	8.40	6.60	0.00	6.60	6.00	8.40	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 9:15 AM	258.00	6.00	7.80	7.30	0.00	7.30	5.40	7.80	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 9:30 AM	254.00	8.30	7.40	8.30	0.90	8.30	4.60	7.40	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 9:45 AM	239.00	7.50	7.10	8.20	1.10	8.20	4.30	7.10	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 10:00 AM	246.00	8.00	5.00	8.50	3.50	8.50	4.20	5.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 10:15 AM	266.00	6.80	4.30	8.80	4.50	8.80	3.90	4.30	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 10:30 AM	264.00	8.10	3.40	8.60	5.20	8.60	3.60	3.40	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 10:45 AM	239.00	8.20	2.30	7.30	5.00	7.30	2.90	2.30	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 11:00 AM	258.00	7.40	2.90	7.10	4.20	7.10	3.40	2.90	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 11:15 AM	255.00	7.80	2.90	7.00	4.10	7.00	3.00	2.90	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 11:30 AM	265.00	7.90	2.80	6.90	4.10	6.90	3.00	2.80	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 11:45 AM	256.00	6.30	2.90	6.30	3.40	6.30	2.60	2.90	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 12:00 PM	257.00	5.10	2.80	6.10	3.30	6.10	2.70	2.80	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 12:15 PM	258.00	8.40	2.70	6.00	3.30	6.00	2.70	2.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 12:30 PM	261.00	8.50	2.50	5.60	3.10	5.60	3.50	2.50	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 12:45 PM	259.00	5.50	2.50	5.30	2.80	5.30	2.70	2.50	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 1:00 PM	260.00	7.40	2.30	5.50	3.20	5.50	2.50	2.30	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 1:15 PM	261.00	9.90	2.40	6.70	4.30	6.70	3.10	2.40	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 1:30 PM	270.00	7.80	4.40	6.80	2.40	5.70	6.80	2.20	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 1:45 PM	267.00	8.50	1.70	7.20	5.50	7.20	2.90	1.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 2:00 PM	276.00	9.10	5.00	4.10	0.00	7.30	4.10	2.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 2:15 PM	292.00	8.40	4.70	4.70	0.00	6.90	4.70	1.60	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 2:30 PM	261.00	10.70	1.70	7.30	5.60	7.30	4.90	1.70	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 2:45 PM	260.00	8.00	1.70	7.80	6.10	7.80	5.40	1.70	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 3:00 PM	267.00	6.50	1.80	9.50	7.70	9.50	6.00	1.80	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 3:15 PM	270.00	6.80	5.40	4.90	0.00	9.80	4.90	1.90	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 3:30 PM	265.00	5.50	2.20	9.70	7.50	9.70	5.40	2.20	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 3:45 PM	266.00	7.50	2.00	9.10	7.10	9.10	5.50	2.00	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 4:00 PM	265.00	6.70	2.00	9.10	7.10	9.10	5.90	2.00	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 4:15 PM	271.00	5.70	5.60	5.80	0.20	9.30	5.80	2.40	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 4:30 PM	289.00	7.10	6.40	6.30	0.00	9.40	6.30	2.20	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/15 4:45 PM	271.00	6.70	6.70	6.30	0.											



**US Army Corps
of Engineers**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (ug/m ³)							Naphthalene (ug/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/21/15 12:30 AM	201.00	1.90	25.10	16.10	0.00	16.10	18.70	25.10	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 12:45 AM	217.00	2.00	24.50	15.80	0.00	15.80	19.40	24.50	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 1:00 AM	211.00	2.30	24.20	15.10	0.00	15.10	18.50	24.20	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 1:15 AM	205.00	1.80	25.10	14.80	0.00	14.80	19.00	25.10	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 1:30 AM	208.00	2.20	25.00	0.00	0.00	0.00	18.90	25.00	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 1:45 AM	209.00	1.90	25.40	14.50	0.00	14.50	19.10	25.40	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 2:00 AM	202.00	2.00	26.10	13.90	0.00	13.90	20.50	26.10	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 2:15 AM	205.00	2.10	27.10	14.60	0.00	14.60	20.70	27.10	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 2:30 AM	205.00	2.40	27.60	16.10	0.00	16.10	20.00	27.60	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 2:45 AM	200.00	2.10	27.20	12.80	0.00	12.80	19.30	27.20	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 3:00 AM	209.00	2.30	25.70	13.20	0.00	13.20	19.30	25.70	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 3:15 AM	207.00	2.10	26.30	13.80	0.00	13.80	19.30	26.30	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 3:30 AM	222.00	1.60	26.70	13.90	0.00	13.90	18.90	26.70	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 3:45 AM	252.00	1.40	26.10	13.90	0.00	13.90	18.80	26.10	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 4:00 AM	204.00	1.80	25.20	13.80	0.00	13.80	18.80	25.20	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 4:15 AM	217.00	1.00	24.30	12.90	0.00	12.90	19.30	24.30	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 4:30 AM	134.00	1.30	19.70	6.70	0.00	12.30	19.70	25.20	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 4:45 AM	180.00	1.00	23.90	0.00	0.00	0.00	18.40	23.90	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 5:00 AM	213.00	2.00	22.70	12.00	0.00	12.00	18.40	22.70	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 5:15 AM	204.00	1.60	24.40	12.90	0.00	12.90	18.10	24.40	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 5:30 AM	221.00	1.60	26.00	14.90	0.00	14.90	18.30	26.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 5:45 AM	212.00	1.30	28.30	15.30	0.00	15.30	21.30	28.30	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 6:00 AM	201.00	0.70	28.30	16.60	0.00	16.60	19.50	28.30	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 6:15 AM	172.00	0.80	20.50	5.20	0.00	18.60	20.50	29.90	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 6:30 AM	195.00	1.20	29.90	19.40	0.00	19.40	19.10	29.90	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 6:45 AM	212.00	0.90	28.80	0.00	0.00	0.00	19.10	28.80	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 7:00 AM	203.00	1.20	27.50	16.90	0.00	16.90	18.40	27.50	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 7:15 AM	197.00	1.60	28.10	0.00	0.00	0.00	17.70	28.10	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 7:30 AM	195.00	1.50	29.50	20.90	0.00	20.90	18.50	29.50	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 7:45 AM	210.00	1.70	27.60	18.00	0.00	18.00	18.90	27.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 8:00 AM	181.00	2.20	23.80	15.20	0.00	15.20	21.30	23.80	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 8:15 AM	199.00	2.00	22.30	14.30	0.00	14.30	21.20	22.30	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 8:30 AM	180.00	1.80	20.30	16.00	0.00	16.00	17.40	20.30	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 8:45 AM	181.00	1.40	18.10	18.70	0.60	18.70	15.50	18.10	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 9:00 AM	209.00	2.60	17.10	17.40	0.30	17.40	20.20	17.10	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 9:15 AM	210.00	3.80	15.50	16.40	0.90	16.40	13.50	15.50	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 9:30 AM	185.00	2.50	14.70	17.30	2.60	17.30	20.90	14.70	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 9:45 AM	202.00	2.40	15.90	18.10	2.20	18.10	13.30	15.90	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 10:00 AM	199.00	2.70	17.20	23.10	5.90	23.10	14.50	17.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 10:15 AM	183.00	4.60	12.50	19.60	7.10	19.60	16.80	12.50	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 10:30 AM	209.00	4.80	9.60	15.90	6.30	15.90	17.60	9.60	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 10:45 AM	198.00	4.00	9.20	19.50	10.30	19.50	10.60	9.20	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 11:00 AM	207.00	5.00	8.50	15.70	7.20	15.70	10.10	8.50	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 11:15 AM	217.00	3.90	8.90	16.80	7.90	16.80	15.80	8.90	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 11:30 AM	193.00	6.00	8.00	14.70	6.70	14.70	8.70	8.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 11:45 AM	202.00	5.30	8.90	14.60	5.70	14.60	9.00	8.90	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 12:00 PM	206.00	6.30	8.20	12.80	4.60	12.80	9.10	8.20	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 12:15 PM	191.00	3.90	8.40	44.40	36.00	44.40	9.20	8.40	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 12:30 PM	188.00	4.90	8.50	28.30	19.80	28.30	10.70	8.50	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 12:45 PM	183.00	5.60	11.20	103.00	91.80	103.00	10.30	11.20	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 1:00 PM	177.00	6.70	10.90	7.20	0.00	42.20	10.90	9.40	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 1:15 PM	202.00	7.10	9.40	27.10	17.70	27.10	10.90	9.40	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 1:30 PM	190.00	5.70	9.80	16.90	7.10	16.90	10.90	9.80	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 1:45 PM	198.00	4.70	10.20	20.00	9.80	20.00	12.60	10.20	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 2:00 PM	197.00	6.00	10.30	12.10	1.80	12.10	11.80	10.30	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 2:15 PM	200.00	6.20	10.60	12.30	1.70	12.30	11.90	10.60	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 2:30 PM	215.00	5.30	11.10	11.50	0.40	11.50	11.90	11.10	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 2:45 PM	189.00	5.00	11.60	11.10	0.00	11.10	12.60	11.60	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 3:00 PM	173.00	4.10	12.50	4.80	0.00	11.80	12.50	12.10	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 3:15 PM	184.00	6.10	12.40	11.20	0.00	11.20	13.80	12.40	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 3:30 PM	179.00	5.70	13.20	5.00	0.00	11.60	13.20	12.40	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 3:45 PM	185.00	4.70	13.20	13.30	0.10	13.30	13.60	13.20	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 4:00 PM	182.00	6.20	12.80	11.70	0.00	11.70	12.70	12.80	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 4:15 PM	214.00	4.80	12.60	11.70	0.00	11.70	14.30	12.60	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 4:30 PM	187.00	3.50	13.00	11.90	0.00	11.90	13.20	13.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 4:45 PM	184.00	4.60	13.30	13.00	0.00	13.00	13.50	13.30	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 5:00 PM	186.00	4.90	14.00	12.50	0.00	12.50	13.80	14.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 5:15 PM	181.00	6.50	14.30	12.40	0.00	12.40	14.40	14.30	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/15 5:30 PM	187.00	5.20	14.50	12.20	0.00	12.20	14.20	14.50	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00



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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
8/22/15 1:45 AM	180.00	2.40	26.50	18.00	0.00	18.00	21.50	26.50	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 2:00 AM	182.00	2.00	26.70	16.60	0.00	16.60	20.10	26.70	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 2:15 AM	189.00	1.70	26.80	18.10	0.00	18.10	21.00	26.80	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 2:30 AM	181.00	1.80	26.90	0.00	0.00	0.00	22.50	26.90	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 2:45 AM	183.00	2.10	27.90	20.50	0.00	20.50	22.00	27.90	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 3:00 AM	177.00	1.70	20.60	9.10	0.00	17.10	20.60	29.00	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 3:15 AM	197.00	2.00	28.60	20.50	0.00	20.50	22.60	28.60	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 3:30 AM	180.00	2.30	30.80	19.40	0.00	19.40	22.10	30.80	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 3:45 AM	194.00	2.50	30.80	18.50	0.00	18.50	21.80	30.80	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 4:00 AM	182.00	2.00	31.20	19.10	0.00	19.10	23.10	31.20	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 4:15 AM	183.00	1.40	30.60	20.30	0.00	20.30	22.30	30.60	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 4:30 AM	181.00	1.80	29.00	20.00	0.00	20.00	22.70	29.00	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 4:45 AM	183.00	1.60	29.00	19.50	0.00	19.50	21.70	29.00	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 5:00 AM	157.00	1.70	21.40	8.80	0.00	19.50	21.40	28.20	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 5:15 AM	166.00	1.70	21.50	8.10	0.00	20.10	21.50	27.90	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 5:30 AM	168.00	2.20	20.80	7.50	0.00	20.10	20.80	27.60	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 5:45 AM	169.00	1.80	22.50	8.00	0.00	19.10	22.50	29.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 6:00 AM	180.00	1.40	29.30	21.40	0.00	21.40	25.90	29.30	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 6:15 AM	189.00	1.40	32.50	23.60	0.00	23.60	27.60	32.50	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 6:30 AM	187.00	1.80	34.80	23.50	0.00	23.50	31.30	34.80	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 6:45 AM	171.00	1.60	30.20	11.10	0.00	25.60	30.20	36.40	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 7:00 AM	155.00	3.20	30.40	10.40	0.00	28.70	30.40	36.00	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 7:15 AM	162.00	3.10	28.30	10.60	0.00	25.60	28.30	35.10	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 7:30 AM	158.00	2.90	28.10	11.20	0.00	24.30	28.10	33.20	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 7:45 AM	168.00	1.90	26.90	12.20	0.00	23.80	26.90	28.70	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 8:00 AM	154.00	3.50	23.20	12.60	0.00	22.80	23.20	25.80	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 8:15 AM	181.00	2.90	22.20	24.20	2.00	24.20	24.40	22.20	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 8:30 AM	183.00	2.30	21.50	20.10	0.00	20.10	20.90	21.50	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 8:45 AM	187.00	3.90	18.20	19.40	1.20	19.40	17.60	18.20	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 9:00 AM	174.00	3.30	16.30	10.60	0.00	18.20	16.30	16.80	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 9:15 AM	171.00	3.50	15.50	9.70	0.00	0.00	15.50	14.90	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 9:30 AM	176.00	5.00	13.60	8.60	0.00	0.00	13.60	13.10	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 9:45 AM	165.00	3.40	11.70	8.30	0.00	14.20	11.70	11.20	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 10:00 AM	168.00	6.30	9.60	6.90	0.00	12.90	9.60	9.80	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 10:15 AM	179.00	6.00	9.40	6.80	0.00	12.50	9.40	8.60	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 10:30 AM	188.00	5.20	8.20	13.20	5.00	13.20	11.10	8.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 10:45 AM	143.00	6.10	8.90	7.50	0.00	12.60	8.90	7.70	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 11:00 AM	149.00	6.60	7.60	7.60	0.00	13.20	7.60	6.90	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 11:15 AM	171.00	5.40	7.90	7.70	0.00	12.80	7.90	6.60	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 11:30 AM	173.00	5.00	8.00	7.70	0.00	13.50	8.00	7.10	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 11:45 AM	172.00	5.20	9.00	8.30	0.00	13.40	9.00	6.10	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 12:00 PM	185.00	6.40	6.30	14.40	8.10	14.40	8.10	6.30	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 12:15 PM	148.00	6.70	9.10	8.60	0.00	13.90	9.10	6.20	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 12:30 PM	147.00	7.30	8.30	8.80	0.50	14.30	8.30	6.30	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 12:45 PM	150.00	8.70	8.50	8.70	0.20	13.80	8.50	6.40	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 1:00 PM	164.00	6.80	9.10	8.30	0.00	14.30	9.10	6.70	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 1:15 PM	174.00	7.90	9.40	7.90	0.00	16.60	9.40	6.80	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 1:30 PM	156.00	5.50	9.30	6.70	0.00	12.50	9.30	6.90	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 1:45 PM	144.00	5.10	12.70	6.70	0.00	13.00	12.70	7.00	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 2:00 PM	134.00	7.30	15.30	6.50	0.00	15.10	15.30	6.70	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 2:15 PM	147.00	7.10	10.70	6.40	0.00	13.90	10.70	6.80	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 2:30 PM	156.00	3.70	10.20	6.70	0.00	13.50	10.20	6.80	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 2:45 PM	135.00	5.90	11.20	7.50	0.00	15.20	11.20	7.10	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 3:00 PM	143.00	5.50	9.30	7.40	0.00	14.90	9.30	7.00	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 3:15 PM	147.00	5.80	9.20	7.60	0.00	13.70	9.20	6.70	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 3:30 PM	151.00	4.60	9.50	8.10	0.00	16.50	9.50	7.10	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 3:45 PM	161.00	6.10	17.50	8.10	0.00	16.10	17.50	7.10	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 4:00 PM	148.00	5.70	9.50	8.30	0.00	15.60	9.50	7.20	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 4:15 PM	166.00	5.60	9.40	8.00	0.00	14.50	9.40	7.40	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 4:30 PM	148.00	6.00	11.00	8.10	0.00	15.00	11.00	7.70	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 4:45 PM	163.00	4.70	10.20	7.40	0.00	12.80	10.20	7.80	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 5:00 PM	153.00	7.10	10.20	7.60	0.00	12.40	10.20	8.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 5:15 PM	170.00	4.80	10.50	7.40	0.00	11.80	10.50	7.70	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 5:30 PM	164.00	3.10	10.70	7.40	0.00	12.70	10.70	7.70	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 5:45 PM	163.00	5.60	10.80	6.40	0.00	11.40	10.80	7.90	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 6:00 PM	186.00	5.20	7.80	11.60	3.80	11.60	10.10	7.80	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 6:15 PM	168.00	6.60	10.80	6.00	0.00	0.00	10.80	8.20	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 6:30 PM	159.00	3.90	10.60	6.50	0.00	13.30	10.60	8.50	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 6:45 PM	150.00	4.90	11.70	6.40	0.00	13.60	11.70	8.80	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/15 7:00 PM	153.00	3.90	38.90	6.90	0.00	14.20										



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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
8/23/15 3:00 AM	177.00	3.80	19.80	8.30	0.00	19.70	19.80	24.70	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 3:15 AM	178.00	4.20	18.50	8.80	0.00	15.20	18.50	25.10	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 3:30 AM	165.00	4.20	19.30	8.40	0.00	14.90	19.30	26.40	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 3:45 AM	162.00	3.40	19.50	8.10	0.00	0.00	19.50	28.80	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 4:00 AM	157.00	4.20	19.60	8.20	0.00	14.10	19.60	28.70	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 4:15 AM	171.00	4.10	19.70	7.90	0.00	14.90	19.70	28.80	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 4:30 AM	185.00	3.60	27.60	15.60	0.00	15.60	20.30	27.60	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 4:45 AM	189.00	4.00	29.60	15.30	0.00	15.30	20.50	29.60	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 5:00 AM	174.00	2.90	20.40	8.70	0.00	17.80	20.40	27.80	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 5:15 AM	186.00	2.50	28.20	17.30	0.00	17.30	21.10	28.20	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 5:30 AM	185.00	4.10	28.00	18.10	0.00	18.10	21.20	28.00	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 5:45 AM	193.00	5.00	28.30	20.30	0.00	20.30	21.80	28.30	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 6:00 AM	202.00	4.40	29.20	21.20	0.00	21.20	23.00	29.20	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 6:15 AM	189.00	4.30	29.20	21.00	0.00	21.00	22.90	29.20	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 6:30 AM	178.00	4.10	23.60	8.90	0.00	21.30	23.60	29.70	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 6:45 AM	186.00	5.50	30.20	20.70	0.00	20.70	25.20	30.20	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 7:00 AM	176.00	3.90	31.60	9.10	0.00	20.80	31.60	30.10	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 7:15 AM	187.00	5.80	30.30	20.10	0.00	20.10	22.90	30.30	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 7:30 AM	172.00	5.10	23.80	8.10	0.00	21.00	23.80	31.00	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 7:45 AM	190.00	4.90	31.80	21.50	0.00	21.50	24.90	31.80	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 8:00 AM	186.00	4.60	31.90	22.00	0.00	22.00	25.70	31.90	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 8:15 AM	196.00	5.20	32.50	20.90	0.00	20.90	26.00	32.50	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 8:30 AM	191.00	4.10	33.80	22.70	0.00	22.70	27.70	33.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 8:45 AM	202.00	4.70	35.70	21.30	0.00	21.30	28.80	35.70	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 9:00 AM	205.00	4.10	38.20	20.30	0.00	20.30	30.30	38.20	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 9:15 AM	194.00	4.30	39.80	0.00	0.00	0.00	31.10	39.80	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 9:30 AM	210.00	5.30	40.00	21.20	0.00	21.20	31.10	40.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 9:45 AM	208.00	3.70	43.90	22.60	0.00	22.60	31.70	43.90	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 10:00 AM	217.00	3.40	45.20	22.00	0.00	22.00	32.20	45.20	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 10:15 AM	197.00	3.80	47.10	21.20	0.00	21.20	31.30	47.10	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 10:30 AM	201.00	3.50	0.00	21.00	0.00	21.00	30.80	0.00	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 10:45 AM	218.00	2.70	45.20	20.20	0.00	20.20	28.90	45.20	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 11:00 AM	208.00	2.50	53.70	23.70	0.00	23.70	31.70	53.70	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 11:15 AM	216.00	4.90	81.90	21.50	0.00	21.50	39.90	81.90	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 11:30 AM	220.00	3.50	100.60	22.70	0.00	22.70	41.90	100.60	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 11:45 AM	228.00	3.90	109.50	20.70	0.00	20.70	42.00	109.50	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 12:00 PM	226.00	4.90	139.30	20.80	0.00	20.80	48.00	139.30	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 12:15 PM	221.00	4.60	192.10	19.10	0.00	19.10	47.00	192.10	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 12:30 PM	227.00	5.40	194.70	20.00	0.00	20.00	47.70	194.70	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 12:45 PM	238.00	5.60	185.60	21.80	0.00	21.80	51.00	185.60	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 1:00 PM	236.00	5.80	173.60	20.90	0.00	20.90	52.40	173.60	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 1:15 PM	258.00	8.00	166.40	22.00	0.00	22.00	48.20	166.40	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 1:30 PM	252.00	7.30	97.20	25.00	0.00	25.00	36.50	97.20	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 1:45 PM	256.00	8.40	57.10	27.50	0.00	27.50	32.80	57.10	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 2:00 PM	245.00	7.90	38.50	32.20	0.00	32.20	32.30	38.50	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 2:15 PM	240.00	6.80	16.00	30.20	14.20	30.20	21.30	16.00	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 2:30 PM	256.00	6.00	10.70	25.20	14.50	25.20	11.00	10.70	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 2:45 PM	236.00	8.00	0.80	16.70	15.90	16.70	3.50	0.80	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 3:00 PM	259.00	7.00	0.90	0.00	0.00	0.00	2.30	0.90	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 3:15 PM	261.00	5.60	1.00	15.70	14.70	15.70	2.20	1.00	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 3:30 PM	267.00	4.60	1.10	16.10	15.00	16.10	2.30	1.10	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 3:45 PM	272.00	9.00	11.50	2.10	0.00	17.70	2.10	1.20	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 4:00 PM	295.00	7.70	11.80	2.40	0.00	19.00	2.40	1.30	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 4:15 PM	258.00	5.20	1.10	12.80	11.70	12.80	2.40	1.10	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 4:30 PM	269.00	5.20	0.80	11.10	10.30	11.10	1.80	0.80	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 4:45 PM	286.00	3.50	8.20	1.70	0.00	10.10	1.70	0.80	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 5:00 PM	256.00	6.40	0.70	7.50	6.80	7.50	1.50	0.70	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 5:15 PM	275.00	6.00	8.00	1.80	0.00	9.40	1.80	0.80	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 5:30 PM	274.00	5.80	8.00	1.70	0.00	8.10	1.70	0.70	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 5:45 PM	261.00	5.80	0.80	0.00	0.00	0.00	2.10	0.80	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 6:00 PM	278.00	5.90	9.50	2.30	0.00	0.00	2.30	0.90	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 6:15 PM	278.00	4.30	10.60	2.70	0.00	10.10	2.70	1.00	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 6:30 PM	288.00	5.00	9.80	3.10	0.00	9.90	3.10	1.00	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 6:45 PM	276.00	5.20	10.80	3.40	0.00	10.80	3.40	1.10	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 7:00 PM	272.00	4.40	11.40	3.30	0.00	10.40	3.30	1.10	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 7:15 PM	273.00	4.60	11.10	5.00	0.00	10.50	5.00	1.10	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 7:30 PM	257.00	3.20	1.10	13.30	12.20	13.30	6.30	1.10	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 7:45 PM	265.00	3.20	1.10	10.40	9.30	10.40	7.30	1.10	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 8:00 PM	258.00	2.00	1.10	10.70	9.60	10.70	7.70	1.10	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/23/15 8:15 PM	259.00	3.0														



**US Army Corps
of Engineers®**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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
8/25/15 5:30 AM	307.00	3.60	5.00	9.40	4.40	8.70	9.40	9.70	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 5:45 AM	281.00	3.40	5.00	9.30	4.30	8.60	9.30	10.10	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 6:00 AM	274.00	2.60	5.00	9.40	4.40	8.50	9.40	9.20	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 6:15 AM	262.00	3.50	9.50	7.20	0.00	7.20	9.10	9.50	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 6:30 AM	265.00	2.90	9.40	0.00	0.00	0.00	9.30	9.40	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 6:45 AM	271.00	2.90	3.80	8.80	5.00	6.90	8.80	9.70	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 7:00 AM	271.00	2.80	4.00	8.90	4.90	7.60	8.90	10.20	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 7:15 AM	269.00	2.70	10.10	0.00	0.00	0.00	8.90	10.10	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 7:30 AM	283.00	3.20	6.80	9.50	2.70	15.10	9.50	35.70	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 7:45 AM	291.00	4.60	4.90	12.00	7.10	10.30	12.00	15.60	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 8:00 AM	282.00	3.30	4.50	9.70	5.20	23.40	9.70	11.10	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 8:15 AM	318.00	3.30	4.10	10.00	5.90	13.00	10.00	11.10	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 8:30 AM	304.00	3.20	3.80	10.40	6.60	12.40	10.40	12.00	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 8:45 AM	303.00	4.20	4.20	10.20	6.00	13.30	10.20	12.70	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 9:00 AM	298.00	1.70	3.50	12.50	9.00	13.10	12.50	12.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 9:15 AM	355.00	3.10	3.70	10.60	6.90	13.20	10.60	13.10	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 9:30 AM	322.00	4.50	3.90	14.60	10.70	12.90	14.60	11.10	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 9:45 AM	309.00	3.20	5.00	15.90	10.90	14.00	15.90	18.70	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 10:00 AM	344.00	3.70	5.20	15.90	10.70	14.10	15.90	18.30	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 10:15 AM	326.00	2.90	8.90	12.00	3.10	31.90	12.00	11.50	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 10:30 AM	314.00	4.20	4.90	13.20	8.30	13.90	13.20	12.00	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 10:45 AM	290.00	3.60	4.80	22.20	17.40	17.30	22.20	13.10	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 11:00 AM	3.00	4.50	17.30	13.10	0.00	17.30	22.20	13.10	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 11:15 AM	351.00	4.40	4.30	12.10	7.80	18.90	12.10	13.10	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 11:30 AM	7.00	5.00	12.60	11.90	0.00	12.60	13.20	11.90	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 11:45 AM	7.00	4.80	12.50	12.70	0.20	12.50	15.70	12.70	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 12:00 PM	359.00	3.50	3.10	0.00	0.00	12.30	0.00	12.60	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 12:15 PM	3.00	3.60	12.10	12.50	0.40	12.10	19.20	12.50	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 12:30 PM	24.00	2.40	12.80	16.00	3.20	12.80	13.50	16.00	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 12:45 PM	23.00	1.30	11.70	14.40	2.70	11.70	13.50	14.40	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 1:00 PM	298.00	4.40	4.20	13.40	9.20	12.70	13.40	14.20	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 1:15 PM	289.00	5.00	4.70	13.30	8.60	12.60	13.30	14.40	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 1:30 PM	274.00	2.80	4.80	13.30	8.50	15.20	13.30	14.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 1:45 PM	299.00	2.50	4.90	46.40	41.50	14.70	46.40	15.50	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 2:00 PM	319.00	4.00	5.50	14.80	9.30	12.70	14.80	20.90	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 2:15 PM	301.00	3.40	5.40	20.30	14.90	15.10	20.30	19.20	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 2:30 PM	346.00	2.90	5.30	42.00	36.70	15.00	42.00	31.00	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 2:45 PM	275.00	3.70	5.60	17.40	11.80	78.20	17.40	15.70	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 3:00 PM	293.00	1.40	5.40	68.50	63.10	48.30	68.50	15.10	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 3:15 PM	308.00	1.10	5.50	17.60	12.10	30.30	17.60	14.60	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 3:30 PM	323.00	2.80	5.60	17.80	12.20	30.10	17.80	16.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 3:45 PM	332.00	3.20	5.50	34.40	28.90	0.00	34.40	15.10	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 4:00 PM	344.00	2.30	5.20	17.80	12.60	20.30	17.80	14.60	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 4:15 PM	345.00	3.00	5.20	18.20	13.00	21.30	18.20	14.90	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 4:30 PM	15.00	2.00	21.90	15.50	0.00	21.90	17.70	15.50	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 4:45 PM	38.00	3.80	22.60	15.10	0.00	22.60	18.50	15.10	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 5:00 PM	44.00	3.80	23.00	15.20	0.00	23.00	17.30	15.20	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 5:15 PM	48.00	3.50	22.80	15.70	0.00	22.80	18.00	15.70	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 5:30 PM	24.00	3.20	25.00	15.90	0.00	25.00	17.90	15.90	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 5:45 PM	40.00	3.10	36.70	16.60	0.00	36.70	21.40	16.60	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 6:00 PM	58.00	2.90	32.40	25.60	0.00	32.40	25.70	25.60	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 6:15 PM	59.00	2.50	29.20	25.70	0.00	29.20	19.70	25.70	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 6:30 PM	64.00	3.60	20.30	23.90	3.60	20.30	21.10	23.90	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 6:45 PM	97.00	2.80	18.20	11.10	0.00	20.80	18.20	27.60	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 7:00 PM	115.00	2.20	20.40	7.30	0.00	21.60	20.40	24.20	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 7:15 PM	76.00	2.00	27.40	41.70	14.30	27.40	29.80	41.70	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 7:30 PM	69.00	3.00	41.00	36.90	0.00	41.00	23.80	36.90	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 7:45 PM	41.00	3.40	37.70	32.00	0.00	37.70	27.80	32.00	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 8:00 PM	39.00	3.60	32.10	50.70	18.60	32.10	29.80	50.70	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 8:15 PM	46.00	3.00	32.70	24.10	0.00	32.70	20.00	24.10	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 8:30 PM	41.00	3.30	34.80	27.80	0.00	34.80	24.50	27.80	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 8:45 PM	58.00	3.10	25.70	33.30	7.60	25.70	35.50	33.30	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 9:00 PM	45.00	3.90	21.30	30.30	9.00	21.30	22.20	30.30	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 9:15 PM	57.00	3.30	20.10	32.50	12.40	20.10	21.70	32.50	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 9:30 PM	46.00	3.70	21.00	33.70	12.70	21.00	27.20	33.70	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 9:45 PM	50.00	3.10	13.50	35.00	21.50	13.50	24.50	35.00	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 10:00 PM	45.00	3.30	10.40	33.80	23.40	10.40	19.90	33.80	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 10:15 PM	30.00	3.90	9.90	29.70	19.80	9.90	22.20	29.70	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 10:30 PM	26.00	3.40	9.90	26.80	16.90	9.90	18.90	26.80	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/15 10:45 PM	29.00	4.00	9.30	26.10												



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August 2015

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		
8/27/15 8:00 AM	254.00	3.00	46.00	31.10	0.00	31.10	33.60	46.00	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 8:15 AM	251.00	1.10	44.00	34.80	0.00	34.80	31.80	44.00	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 8:30 AM	275.00	1.40	11.30	32.90	21.60	33.00	32.90	44.20	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 8:45 AM	269.00	1.70	45.80	0.00	0.00	0.00	34.70	45.80	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 9:00 AM	22.00	0.90	34.10	42.90	8.80	34.10	33.20	42.90	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 9:15 AM	46.00	0.80	34.80	44.60	9.80	34.80	33.60	44.60	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 9:30 AM	195.00	0.50	42.70	35.10	0.00	35.10	33.50	42.70	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 9:45 AM	166.00	1.30	35.00	16.50	0.00	132.60	35.00	41.50	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 10:00 AM	130.00	1.90	35.80	18.20	0.00	37.20	35.80	40.80	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 10:15 AM	189.00	0.70	40.70	37.60	0.00	37.60	32.60	40.70	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 10:30 AM	158.00	1.80	30.50	15.20	0.00	0.00	30.50	38.00	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 10:45 AM	187.00	0.60	39.20	42.00	2.80	42.00	30.40	39.20	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 11:00 AM	11.00	1.20	45.80	34.30	0.00	45.80	42.40	34.30	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 11:15 AM	101.00	0.50	39.70	13.40	0.00	73.40	39.70	49.90	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 11:30 AM	2.00	1.40	47.70	39.20	0.00	47.70	30.40	39.20	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 11:45 AM	333.00	0.60	15.90	25.90	10.00	37.40	25.90	32.70	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 12:00 PM	47.00	1.60	24.70	29.40	4.70	24.70	23.00	29.40	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 12:15 PM	359.00	1.20	16.80	23.30	6.50	22.90	23.30	25.60	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 12:30 PM	354.00	3.80	16.10	31.40	15.30	42.20	31.40	33.10	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 12:45 PM	345.00	2.30	16.80	113.50	96.70	39.60	113.50	33.00	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 1:00 PM	352.00	1.20	13.70	31.70	18.00	28.50	31.70	33.60	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 1:15 PM	33.00	1.50	29.60	28.60	0.00	29.60	27.00	28.60	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 1:30 PM	3.00	1.50	21.70	30.30	8.60	21.70	43.40	30.30	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 1:45 PM	239.00	0.40	32.60	27.40	0.00	27.40	31.00	32.60	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 2:00 PM	315.00	1.30	9.30	30.40	21.10	28.30	30.40	33.10	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 2:15 PM	217.00	0.20	33.30	29.10	0.00	29.10	32.10	33.30	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 2:30 PM	198.00	1.00	34.70	31.40	0.00	31.40	65.00	34.70	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 2:45 PM	20.00	2.40	63.70	34.50	0.00	63.70	36.60	34.50	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 3:00 PM	71.00	1.50	36.40	34.30	0.00	36.40	37.80	34.30	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 3:15 PM	121.00	3.10	36.70	14.10	0.00	32.20	36.70	32.50	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 3:30 PM	123.00	3.80	48.30	14.90	0.00	45.50	48.30	31.70	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 3:45 PM	125.00	2.30	41.50	16.30	0.00	37.40	41.50	36.10	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 4:00 PM	98.00	2.30	44.10	16.70	0.00	40.40	44.10	39.00	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 4:15 PM	117.00	3.90	37.60	17.70	0.00	44.00	37.60	40.60	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 4:30 PM	116.00	4.40	36.00	28.50	0.00	51.20	36.00	35.70	28.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 4:45 PM	117.00	4.00	36.70	17.50	0.00	34.50	36.70	33.80	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 5:00 PM	114.00	3.80	42.70	15.70	0.00	38.40	42.70	0.00	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 5:15 PM	123.00	3.20	37.00	16.40	0.00	34.60	37.00	37.60	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 5:30 PM	117.00	2.50	35.20	15.20	0.00	33.00	35.20	31.70	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 5:45 PM	81.00	2.40	31.50	33.30	1.80	31.50	38.10	33.30	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 6:00 PM	123.00	3.10	35.20	15.80	0.00	34.00	35.20	42.40	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 6:15 PM	114.00	3.30	38.00	14.80	0.00	28.50	38.00	35.30	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 6:30 PM	82.00	2.50	28.80	35.50	6.70	28.80	34.50	35.50	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 6:45 PM	121.00	3.00	39.70	13.20	0.00	27.00	39.70	36.40	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 7:00 PM	104.00	2.50	37.50	12.40	0.00	29.70	37.50	41.60	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 7:15 PM	73.00	3.10	27.20	39.60	12.40	27.20	58.40	39.60	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 7:30 PM	114.00	2.70	47.50	11.40	0.00	23.40	47.50	40.70	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 7:45 PM	126.00	2.00	48.40	11.70	0.00	23.80	48.40	43.10	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 8:00 PM	133.00	0.90	47.00	12.60	0.00	26.30	47.00	42.70	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 8:15 PM	147.00	1.90	57.40	12.80	0.00	25.80	57.40	47.00	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 8:30 PM	138.00	2.30	55.20	12.10	0.00	24.70	55.20	51.10	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 8:45 PM	142.00	2.40	39.60	10.50	0.00	21.10	39.60	50.10	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 9:00 PM	146.00	2.00	39.80	8.90	0.00	19.00	39.80	50.20	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 9:15 PM	134.00	2.40	41.80	8.40	0.00	17.40	41.80	55.10	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 9:30 PM	120.00	1.40	40.40	7.50	0.00	18.00	40.40	53.50	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 9:45 PM	137.00	2.70	37.40	8.00	0.00	18.40	37.40	55.30	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 10:00 PM	154.00	2.00	40.60	10.80	0.00	28.20	40.60	55.60	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 10:15 PM	145.00	0.80	44.80	12.60	0.00	37.90	44.80	51.70	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 10:30 PM	140.00	1.90	43.10	13.80	0.00	34.40	43.10	44.40	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 10:45 PM	166.00	1.70	45.10	14.40	0.00	34.90	45.10	49.60	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 11:00 PM	141.00	2.00	42.10	14.70	0.00	29.90	42.10	48.20	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 11:15 PM	11.00	2.00	38.80	47.30	8.50	38.80	42.50	47.30	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 11:30 PM	51.00	1.90	34.10	45.50	11.40	34.10	37.20	45.50	19.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/15 11:45 PM	135.00	2.70	0.00	23.60	0.00	38.40	0.00	46.40	23.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 12:00 AM	129.00	2.60	30.30	16.00	0.00	38.40	30.30	38.70	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 12:15 AM	132.00	2.80	29.80	14.00	0.00	23.10	29.80	38.70	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 12:30 AM	141.00	1.80	30.60	14.00	0.00	39.50	30.60	40.30	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 12:45 AM	122.00	2.40	31.10	13.80	0.00	0.00	31.10	39.30	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 1:00 AM	123.00	3.10	31.70	14.70	0.00	27.50	31.70											



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

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		
8/28/15 9:15 AM	209.00	1.90	27.20	26.50	0.00	26.50	27.40	27.20	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 9:30 AM	175.00	2.10	27.00	12.10	0.00	26.50	27.00	25.00	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 9:45 AM	247.00	2.90	23.50	24.00	0.50	24.00	24.80	23.50	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 10:00 AM	200.00	2.70	20.60	22.80	2.20	22.80	21.60	20.60	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 10:15 AM	194.00	2.50	20.40	22.30	1.90	22.30	22.00	20.40	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 10:30 AM	182.00	3.70	18.90	23.60	4.70	23.60	19.40	18.90	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 10:45 AM	200.00	3.60	16.60	22.00	5.40	22.00	19.30	16.60	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 11:00 AM	191.00	3.90	16.10	19.30	3.20	19.30	21.50	16.10	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 11:15 AM	201.00	3.10	15.70	0.00	0.00	0.00	17.80	15.70	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 11:30 AM	223.00	3.00	16.30	20.40	4.10	20.40	18.40	16.30	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 11:45 AM	211.00	3.20	16.30	19.30	3.00	19.30	21.70	16.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 12:00 PM	226.00	3.90	14.50	18.90	4.40	18.90	18.50	14.50	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 12:15 PM	228.00	3.90	13.60	18.30	4.70	18.30	29.80	13.60	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 12:30 PM	214.00	3.40	14.40	18.80	4.40	18.80	20.40	14.40	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 12:45 PM	212.00	3.70	13.80	18.60	4.80	18.60	20.70	13.80	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 1:00 PM	236.00	3.40	14.50	18.60	4.10	18.60	18.80	14.50	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 1:15 PM	237.00	3.30	14.40	20.60	6.20	20.60	18.00	14.40	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 1:30 PM	221.00	2.90	13.20	17.70	4.50	17.70	18.30	13.20	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 1:45 PM	225.00	2.20	13.60	22.10	8.50	22.10	18.60	13.60	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 2:00 PM	240.00	3.20	13.10	19.50	6.40	19.50	17.70	13.10	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 2:15 PM	217.00	3.10	12.40	19.50	7.10	19.50	17.40	12.40	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 2:30 PM	212.00	1.80	11.60	16.10	4.50	16.10	15.50	11.60	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 2:45 PM	187.00	2.90	10.70	15.40	4.70	15.40	83.20	10.70	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 3:00 PM	202.00	2.80	10.20	16.50	6.30	16.50	16.00	10.20	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 3:15 PM	201.00	1.90	10.50	15.90	5.40	15.90	18.70	10.50	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 3:30 PM	176.00	2.90	20.10	10.00	0.00	16.80	20.10	12.30	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 3:45 PM	173.00	2.60	19.80	9.90	0.00	17.70	19.80	13.30	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 4:00 PM	172.00	2.20	18.30	9.10	0.00	20.00	18.30	12.90	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 4:15 PM	158.00	2.00	17.70	7.90	0.00	17.20	17.70	13.20	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 4:30 PM	177.00	1.90	19.10	8.00	0.00	19.60	19.10	13.80	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 4:45 PM	145.00	2.50	18.50	7.80	0.00	16.80	18.50	15.00	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 5:00 PM	140.00	2.20	18.30	6.90	0.00	0.00	18.30	14.40	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 5:15 PM	126.00	2.20	20.40	7.10	0.00	18.50	20.40	14.30	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 5:30 PM	143.00	1.90	19.60	7.50	0.00	18.90	19.60	15.70	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 5:45 PM	115.00	2.40	24.60	7.90	0.00	18.80	24.60	16.80	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 6:00 PM	131.00	2.00	21.90	8.40	0.00	20.40	21.90	18.70	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 6:15 PM	132.00	2.30	23.10	9.70	0.00	23.00	23.10	21.30	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 6:30 PM	116.00	2.70	23.40	9.80	0.00	24.10	23.40	22.00	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 6:45 PM	89.00	1.80	27.00	26.00	0.00	27.00	24.40	26.00	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 7:00 PM	60.00	3.50	32.40	25.40	0.00	32.40	25.90	25.40	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 7:15 PM	61.00	2.40	25.40	24.40	0.00	25.40	26.80	24.40	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 7:30 PM	72.00	3.00	25.70	28.40	2.70	25.70	30.00	28.40	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 7:45 PM	84.00	3.00	25.60	28.40	2.80	25.60	30.00	28.40	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 8:00 PM	91.00	2.60	45.00	12.00	0.00	20.40	45.00	35.90	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 8:15 PM	113.00	3.10	54.60	11.60	0.00	19.60	54.60	37.10	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 8:30 PM	101.00	1.30	45.10	10.30	0.00	19.80	45.10	40.10	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 8:45 PM	111.00	2.60	45.10	10.30	0.00	21.10	45.10	42.00	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 9:00 PM	119.00	2.00	47.70	11.10	0.00	23.00	47.70	46.80	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 9:15 PM	134.00	2.60	47.30	10.20	0.00	22.40	47.30	49.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 9:30 PM	149.00	2.30	51.90	9.50	0.00	23.80	51.90	58.10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 9:45 PM	121.00	2.00	49.70	9.10	0.00	23.80	49.70	72.50	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 10:00 PM	139.00	2.60	45.00	9.30	0.00	27.50	45.00	79.10	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 10:15 PM	151.00	2.80	36.60	10.00	0.00	30.20	36.60	53.80	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 10:30 PM	139.00	2.30	32.50	10.40	0.00	27.40	32.50	44.90	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 10:45 PM	124.00	2.20	31.60	11.10	0.00	28.70	31.60	42.10	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 11:00 PM	130.00	2.00	31.00	12.20	0.00	27.90	31.00	36.30	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 11:15 PM	121.00	2.40	30.50	13.60	0.00	26.00	30.50	36.20	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 11:30 PM	134.00	2.00	31.00	15.10	0.00	29.40	31.00	33.00	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/15 11:45 PM	116.00	2.90	33.20	15.50	0.00	27.80	33.20	32.90	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 12:00 AM	120.00	3.70	30.40	16.20	0.00	28.00	30.40	31.30	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 12:15 AM	144.00	2.80	30.60	16.80	0.00	26.20	30.60	30.30	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 12:30 AM	150.00	3.10	30.00	17.50	0.00	27.10	30.00	31.20	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 12:45 AM	150.00	2.50	29.40	16.50	0.00	25.10	29.40	29.80	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 1:00 AM	151.00	2.10	29.20	15.10	0.00	26.70	29.20	30.80	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 1:15 AM	180.00	0.60	30.00	23.20	0.00	23.20	28.40	30.00	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 1:30 AM	156.00	1.70	28.00	13.00	0.00	24.60	28.00	28.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 1:45 AM	159.00	2.10	26.50	13.30	0.00	24.30	26.50	27.10	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 2:00 AM	150.00	1.20	27.00	12.90	0.00	26.00	27.00	26.20	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 2:15 AM	139.00	1.80	27.20	12.80	0.00	22.80	27.20	28.70	12.80	0.00	0.00	0.00						



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August 2015

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (ug/m ³)								Naphthalene (ug/m ³)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
8/29/15 10:30 AM	125.00	2.10	34.60	11.00	0.00	24.50	34.60	23.70	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 10:45 AM	149.00	2.80	39.00	16.70	0.00	24.60	39.00	23.70	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 11:00 AM	160.00	4.00	31.70	13.30	0.00	23.60	31.70	23.70	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 11:15 AM	166.00	3.30	30.60	12.90	0.00	21.60	30.60	23.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 11:30 AM	175.00	3.90	30.80	12.40	0.00	21.70	30.80	23.70	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 11:45 AM	171.00	4.30	32.00	12.80	0.00	22.90	32.00	23.70	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 12:00 PM	178.00	2.00	31.90	12.10	0.00	22.30	31.90	23.70	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 12:15 PM	199.00	4.40	23.70	22.30	0.00	22.30	31.90	23.70	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 12:30 PM	201.00	4.20	23.70	21.30	0.00	21.30	26.10	23.70	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 12:45 PM	205.00	4.20	23.70	21.30	0.00	21.30	26.10	23.70	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 1:00 PM	184.00	3.60	23.70	21.60	0.00	21.60	24.70	23.70	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 1:15 PM	186.00	4.70	23.70	22.30	0.00	22.30	23.60	23.70	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 1:30 PM	178.00	3.00	22.20	9.50	0.00	22.30	22.20	23.70	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 1:45 PM	178.00	3.80	20.80	10.80	0.00	23.10	20.80	23.70	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 2:00 PM	194.00	2.20	23.70	22.70	0.00	22.70	19.30	23.70	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 2:15 PM	179.00	4.90	19.60	13.30	0.00	23.00	19.60	23.70	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 2:30 PM	202.00	3.40	23.70	23.10	0.00	23.10	19.10	23.70	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 2:45 PM	201.00	2.90	23.70	0.00	0.00	0.00	18.90	23.70	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 3:00 PM	212.00	3.10	23.70	25.50	1.80	25.50	18.30	23.70	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 3:15 PM	186.00	3.60	23.70	25.50	1.80	25.50	17.70	23.70	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 3:30 PM	185.00	3.50	23.70	25.70	2.00	25.70	18.20	23.70	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 3:45 PM	200.00	2.80	23.70	25.50	1.80	25.50	18.50	23.70	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 4:00 PM	241.00	1.60	23.70	25.20	1.50	25.20	19.10	23.70	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 4:15 PM	297.00	1.60	11.30	19.30	8.00	24.90	19.30	23.70	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 4:30 PM	302.00	2.00	11.50	20.00	8.50	24.40	20.00	23.70	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 4:45 PM	311.00	1.80	11.90	20.90	9.00	24.40	20.90	23.70	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 5:00 PM	321.00	2.70	11.70	22.20	10.50	23.90	22.20	23.70	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 5:15 PM	324.00	1.80	11.80	26.60	14.80	24.00	26.60	23.70	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 5:30 PM	342.00	1.00	12.10	30.00	17.90	25.50	30.00	23.70	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 5:45 PM	351.00	4.60	13.10	35.80	22.70	27.10	35.80	23.70	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 6:00 PM	37.00	3.30	26.40	23.70	0.00	26.40	31.90	23.70	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 6:15 PM	30.00	3.60	24.40	23.70	0.00	24.40	30.50	23.70	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 6:30 PM	24.00	3.10	22.60	23.70	1.10	22.60	30.70	23.70	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 6:45 PM	65.00	2.90	22.70	23.70	1.00	22.70	29.70	23.70	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 7:00 PM	44.00	2.30	26.80	23.70	0.00	26.80	35.30	23.70	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 7:15 PM	59.00	1.40	26.20	23.70	0.00	26.20	35.30	23.70	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 7:30 PM	342.00	0.40	16.40	37.70	21.30	27.40	37.70	23.70	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 7:45 PM	33.00	2.20	27.10	23.70	0.00	27.10	36.70	23.70	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 8:00 PM	25.00	5.10	28.30	23.70	0.00	28.30	37.30	23.70	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 8:15 PM	2.00	3.60	29.70	23.70	0.00	29.70	37.10	23.70	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 8:30 PM	359.00	3.70	12.90	36.00	23.10	36.90	36.00	23.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 8:45 PM	349.00	4.70	12.10	42.50	30.40	46.60	42.50	23.70	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 9:00 PM	352.00	4.80	12.10	39.70	27.60	26.00	39.70	23.70	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 9:15 PM	347.00	5.00	12.00	43.90	31.90	28.00	43.90	23.70	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 9:30 PM	348.00	3.70	11.80	41.00	29.20	26.20	41.00	23.70	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 9:45 PM	347.00	4.20	13.70	44.90	31.20	27.90	44.90	23.70	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 10:00 PM	7.00	2.70	22.40	23.70	1.30	22.40	36.20	23.70	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 10:15 PM	330.00	2.00	11.40	33.60	22.20	21.00	33.60	23.70	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 10:30 PM	339.00	1.80	11.20	33.60	22.40	21.00	33.60	23.70	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 10:45 PM	328.00	2.10	11.60	37.60	26.00	23.60	37.60	23.70	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 11:00 PM	322.00	2.30	14.50	45.30	30.80	30.90	45.30	23.70	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 11:15 PM	329.00	2.70	15.10	52.70	37.60	30.20	52.70	23.70	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 11:30 PM	315.00	2.10	13.90	55.60	41.70	30.30	55.60	23.70	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/15 11:45 PM	311.00	2.00	12.90	55.60	42.70	29.80	55.60	23.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 12:00 AM	350.00	2.90	12.90	50.60	37.70	24.40	50.60	23.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 12:15 AM	379.00	3.00	12.10	47.70	35.60	22.60	47.70	23.70	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 12:30 AM	2.00	2.90	21.90	23.70	1.80	21.90	44.60	23.70	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 12:45 AM	351.00	3.00	11.90	44.10	32.20	23.20	44.10	23.70	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 1:00 AM	7.00	1.30	20.60	23.70	3.10	20.60	44.10	23.70	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 1:15 AM	42.00	3.20	19.90	23.70	3.80	19.90	43.50	23.70	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 1:30 AM	29.00	3.60	27.60	23.70	0.00	27.60	42.80	23.70	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 1:45 AM	347.00	2.10	20.60	49.90	29.30	32.30	49.90	23.70	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 2:00 AM	347.00	3.90	20.70	42.00	21.30	31.60	42.00	23.70	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 2:15 AM	344.00	2.10	24.40	42.00	17.60	33.40	42.00	23.70	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 2:30 AM	346.00	3.00	15.90	49.30	33.40	24.90	49.30	23.70	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 2:45 AM	341.00	3.40	13.40	40.40	27.00	23.70	40.40	23.70	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 3:00 AM	349.00	5.50	13.40	42.40	29.00	23.70	42.40	23.70	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 3:15 AM	337.00	2.60	9.60	35.10	25.50	18.10	35.10	23.70	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/30/15 3:30 AM	331.00	2.70	7.70	35.10	27.40	17.40												



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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
8/30/15 11:45 AM	343.00	2.00	9.70	10.10	0.40	11.40	10.10	23.70	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 12:00 PM	348.00	2.10	9.80	10.10	0.30	12.60	10.10	23.70	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 12:15 PM	350.00	1.90	9.40	10.60	1.20	15.10	10.60	23.70	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 12:30 PM	358.00	1.90	8.20	10.60	2.40	13.00	10.60	23.70	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 12:45 PM	353.00	2.40	6.80	7.80	1.00	11.20	7.80	23.70	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 1:00 PM	356.00	2.70	7.40	7.20	0.00	11.90	7.20	23.70	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 1:15 PM	62.00	3.00	13.20	23.70	10.50	13.20	8.60	23.70	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 1:30 PM	8.00	1.60	15.20	23.70	8.50	15.20	7.80	23.70	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 1:45 PM	17.00	2.50	13.90	23.70	9.80	13.90	8.30	23.70	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 2:00 PM	25.00	2.90	13.70	23.70	10.00	13.70	7.70	23.70	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 2:15 PM	1.00	2.70	16.60	23.70	7.10	16.60	7.80	23.70	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 2:30 PM	355.00	2.90	10.30	7.80	0.00	23.00	7.80	23.70	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 2:45 PM	27.00	3.60	25.70	23.70	0.00	25.70	16.70	23.70	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 3:00 PM	23.00	3.80	23.40	23.70	0.30	23.40	16.60	23.70	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 3:15 PM	43.00	3.80	23.80	23.70	0.00	23.80	17.30	23.70	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 3:30 PM	37.00	3.30	21.50	23.70	2.20	21.50	17.30	23.70	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 3:45 PM	24.00	4.80	21.90	23.70	1.80	21.90	16.40	23.70	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 4:00 PM	35.00	3.50	18.40	23.70	5.30	18.40	14.30	23.70	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 4:15 PM	40.00	3.70	16.90	23.70	6.80	16.90	15.20	23.70	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 4:30 PM	28.00	3.40	15.90	23.70	7.80	15.90	15.20	23.70	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 4:45 PM	35.00	3.60	16.40	23.70	7.30	16.40	12.80	23.70	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 5:00 PM	38.00	4.20	17.20	23.70	6.50	17.20	12.60	23.70	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 5:15 PM	15.00	3.30	18.60	23.70	5.10	18.60	13.80	23.70	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 5:30 PM	55.00	3.00	16.80	23.70	6.90	16.80	14.40	23.70	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 5:45 PM	56.00	2.60	21.30	23.70	2.40	21.30	14.90	23.70	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 6:00 PM	116.00	4.20	17.60	17.30	0.00	19.60	17.60	23.70	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 6:15 PM	74.00	4.30	25.10	23.70	0.00	25.10	17.50	23.70	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 6:30 PM	81.00	3.60	23.30	23.70	0.40	23.30	21.90	23.70	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 6:45 PM	73.00	2.80	23.70	23.70	0.00	23.70	18.60	23.70	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 7:00 PM	95.00	2.00	15.80	23.30	7.50	27.90	15.80	23.70	23.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 7:15 PM	68.00	2.50	16.90	23.70	6.80	16.90	15.80	23.70	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 7:30 PM	84.00	2.40	16.20	23.70	7.50	16.20	13.30	23.70	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 7:45 PM	85.00	2.00	16.40	23.70	7.30	16.40	14.80	23.70	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 8:00 PM	69.00	3.50	17.70	23.70	6.00	17.70	15.70	23.70	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 8:15 PM	72.00	3.20	17.70	23.70	6.00	17.70	15.70	23.70	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 8:30 PM	71.00	3.10	19.50	23.70	4.20	19.50	20.90	23.70	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 8:45 PM	74.00	3.30	21.40	23.70	2.30	21.40	24.20	23.70	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 9:00 PM	84.00	2.30	22.10	23.70	1.60	22.10	24.20	23.70	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 9:15 PM	84.00	2.80	20.30	23.70	3.40	20.30	25.70	23.70	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 9:30 PM	128.00	2.80	29.50	14.10	0.00	20.60	29.50	23.70	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 9:45 PM	123.00	2.50	29.50	14.80	0.00	21.90	29.50	23.70	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 10:00 PM	100.00	1.60	30.90	15.80	0.00	21.50	30.90	23.70	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 10:15 PM	115.00	1.70	32.40	14.40	0.00	20.10	32.40	23.70	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 10:30 PM	115.00	2.00	29.40	15.10	0.00	20.20	29.40	23.70	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 10:45 PM	121.00	2.60	31.30	15.10	0.00	20.40	31.30	23.70	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 11:00 PM	130.00	2.60	36.70	14.90	0.00	19.80	36.70	23.70	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 11:15 PM	104.00	1.80	35.70	15.30	0.00	20.60	35.70	23.70	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 11:30 PM	145.00	2.10	33.20	15.30	0.00	19.50	33.20	23.70	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/15 11:45 PM	149.00	1.40	33.20	13.80	0.00	19.80	33.20	23.70	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 12:00 AM	162.00	1.10	33.20	13.10	0.00	19.70	33.20	23.70	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 12:15 AM	82.00	0.60	19.40	23.70	4.30	19.40	33.50	23.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 12:30 AM	152.00	1.80	34.00	14.10	0.00	19.80	34.00	23.70	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 12:45 AM	163.00	1.30	34.00	14.10	0.00	0.00	34.00	23.70	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 1:00 AM	132.00	1.10	42.90	15.00	0.00	20.60	42.90	23.70	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 1:15 AM	151.00	0.70	50.00	17.20	0.00	27.80	50.00	23.70	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 1:30 AM	160.00	1.90	48.80	17.90	0.00	25.30	48.80	23.70	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 1:45 AM	167.00	1.00	48.80	19.70	0.00	29.20	48.80	23.70	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 2:00 AM	156.00	0.70	67.10	21.70	0.00	30.50	67.10	23.70	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 2:15 AM	185.00	0.70	23.70	32.90	9.20	32.90	67.80	23.70	22.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 2:30 AM	218.00	0.30	23.70	30.30	6.60	30.30	67.80	23.70	21.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 2:45 AM	195.00	0.80	23.70	30.20	6.50	30.20	56.10	23.70	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 3:00 AM	194.00	0.90	23.70	32.30	8.60	32.30	58.00	23.70	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 3:15 AM	214.00	0.70	23.70	30.80	7.10	30.80	56.30	23.70	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 3:30 AM	211.00	0.50	23.70	30.10	6.40	30.10	56.30	23.70	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 3:45 AM	243.00	0.60	23.70	29.20	5.50	29.20	49.80	23.70	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 4:00 AM	265.00	0.70	23.70	28.60	4.90	28.60	49.80	23.70	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 4:15 AM	290.00	0.20	21.70	49.30	27.60	29.80	49.30	23.70	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 4:30 AM	299.00	0.90	21.30	44.70	23.40	28.40	44.70	23.70	21.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/15 4:45 AM	256.00	0.80	23.70	28.40	4.70	28.40	44.70	23.70	21.30	0.00	0.00	0.00</				



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		
8/31/15 1:00 PM	118.00	3.80	21.20	12.90	0.00	24.60	21.20	23.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 1:15 PM	109.00	3.50	19.70	17.80	0.00	25.00	19.70	23.70	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 1:30 PM	103.00	3.00	25.00	17.00	0.00	30.90	25.00	23.70	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 1:45 PM	103.00	3.40	23.50	20.00	0.00	31.30	23.50	23.70	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 2:00 PM	114.00	2.50	23.50	20.00	0.00	34.30	23.50	23.70	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 2:15 PM	87.00	2.40	33.90	23.70	0.00	33.90	27.40	23.70	49.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 2:30 PM	117.00	3.50	28.60	22.70	0.00	35.10	28.60	23.70	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 2:45 PM	109.00	3.40	28.10	23.80	0.00	35.00	28.10	23.70	23.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 3:00 PM	121.00	3.50	28.50	21.70	0.00	34.20	28.50	23.70	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 3:15 PM	84.00	3.10	35.30	23.70	0.00	35.30	28.50	23.70	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 3:30 PM	76.00	3.50	33.60	23.70	0.00	33.60	23.80	23.70	22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 3:45 PM	67.00	3.40	31.90	23.70	0.00	31.90	27.70	23.70	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 4:00 PM	71.00	4.40	34.30	23.70	0.00	34.30	26.70	23.70	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 4:15 PM	69.00	3.30	33.80	23.70	0.00	33.80	28.40	23.70	21.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 4:30 PM	82.00	2.50	37.40	23.70	0.00	37.40	34.90	23.70	22.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 4:45 PM	89.00	3.80	42.10	23.70	0.00	42.10	32.20	23.70	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 5:00 PM	66.00	3.60	42.80	23.70	0.00	42.80	33.20	23.70	24.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 5:15 PM	95.00	3.10	30.60	24.40	0.00	36.90	30.60	23.70	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 5:30 PM	111.00	3.50	30.70	23.10	0.00	35.90	30.70	23.70	23.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 5:45 PM	108.00	2.70	29.00	24.40	0.00	35.50	29.00	23.70	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 6:00 PM	97.00	2.40	31.20	24.20	0.00	33.40	31.20	23.70	24.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 6:15 PM	86.00	2.20	29.20	23.70	0.00	29.20	29.40	23.70	24.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 6:30 PM	115.00	2.80	26.90	21.50	0.00	30.80	26.90	23.70	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 6:45 PM	108.00	2.70	28.70	20.70	0.00	31.90	28.70	23.70	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 7:00 PM	109.00	2.50	29.40	21.90	0.00	31.60	29.40	23.70	21.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 7:15 PM	115.00	1.00	29.40	20.80	0.00	29.90	29.40	23.70	20.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 7:30 PM	112.00	1.20	39.00	21.00	0.00	31.30	39.00	23.70	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 7:45 PM	124.00	2.20	37.50	20.50	0.00	32.50	37.50	23.70	20.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 8:00 PM	111.00	1.80	38.80	19.40	0.00	31.00	38.80	23.70	19.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 8:15 PM	114.00	1.60	41.60	20.10	0.00	30.20	41.60	23.70	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 8:30 PM	110.00	1.50	46.20	20.30	0.00	28.90	46.20	23.70	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 8:45 PM	132.00	1.20	45.40	20.00	0.00	29.10	45.40	23.70	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 9:00 PM	130.00	1.10	51.90	20.10	0.00	29.80	51.90	23.70	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 9:15 PM	151.00	0.70	56.40	21.10	0.00	30.30	56.40	23.70	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 9:30 PM	186.00	1.00	23.70	31.20	7.50	31.20	47.80	23.70	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 9:45 PM	162.00	1.60	47.40	20.70	0.00	32.40	47.40	23.70	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 10:00 PM	169.00	1.30	49.50	23.20	0.00	38.20	49.50	23.70	23.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 10:15 PM	0.00	0.00	0.00	0.00	0.00	40.60	49.50	23.70	25.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 10:30 PM	194.00	1.50	23.70	50.10	26.40	50.10	49.50	23.70	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 10:45 PM	180.00	1.60	23.70	43.40	19.70	43.40	57.20	23.70	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 11:00 PM	182.00	1.50	23.70	45.70	22.00	45.70	72.50	23.70	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 11:15 PM	165.00	1.80	72.50	25.70	0.00	45.70	72.50	23.70	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 11:30 PM	195.00	1.30	23.70	44.90	21.20	44.90	70.40	23.70	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/31/15 11:45 PM	175.00	1.60	54.60	21.90	0.00	40.80	54.60	23.70	21.90	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: 8/4/2015 All Day

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:

- | | |
|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Loss of Power |
| <input type="checkbox"/> | Loss of Radio Communication |
| <input type="checkbox"/> | Out of Calibration |
| <input type="checkbox"/> | UV Alignment |
| <input type="checkbox"/> | Blockage in Air Tube |
| <input checked="" type="checkbox"/> | Air Quality |
| <input checked="" type="checkbox"/> | Other: dry conditions |

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:

USACE maintenance personnel are performing repairs to the interior slopes of the east cell. Truck carrying stone and dirt are kicking up dust from the gravel roads. Lead operator notified the truck drivers to slow down while driving on the site.



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: 8/9/2015 5:15AM & 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:

- | | |
|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Loss of Power |
| <input type="checkbox"/> | Loss of Radio Communication |
| <input type="checkbox"/> | Out of Calibration |
| <input type="checkbox"/> | UV Alignment |
| <input type="checkbox"/> | Blockage in Air Tube |
| <input checked="" type="checkbox"/> | Air Quality |
| <input checked="" type="checkbox"/> | Other: dry conditions |

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:

M3 air alarm is unknown. Calibration was checked and is within tolerances. Video cameras did not show anything unusual.

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: 8/10/2015 3:15AM & 10:00 PM 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:

- | | |
|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Loss of Power |
| <input type="checkbox"/> | Loss of Radio Communication |
| <input type="checkbox"/> | Out of Calibration |
| <input type="checkbox"/> | UV Alignment |
| <input type="checkbox"/> | Blockage in Air Tube |
| <input checked="" type="checkbox"/> | Air Quality |
| <input checked="" type="checkbox"/> | Other: dry conditions |

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:

M3 air alarm is unknown. Calibration was checked and is when tolerances. Video cameras did not show anything usually.

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: 8/13/2015 1:00 PM 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:

- | | |
|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Loss of Power |
| <input type="checkbox"/> | Loss of Radio Communication |
| <input type="checkbox"/> | Out of Calibration |
| <input type="checkbox"/> | UV Alignment |
| <input type="checkbox"/> | Blockage in Air Tube |
| <input checked="" type="checkbox"/> | Air Quality |
| <input checked="" type="checkbox"/> | Other: dry conditions |

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:

During the weekly air unit calibrations and testing caused the high alarm to trip.

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: 8/18/2015 1:15AM

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:

- | | |
|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Loss of Power |
| <input type="checkbox"/> | Loss of Radio Communication |
| <input type="checkbox"/> | Out of Calibration |
| <input type="checkbox"/> | UV Alignment |
| <input type="checkbox"/> | Blockage in Air Tube |
| <input checked="" type="checkbox"/> | Air Quality |
| <input checked="" type="checkbox"/> | Other: Thunder Storms |

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:

M3 air alarm during the start of the thunderstorms. Calibration was checked and is within tolerances. Video cameras did not show anything unusual.