



**US Army Corps
of Engineers®**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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
8/3/14 2:30 AM	206.00	0.50	102.30	62.70	0.00	62.70	109.80	102.30	32.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 2:45 AM	194.00	0.70	106.70	61.80	0.00	61.80	106.60	106.70	33.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 3:00 AM	171.00	1.00	110.60	34.30	0.00	61.30	110.60	104.30	34.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 3:15 AM	176.00	0.80	102.50	34.30	0.00	63.80	102.50	95.70	34.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 3:30 AM	237.00	1.10	88.90	62.90	0.00	62.90	91.20	88.90	35.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 3:45 AM	200.00	1.00	86.20	64.00	0.00	64.00	87.60	86.20	35.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 4:00 AM	199.00	0.80	81.70	63.70	0.00	63.70	87.30	81.70	34.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 4:15 AM	201.00	1.00	76.50	63.80	0.00	63.80	84.70	76.50	34.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 4:30 AM	152.00	0.80	81.50	35.10	0.00	61.70	81.50	77.00	35.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 4:45 AM	165.00	1.50	83.60	35.00	0.00	59.30	83.60	81.30	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 5:00 AM	185.00	1.00	79.30	52.20	0.00	52.20	78.40	79.30	31.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 5:15 AM	209.00	1.20	73.30	47.40	0.00	47.40	76.00	73.30	31.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 5:30 AM	148.00	1.10	64.00	25.70	0.00	54.30	64.00	62.50	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 5:45 AM	173.00	1.00	62.80	30.40	0.00	49.60	62.80	59.10	30.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 6:00 AM	179.00	1.30	61.70	32.20	0.00	52.80	61.70	55.30	32.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 6:15 AM	182.00	1.50	55.90	51.80	0.00	51.80	61.40	55.90	33.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 6:30 AM	199.00	1.70	54.80	52.30	0.00	52.30	58.00	54.80	33.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 6:45 AM	211.00	1.00	51.30	49.00	0.00	49.00	56.20	51.30	31.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 7:00 AM	210.00	1.60	51.00	48.40	0.00	48.40	50.80	51.00	30.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 7:15 AM	225.00	2.10	46.60	46.20	0.00	46.20	49.90	46.60	28.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 7:30 AM	214.00	2.20	41.50	44.90	3.40	44.90	46.60	41.50	25.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 7:45 AM	217.00	2.60	40.00	44.00	4.00	44.00	44.80	40.00	25.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 8:00 AM	199.00	2.50	38.90	41.10	2.20	41.10	43.90	38.90	23.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 8:15 AM	201.00	1.90	36.00	38.60	2.60	38.60	38.80	36.00	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 8:30 AM	220.00	2.10	36.40	38.30	1.90	38.30	39.40	36.40	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 8:45 AM	234.00	2.50	37.00	38.70	1.70	38.70	39.60	37.00	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 9:00 AM	245.00	3.30	34.90	37.30	2.40	37.30	36.40	34.90	19.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 9:15 AM	231.00	1.80	31.90	33.30	1.40	33.30	33.90	31.90	19.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 9:30 AM	246.00	2.30	31.40	33.70	2.30	33.70	32.10	31.40	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 9:45 AM	245.00	2.60	29.40	32.20	2.80	32.20	31.20	29.40	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 10:00 AM	229.00	3.00	27.10	29.80	2.70	29.80	29.80	27.10	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 10:15 AM	277.00	2.90	16.20	28.60	12.40	28.60	28.60	26.90	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 10:30 AM	235.00	3.90	26.00	28.20	2.20	28.20	27.90	26.00	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 10:45 AM	271.00	2.20	14.40	26.60	12.20	25.60	26.60	24.60	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 11:00 AM	277.00	2.90	13.90	25.90	12.00	23.90	25.90	23.90	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 11:15 AM	247.00	2.30	20.40	23.70	3.30	23.70	22.70	20.40	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 11:30 AM	282.00	3.10	12.30	21.80	9.50	23.10	21.80	19.10	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 11:45 AM	266.00	3.40	18.00	22.90	4.90	22.90	20.40	18.00	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 12:00 PM	264.00	3.90	18.00	23.20	5.20	23.20	19.40	18.00	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 12:15 PM	252.00	1.80	17.60	23.90	6.30	23.90	19.50	17.60	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 12:30 PM	231.00	2.20	17.50	23.80	6.30	23.80	19.60	17.50	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 12:45 PM	249.00	3.70	17.80	24.90	7.10	24.90	20.10	17.80	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 1:00 PM	207.00	3.50	18.50	25.20	6.70	25.20	20.10	18.50	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 1:15 PM	268.00	3.30	18.50	24.80	6.30	24.80	20.40	18.50	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 1:30 PM	253.00	4.20	16.90	25.60	8.70	25.60	19.30	16.90	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 1:45 PM	204.00	2.60	16.20	25.60	9.40	25.60	18.40	16.20	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 2:00 PM	270.00	5.90	15.60	18.10	2.50	0.00	18.10	16.10	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 2:15 PM	11.00	5.10	26.00	15.70	0.00	26.00	17.70	15.70	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 2:30 PM	28.00	5.80	26.10	15.40	0.00	26.10	17.50	15.40	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 2:45 PM	17.00	6.60	25.50	14.30	0.00	25.50	16.20	14.30	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 3:00 PM	22.00	4.80	25.50	13.50	0.00	25.50	15.20	13.50	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 3:15 PM	1.00	5.40	26.60	14.00	0.00	26.60	20.00	14.00	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 3:30 PM	23.00	2.70	25.50	18.50	0.00	25.50	17.30	18.50	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 3:45 PM	116.00	4.30	18.30	17.80	0.00	26.00	18.30	22.60	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 4:00 PM	127.00	3.40	19.90	18.80	0.00	26.20	19.90	23.30	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 4:15 PM	94.00	2.70	16.10	14.90	0.00	23.00	16.10	19.90	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 4:30 PM	148.00	3.50	16.70	14.90	0.00	23.40	16.70	17.80	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 4:45 PM	141.00	4.20	18.70	16.40	0.00	26.80	18.70	23.00	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 5:00 PM	156.00	3.40	20.20	18.90	0.00	29.10	20.20	24.50	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 5:15 PM	165.00	4.20	22.80	18.20	0.00	30.50	22.80	23.70	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 5:30 PM	136.00	4.00	24.20	16.20	0.00	26.30	24.20	24.60	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 5:45 PM	158.00	3.60	19.10	17.30	0.00	26.70	19.10	21.40	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 6:00 PM	164.00	2.50	19.80	17.00	0.00	25.80	19.80	21.50	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 6:15 PM	222.00	3.50	20.40	21.70	1.30	21.70	18.20	20.40	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 6:30 PM	214.00	0.90	21.00	21.70	0.70	21.70	18.60	21.00	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 6:45 PM	289.00	2.90	14.80	20.30	5.50	22.20	20.30	21.80	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 7:00 PM	179.00	1.80	22.10	14.90	0.00	23.20	22.10	24.10	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 7:15 PM	357.00	1.20	15.20	22.90	7.70	23.40	22.90	26.10	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/14 7:30 PM	52.00	4.00	25.20	31.90	6.70	25.20	30.90	31.90	16.70	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		
8/4/14 3:45 AM	222.00	2.10	47.60	32.90	0.00	32.90	45.60	47.60	22.60	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 4:00 AM	213.00	1.90	50.50	33.40	0.00	33.40	47.20	50.50	22.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 4:15 AM	222.00	1.90	52.10	33.20	0.00	33.20	48.90	52.10	22.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 4:30 AM	246.00	1.40	53.30	33.60	0.00	33.60	51.10	53.30	22.30	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 4:45 AM	230.00	1.30	57.30	33.40	0.00	33.40	52.70	57.30	21.90	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 5:00 AM	210.00	1.20	59.70	32.70	0.00	32.70	52.20	59.70	20.80	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 5:15 AM	240.00	1.30	59.60	32.90	0.00	32.90	51.20	59.60	20.60	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 5:30 AM	226.00	1.10	58.60	31.90	0.00	31.90	51.50	58.60	20.40	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 5:45 AM	278.00	1.20	20.20	52.60	32.40	32.60	52.60	57.90	20.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 6:00 AM	253.00	1.00	59.50	32.60	0.00	32.60	52.60	59.50	20.50	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 6:15 AM	219.00	1.00	61.00	33.70	0.00	33.70	57.00	61.00	20.50	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 6:30 AM	220.00	1.20	63.80	33.20	0.00	33.20	60.20	63.80	21.40	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 6:45 AM	202.00	0.90	65.10	33.00	0.00	33.00	63.50	65.10	20.80	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 7:00 AM	224.00	1.40	66.30	32.30	0.00	32.30	66.10	66.30	20.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 7:15 AM	226.00	1.10	63.60	32.90	0.00	32.90	60.00	63.60	19.70	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 7:30 AM	220.00	1.80	72.90	33.10	0.00	33.10	61.90	72.90	20.60	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 7:45 AM	212.00	1.70	73.30	32.00	0.00	32.00	60.10	73.30	20.00	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 8:00 AM	246.00	1.40	63.50	33.30	0.00	33.30	53.90	63.50	20.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 8:15 AM	246.00	2.30	55.60	33.10	0.00	33.10	49.50	55.60	20.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 8:30 AM	263.00	2.30	44.70	33.10	0.00	33.10	44.60	44.70	20.50	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 8:45 AM	262.00	1.90	38.80	31.80	0.00	31.80	41.90	38.80	20.50	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 9:00 AM	266.00	2.10	32.20	30.80	0.00	30.80	33.80	32.20	19.00	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 9:15 AM	243.00	1.90	26.70	31.40	4.70	31.40	31.10	26.70	20.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 9:30 AM	266.00	2.30	20.90	32.20	11.30	32.20	29.70	20.90	21.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 9:45 AM	273.00	1.80	21.20	25.60	4.40	32.00	25.60	19.60	21.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 10:00 AM	256.00	3.50	17.80	31.40	13.60	31.40	53.90	17.80	21.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 10:15 AM	246.00	2.60	17.40	30.40	13.00	30.40	48.10	17.40	21.00	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 10:30 AM	262.00	3.20	16.30	28.20	11.90	28.20	49.80	16.30	20.00	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 10:45 AM	241.00	3.00	16.70	27.60	10.90	27.60	49.20	16.70	20.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 11:00 AM	239.00	2.90	16.90	29.10	12.20	29.10	49.20	16.90	20.00	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 11:15 AM	269.00	2.50	15.40	27.10	11.70	27.10	45.40	15.40	18.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 11:30 AM	258.00	2.10	15.30	27.20	11.90	27.20	46.60	15.30	17.00	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 11:45 AM	266.00	3.00	14.40	25.70	11.30	25.70	46.60	14.40	16.80	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 12:00 PM	266.00	2.00	13.00	44.10	31.10	44.10	39.40	13.00	16.50	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 12:15 PM	249.00	2.90	12.80	25.20	12.40	25.20	41.70	12.80	16.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 12:30 PM	253.00	5.00	12.30	24.10	11.80	24.10	41.70	12.30	16.80	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 12:45 PM	260.00	2.00	12.30	23.50	11.20	23.50	37.60	12.30	17.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 1:00 PM	196.00	3.00	11.80	23.60	11.80	23.60	36.60	11.80	16.40	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 1:15 PM	264.00	2.90	11.50	23.60	12.10	23.60	37.40	11.50	16.80	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 1:30 PM	215.00	2.70	11.00	23.60	12.60	23.60	37.40	11.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 1:45 PM	192.00	3.80	11.40	25.70	14.30	25.70	37.40	11.40	19.30	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 2:00 PM	161.00	1.20	37.40	19.70	0.00	25.50	37.40	10.60	19.70	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 2:15 PM	219.00	2.70	10.40	26.20	15.80	26.20	37.40	10.40	20.30	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 2:30 PM	190.00	4.30	10.00	26.80	16.80	26.80	37.40	10.00	20.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 2:45 PM	230.00	2.90	10.00	27.20	17.20	27.20	37.40	10.00	20.50	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 3:00 PM	206.00	4.20	9.90	26.50	16.60	26.50	37.40	9.90	21.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 3:15 PM	220.00	5.00	9.70	27.30	17.60	27.30	37.40	9.70	21.70	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 3:30 PM	212.00	4.10	10.20	26.00	15.80	26.00	37.40	10.20	19.50	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 3:45 PM	228.00	3.40	9.80	24.50	14.70	24.50	37.40	9.80	19.90	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 4:00 PM	219.00	1.90	10.20	23.60	13.40	23.60	31.30	10.20	18.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 4:15 PM	301.00	3.70	18.50	33.40	14.90	24.70	33.40	18.50	18.50	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 4:30 PM	22.00	2.30	23.20	10.00	0.00	23.20	30.60	10.00	20.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 4:45 PM	130.00	0.60	31.40	19.80	0.00	23.70	31.40	10.20	19.80	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 5:00 PM	177.00	1.70	32.10	19.30	0.00	24.30	32.10	10.10	19.30	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 5:15 PM	236.00	2.40	10.20	23.00	12.80	23.00	30.90	10.20	19.60	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 5:30 PM	112.00	2.10	43.40	19.70	0.00	24.20	43.40	14.90	19.70	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 5:45 PM	110.00	2.80	82.40	20.10	0.00	24.40	82.40	23.70	20.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 6:00 PM	130.00	3.40	81.10	23.20	0.00	24.50	81.10	21.30	23.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 6:15 PM	200.00	2.40	17.20	23.40	6.20	23.40	64.30	17.20	19.80	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 6:30 PM	210.00	2.50	18.60	27.60	9.00	27.60	80.40	18.60	22.90	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 6:45 PM	215.00	3.00	21.60	27.10	5.50	27.10	80.40	21.60	24.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 7:00 PM	206.00	1.80	24.90	26.60	1.70	26.60	83.10	24.90	22.50	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 7:15 PM	237.00	2.50	22.90	28.60	5.70	28.60	86.70	22.90	23.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 7:30 PM	303.00	2.20	20.80	69.20	48.40	27.60	69.20	21.80	20.80	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 7:45 PM	323.00	1.60	21.30	69.50	48.20	26.20	69.50	21.70	21.30	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 8:00 PM	2.00	4.90	27.20	23.80	0.00	27.20	68.80	23.80	22.70	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 8:15 PM	359.00	8.10	22.30	68.80	46.50	27.60	68.80	25.10	22.30	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 8:30 PM	1.00	5.00	26.50	27.70	1.20	26.50	81.50	27.70	21.80	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 8:45 PM	21.00	5.80	25.60	31.00	5.40	25.60	91.60	31.00	22.30	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 9:00 PM	27.00	6.20	29.90	33.90	4.00	29.90	101.40	33.90	24.60	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 9:15 PM	46.00	3.20	28.00	38.20	10.20	28.00	92.40	38.20	23.10	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 9:30 PM	28.00	1.60	24.10	34.00	9.90	24.10	92.40	34.00	18.20	0.00	0.00	0.00	0.00	0.00	0.00			
8/4/14 9:45 PM	111.00	1.00	92.40	21.70	0.00	27.40												



US Army Corps
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Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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		
8/6/14 6:15 AM	355.00	4.50	2.40	6.20	3.80	4.50	6.20	7.20	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 6:30 AM	344.00	3.20	2.70	6.60	3.90	4.60	6.60	7.20	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 6:45 AM	351.00	4.80	2.40	5.80	3.40	4.50	5.80	7.20	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 7:00 AM	339.00	2.90	2.60	6.40	3.80	5.00	6.40	6.80	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 7:15 AM	346.00	3.70	2.80	6.10	3.30	5.10	6.10	6.90	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 7:30 AM	346.00	3.50	3.10	6.60	3.50	7.80	6.60	7.10	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 7:45 AM	353.00	4.90	3.40	6.20	2.80	5.50	6.20	7.10	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 8:00 AM	353.00	5.00	3.90	6.20	2.30	5.40	6.20	6.90	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 8:15 AM	351.00	5.90	4.10	6.70	2.60	5.50	6.70	7.30	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 8:30 AM	355.00	4.30	4.20	7.00	2.80	6.10	7.00	7.20	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 8:45 AM	357.00	4.10	3.90	6.50	2.60	6.30	6.50	7.40	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 9:00 AM	353.00	5.10	4.40	6.60	2.20	7.10	6.60	7.30	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 9:15 AM	352.00	5.10	4.20	7.00	2.80	6.70	7.00	6.80	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 9:30 AM	0.00	5.40	8.10	7.10	0.00	8.10	6.90	7.10	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 9:45 AM	350.00	5.80	5.20	6.80	1.60	7.40	6.80	6.80	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 10:00 AM	350.00	5.60	4.90	6.50	1.60	6.90	6.50	6.00	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 10:15 AM	349.00	4.50	5.20	6.10	0.90	7.00	6.10	5.40	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 10:30 AM	359.00	4.80	5.90	6.60	0.70	7.60	6.60	4.80	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 10:45 AM	344.00	3.50	7.00	7.80	0.80	9.00	7.80	5.70	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 11:00 AM	7.00	5.20	8.90	6.10	0.00	8.90	7.50	6.10	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 11:15 AM	5.00	4.50	9.30	6.00	0.00	9.30	6.80	6.00	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 11:30 AM	356.00	4.20	7.90	6.10	0.00	8.80	6.10	4.70	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 11:45 AM	354.00	4.80	8.10	6.60	0.00	9.40	6.60	4.20	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 12:00 PM	358.00	4.10	8.10	6.30	0.00	8.70	6.30	3.50	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 12:15 PM	8.00	3.80	9.50	3.00	0.00	9.50	4.80	3.00	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 12:30 PM	12.00	3.70	10.80	3.30	0.00	10.80	5.10	3.30	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 12:45 PM	29.00	5.60	12.10	3.90	0.00	12.10	6.70	3.90	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 1:00 PM	27.00	4.50	11.00	4.30	0.00	11.00	6.40	4.30	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 1:15 PM	20.00	5.40	11.00	5.00	0.00	11.00	6.00	5.00	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 1:30 PM	16.00	5.20	12.30	6.00	0.00	12.30	7.50	6.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 1:45 PM	30.00	4.90	11.80	8.50	0.00	11.80	7.50	8.50	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 2:00 PM	32.00	5.80	11.80	8.00	0.00	11.80	8.70	8.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 2:15 PM	25.00	5.30	12.00	9.00	0.00	12.00	8.60	9.00	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 2:30 PM	35.00	6.30	11.90	8.30	0.00	11.90	8.60	8.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 2:45 PM	34.00	5.40	11.00	9.50	0.00	11.00	8.40	9.50	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 3:00 PM	44.00	5.80	12.00	9.10	0.00	12.00	9.30	9.10	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 3:15 PM	32.00	5.30	13.20	9.40	0.00	13.20	9.20	9.40	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 3:30 PM	32.00	6.00	12.50	10.40	0.00	12.50	11.30	10.40	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 3:45 PM	21.00	4.90	12.30	9.90	0.00	12.30	11.50	9.90	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 4:00 PM	37.00	6.00	12.70	11.20	0.00	12.70	13.10	11.20	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 4:15 PM	30.00	6.10	12.00	11.10	0.00	12.00	10.20	11.10	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 4:30 PM	36.00	5.70	11.70	7.70	0.00	11.70	10.30	7.70	21.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 4:45 PM	40.00	5.70	12.90	6.50	0.00	12.90	11.70	6.50	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 5:00 PM	30.00	4.30	10.00	5.20	0.00	10.00	7.90	5.20	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 5:15 PM	16.00	5.30	8.90	3.90	0.00	8.90	7.70	3.90	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 5:30 PM	10.00	4.20	11.60	3.30	0.00	11.60	7.10	3.30	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 5:45 PM	354.00	4.80	19.90	9.80	0.00	11.90	9.80	5.40	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 6:00 PM	1.00	4.70	13.00	6.90	0.00	13.00	12.30	6.90	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 6:15 PM	4.00	3.70	12.20	11.50	0.00	12.20	12.60	11.50	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 6:30 PM	354.00	4.30	12.00	11.40	0.00	11.30	11.40	12.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 6:45 PM	356.00	2.70	10.60	11.10	0.50	11.10	11.10	12.30	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 7:00 PM	359.00	2.90	10.60	11.80	1.20	10.30	11.80	12.30	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 7:15 PM	351.00	1.90	9.60	11.50	1.90	12.70	11.50	14.80	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 7:30 PM	353.00	2.80	9.30	8.90	0.00	11.30	8.90	13.90	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 7:45 PM	355.00	2.60	10.10	8.90	0.00	11.90	8.90	14.30	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 8:00 PM	347.00	2.20	8.80	8.70	0.00	11.80	8.70	15.10	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 8:15 PM	345.00	1.90	8.50	9.30	0.80	11.80	9.30	14.80	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 8:30 PM	9.00	2.00	12.00	14.30	2.30	12.00	10.30	14.30	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 8:45 PM	347.00	1.80	8.30	14.60	6.30	12.40	14.60	15.10	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 9:00 PM	10.00	1.50	12.50	15.40	2.90	12.50	17.00	15.40	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 9:15 PM	181.00	0.80	17.00	13.00	0.00	13.00	18.50	17.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 9:30 PM	191.00	0.40	18.90	12.80	0.00	12.80	20.20	18.90	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 9:45 PM	59.00	2.20	12.60	18.70	6.10	12.60	17.90	18.70	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 10:00 PM	50.00	2.30	12.50	19.00	6.50	12.50	16.10	19.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 10:15 PM	65.00	2.50	11.50	18.60	7.10	11.50	15.50	18.60	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 10:30 PM	54.00	2.60	11.00	19.90	8.90	11.00	14.80	19.90	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 10:45 PM	64.00	3.40	13.50	19.70	6.20	13.50	18.70	19.70	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 11:00 PM	44.00	3.70	16.80	19.30	2.50	16.80	0.00	19.30	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 11:15 PM	44.00	3.20	21.90	15.90	0.00	21.90	18.30	15.90	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 11:30 PM	60.00	3.20	16.10	18.00	1.90	16.10	21.20	18.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/6/14 11:45 PM	55.00	2.70	19.40	18.70	0.00	19.40	18											



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Real-Time Air Monitoring Data
August, 2014

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		
			8/7/14 7:30 AM	124.00	2.90	19.20	15.20	0.00	22.30	19.20	13.30	15.20	0.00	0.00	0.00	0.00	0.00	0.00
8/7/14 7:45 AM	133.00	2.80	19.20	15.50	0.00	22.80	19.20	14.50	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 8:00 AM	134.00	2.20	23.40	17.50	0.00	25.70	23.40	17.60	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 8:15 AM	128.00	3.40	21.70	16.00	0.00	22.60	21.70	19.80	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 8:30 AM	135.00	2.40	21.30	17.30	0.00	24.80	21.30	19.30	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 8:45 AM	149.00	3.40	23.30	20.30	0.00	35.70	23.30	22.60	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 9:00 AM	147.00	4.60	23.30	16.30	0.00	33.40	23.30	20.00	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 9:15 AM	144.00	2.90	34.00	15.10	0.00	28.70	34.00	31.50	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 9:30 AM	157.00	3.80	79.60	20.20	0.00	38.50	79.60	28.50	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 9:45 AM	162.00	3.90	20.50	15.10	0.00	27.10	20.50	17.00	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 10:00 AM	148.00	3.90	17.50	13.70	0.00	22.70	17.50	16.70	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 10:15 AM	134.00	3.20	17.50	13.40	0.00	23.60	17.50	16.10	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 10:30 AM	121.00	3.50	0.00	13.40	0.00	26.40	0.00	14.40	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 10:45 AM	132.00	3.80	19.00	15.70	0.00	29.00	19.00	14.70	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 11:00 AM	168.00	3.50	18.00	15.00	0.00	23.20	18.00	15.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 11:15 AM	128.00	3.10	16.10	14.40	0.00	22.90	16.10	13.40	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 11:30 AM	136.00	3.10	16.10	13.60	0.00	21.40	16.10	13.50	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 11:45 AM	141.00	3.50	16.30	13.50	0.00	22.90	16.30	13.30	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 12:00 PM	134.00	4.20	16.80	14.20	0.00	19.70	16.80	13.40	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 12:15 PM	118.00	3.80	15.90	13.60	0.00	18.90	15.90	11.90	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 12:30 PM	141.00	3.40	16.80	13.20	0.00	19.60	16.80	10.70	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 12:45 PM	158.00	3.70	13.80	14.20	0.40	21.00	13.80	10.50	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 1:00 PM	144.00	4.40	19.50	15.40	0.00	25.60	19.50	10.20	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 1:15 PM	81.00	2.60	27.00	11.30	0.00	27.00	16.20	11.30	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 1:30 PM	74.00	3.90	19.10	10.40	0.00	19.10	17.40	10.40	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 1:45 PM	57.00	4.50	23.40	10.50	0.00	23.40	14.40	10.50	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 2:00 PM	86.00	4.10	23.40	10.90	0.00	23.40	14.00	10.90	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 2:15 PM	90.00	3.10	20.70	14.60	0.00	20.30	20.70	12.60	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 2:30 PM	53.00	5.10	20.20	13.20	0.00	20.20	15.60	13.20	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 2:45 PM	81.00	3.70	23.50	15.80	0.00	23.50	28.30	15.80	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 3:00 PM	62.00	5.00	22.10	16.20	0.00	22.10	22.20	16.20	23.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 3:15 PM	69.00	5.40	19.50	15.80	0.00	19.50	18.70	15.80	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 3:30 PM	91.00	5.00	22.70	15.20	0.00	30.40	22.70	14.60	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 3:45 PM	69.00	5.40	22.80	16.10	0.00	22.80	20.10	16.10	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 4:00 PM	86.00	5.20	28.80	18.10	0.00	28.80	26.40	18.10	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 4:15 PM	65.00	4.90	30.80	19.10	0.00	30.80	20.30	19.10	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 4:30 PM	48.00	4.70	30.80	19.10	0.00	30.80	29.80	19.10	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 4:45 PM	46.00	5.70	37.10	20.50	0.00	37.10	54.50	20.50	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 5:00 PM	56.00	6.00	33.60	19.60	0.00	33.60	36.70	19.60	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 5:15 PM	72.00	4.70	34.00	19.60	0.00	34.00	35.40	19.60	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 5:30 PM	50.00	6.50	43.10	24.70	0.00	43.10	47.40	24.70	22.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 5:45 PM	40.00	5.40	37.10	30.50	0.00	37.10	44.60	30.50	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 6:00 PM	39.00	6.10	35.80	38.80	3.00	35.80	60.20	38.80	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 6:15 PM	55.00	5.90	61.50	45.10	0.00	61.50	65.20	45.10	23.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 6:30 PM	59.00	4.60	37.40	31.50	0.00	37.40	52.30	31.50	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 6:45 PM	59.00	5.30	31.60	34.00	2.40	31.60	45.70	34.00	26.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 7:00 PM	64.00	5.50	32.00	32.70	0.70	32.00	49.90	32.70	22.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 7:15 PM	69.00	4.80	34.60	33.70	0.00	34.60	53.50	33.70	26.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 7:30 PM	54.00	5.50	27.40	32.70	5.30	27.40	47.60	32.70	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 7:45 PM	70.00	4.30	30.00	33.60	3.60	30.00	42.30	33.60	23.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 8:00 PM	63.00	4.40	27.20	32.00	4.80	27.20	42.70	32.00	28.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 8:15 PM	69.00	4.30	27.00	30.90	3.90	27.00	46.80	30.90	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 8:30 PM	68.00	4.50	28.20	30.10	1.90	28.20	45.70	30.10	29.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 8:45 PM	62.00	4.20	37.00	31.40	0.00	37.00	41.90	31.40	33.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 9:00 PM	66.00	3.80	57.60	30.60	0.00	57.60	38.20	30.60	33.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 9:15 PM	58.00	4.30	64.40	33.90	0.00	64.40	42.40	33.90	28.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 9:30 PM	78.00	4.90	28.60	32.50	3.90	28.60	49.30	32.50	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 9:45 PM	70.00	5.10	30.10	40.10	10.00	30.10	62.60	40.10	27.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 10:00 PM	71.00	5.50	31.10	41.40	10.30	31.10	54.40	41.40	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 10:15 PM	77.00	6.20	32.80	39.60	6.80	32.80	61.50	39.60	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 10:30 PM	73.00	4.30	27.80	41.10	13.30	27.80	67.40	41.10	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 10:45 PM	74.00	4.40	29.80	36.80	7.00	29.80	53.50	36.80	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 11:00 PM	78.00	4.80	31.40	33.90	2.50	31.40	38.50	33.90	19.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 11:15 PM	72.00	4.40	30.80	36.80	6.00	30.80	42.50	36.80	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 11:30 PM	72.00	5.20	27.40	37.70	10.30	27.40	47.50	37.70	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/14 11:45 PM	64.00	3.00	34.															



US Army Corps
of Engineers®

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates ($\mu\text{g}/\text{m}^3$)								Naphthalene ($\mu\text{g}/\text{m}^3$)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
			8/10/14 11:15 AM	28.00	5.90	29.90	26.60	0.00	29.90	34.70	26.60	28.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/14 11:30 AM	29.00	4.50	28.50	35.50	7.00	28.50	41.80	35.50	23.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 11:45 AM	14.00	5.50	29.50	36.70	7.20	29.50	0.00	36.70	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 12:00 PM	19.00	4.70	0.00	38.80	0.00	0.00	29.70	38.80	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 12:15 PM	31.00	5.30	24.50	43.40	18.90	24.50	28.50	43.40	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 12:30 PM	30.00	5.50	24.30	40.30	16.00	24.30	29.40	40.30	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 12:45 PM	22.00	5.40	24.30	38.90	14.60	24.30	33.90	38.90	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 1:00 PM	19.00	6.30	25.60	49.40	23.80	25.60	33.50	49.40	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 1:15 PM	29.00	5.60	25.70	42.70	17.00	25.70	34.00	42.70	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 1:30 PM	9.00	6.30	24.80	44.50	19.70	24.80	34.20	44.50	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 1:45 PM	37.00	5.10	24.80	41.30	16.50	24.80	37.40	41.30	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 2:00 PM	12.00	5.50	26.20	43.90	17.70	26.20	34.30	43.90	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 2:15 PM	18.00	5.50	26.20	45.70	19.50	26.20	39.70	45.70	23.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 2:30 PM	8.00	5.00	26.90	43.30	16.40	26.90	54.10	43.30	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 2:45 PM	23.00	4.90	25.80	36.90	11.10	25.80	38.80	36.90	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 3:00 PM	28.00	4.90	25.80	37.60	11.80	25.80	48.70	37.60	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 3:15 PM	14.00	4.40	27.50	41.80	14.30	27.50	32.90	41.80	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 3:30 PM	6.00	5.30	26.40	47.10	20.70	26.40	31.10	47.10	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 3:45 PM	8.00	6.10	27.30	41.50	14.20	27.30	32.80	41.50	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 4:00 PM	26.00	5.10	30.80	36.70	5.90	30.80	31.10	36.70	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 4:15 PM	15.00	4.50	26.30	35.80	9.50	26.30	31.10	35.80	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 4:30 PM	8.00	4.80	28.10	29.20	1.10	28.10	37.80	29.20	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 4:45 PM	5.00	4.60	31.10	29.40	0.00	31.10	33.20	29.40	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 5:00 PM	350.00	3.90	14.40	31.80	17.40	26.30	31.80	32.40	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 5:15 PM	356.00	4.40	14.30	32.20	17.90	28.00	32.20	32.60	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 5:30 PM	351.00	4.90	15.20	32.30	17.10	30.30	32.30	32.40	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 5:45 PM	3.00	5.40	27.10	30.80	3.70	27.10	36.10	30.80	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 6:00 PM	4.00	5.80	27.50	31.80	4.30	27.50	38.10	31.80	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 6:15 PM	355.00	6.40	14.10	35.70	21.60	27.70	35.70	31.70	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 6:30 PM	350.00	5.20	14.00	38.80	24.80	26.10	38.80	32.10	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 6:45 PM	353.00	5.40	14.10	44.10	30.00	25.60	44.10	33.60	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 7:00 PM	352.00	5.20	13.50	42.30	28.80	24.40	42.30	34.90	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 7:15 PM	8.00	6.70	25.70	35.20	9.50	25.70	41.70	35.20	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 7:30 PM	358.00	5.60	13.10	42.50	29.40	24.20	42.50	36.20	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 7:45 PM	5.00	6.80	24.60	36.20	11.60	24.60	42.50	36.20	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 8:00 PM	20.00	7.60	23.60	36.00	12.40	23.60	42.00	36.00	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 8:15 PM	15.00	6.80	24.00	36.20	12.20	24.00	44.30	36.20	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 8:30 PM	16.00	6.30	22.10	36.10	14.00	22.10	42.30	36.10	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 8:45 PM	25.00	4.30	23.80	37.20	13.40	23.80	41.50	37.20	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 9:00 PM	18.00	5.00	25.30	37.90	12.60	25.30	40.50	37.90	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 9:15 PM	22.00	4.30	24.00	42.60	18.60	24.00	39.40	42.60	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 9:30 PM	2.00	3.90	28.40	41.70	13.30	28.40	39.40	41.70	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 9:45 PM	351.00	4.20	12.50	39.10	26.60	25.50	39.10	46.70	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 10:00 PM	7.00	4.30	22.30	43.10	20.80	22.30	34.90	43.10	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 10:15 PM	354.00	4.80	12.40	35.60	23.20	21.90	35.60	46.40	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 10:30 PM	354.00	4.90	11.40	35.60	24.20	22.10	35.60	43.80	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 10:45 PM	351.00	4.50	10.70	39.30	28.60	26.00	39.30	31.80	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 11:00 PM	350.00	4.20	11.20	38.80	27.60	21.30	38.80	33.90	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 11:15 PM	350.00	4.90	11.20	38.80	27.60	23.70	38.80	34.20	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 11:30 PM	359.00	3.70	10.50	35.50	25.00	19.80	35.50	34.10	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/10/14 11:45 PM	357.00	4.80	10.50	38.00	27.50	19.00	38.00	33.50	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 12:00 AM	358.00	5.80	10.20	35.80	25.60	18.00	35.80	33.30	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 12:15 AM	353.00	6.10	9.40	37.30	27.90	17.30	37.30	32.90	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 12:30 AM	355.00	5.40	9.90	36.90	27.00	17.40	36.90	32.60	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 12:45 AM	350.00	5.20	9.70	0.00	0.00	21.50	0.00	33.00	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 1:00 AM	356.00	5.60	10.10	36.10	26.00	17.50	36.10	33.70	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 1:15 AM	353.00	6.60	11.00	35.40	24.40	17.30	35.40	33.10	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 1:30 AM	356.00	6.00	9.50	34.30	24.80	17.40	34.30	33.10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 1:45 AM	350.00	4.40	9.80	34.00	24.20	17.50	34.00	32.90	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 2:00 AM	0.00	0.00	0.00	0.00	0.00	17.60	34.90	35.80	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 2:15 AM	352.00	6.70	10.90	35.80	24.90	17.80	35.80	37.10	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/11/14 2:30 AM	349.00	5.80	10.90	35.10	24.20	18.80	35.10	36.80	10.90	0.00	0							



US Army Corps
of Engineers®

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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
			Upwind	Downwind	Upwind	Downwind														
8/11/14 12:30 PM	289.00	3.40	5.60	7.90	2.30	10.00	7.90	2.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 12:45 PM	1.00	1.30	10.70	2.30	0.00	10.70	9.00	2.30	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 1:00 PM	353.00	1.50	7.60	10.30	2.70	11.60	10.30	2.50	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 1:15 PM	13.00	1.50	11.90	2.20	0.00	11.90	9.10	2.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 1:30 PM	43.00	1.00	10.80	2.00	0.00	10.80	9.10	2.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 1:45 PM	14.00	1.80	10.60	2.30	0.00	10.60	8.60	2.30	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 2:00 PM	1.00	3.30	11.10	2.10	0.00	11.10	9.30	2.10	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 2:15 PM	42.00	4.20	11.20	2.20	0.00	11.20	8.00	2.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 2:30 PM	36.00	5.30	11.40	2.20	0.00	11.40	6.60	2.20	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 2:45 PM	18.00	3.30	11.90	1.90	0.00	11.90	5.90	1.90	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 3:00 PM	22.00	4.40	12.90	2.10	0.00	12.90	6.50	2.10	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 3:15 PM	36.00	2.80	13.60	2.30	0.00	13.60	7.50	2.30	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 3:30 PM	39.00	2.50	14.40	3.50	0.00	14.40	7.90	3.50	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 3:45 PM	39.00	2.70	14.40	3.50	0.00	14.40	11.50	3.50	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 4:00 PM	0.00	1.80	13.30	3.80	0.00	13.30	13.20	3.80	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 4:15 PM	29.00	3.00	12.90	7.60	0.00	12.90	18.80	7.60	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 4:30 PM	63.00	1.90	16.40	21.90	5.50	16.40	22.50	21.90	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 4:45 PM	93.00	1.80	25.70	7.40	0.00	16.80	25.70	29.00	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 5:00 PM	125.00	2.80	20.70	10.40	0.00	15.30	20.70	23.50	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 5:15 PM	121.00	3.10	19.30	8.00	0.00	15.40	19.30	13.90	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 5:30 PM	125.00	1.90	13.90	9.40	0.00	18.00	13.90	10.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 5:45 PM	114.00	3.10	16.30	9.40	0.00	16.60	16.30	7.50	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 6:00 PM	112.00	2.50	23.50	11.00	0.00	29.50	23.50	7.50	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 6:15 PM	127.00	1.80	19.80	14.50	0.00	27.20	19.80	11.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 6:30 PM	110.00	1.90	16.70	12.40	0.00	23.10	16.70	11.10	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 6:45 PM	134.00	1.90	19.00	42.50	23.50	65.30	19.00	11.20	42.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 7:00 PM	109.00	2.20	0.00	20.30	0.00	30.70	0.00	10.90	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 7:15 PM	117.00	1.70	0.00	20.30	0.00	30.70	0.00	10.90	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 7:30 PM	132.00	1.60	21.50	12.90	0.00	23.50	21.50	14.80	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 7:45 PM	221.00	3.30	13.00	21.20	8.20	21.20	21.50	13.00	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 8:00 PM	342.00	1.60	15.40	15.80	0.40	27.50	15.80	13.00	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 8:15 PM	232.00	2.60	12.80	17.90	5.10	17.90	16.10	12.80	19.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 8:30 PM	238.00	2.00	13.30	19.80	6.50	19.80	16.10	13.30	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 8:45 PM	234.00	3.00	14.10	19.30	5.20	19.30	15.30	14.10	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 9:00 PM	245.00	1.80	16.40	13.80	0.00	13.80	15.90	16.40	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 9:15 PM	235.00	2.00	18.20	13.10	0.00	13.10	18.10	18.20	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 9:30 PM	227.00	1.40	26.90	16.60	0.00	16.60	25.60	26.90	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 9:45 PM	251.00	2.60	32.40	24.60	0.00	24.60	29.10	32.40	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 10:00 PM	249.00	3.30	32.40	23.80	0.00	23.80	29.60	32.40	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 10:15 PM	262.00	4.00	32.00	23.20	0.00	23.20	27.70	32.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 10:30 PM	262.00	3.60	25.90	20.50	0.00	20.50	25.00	25.90	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 10:45 PM	261.00	4.20	22.20	18.50	0.00	18.50	21.00	22.20	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 11:00 PM	260.00	4.00	23.00	17.60	0.00	17.60	21.20	23.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 11:15 PM	260.00	4.50	23.00	17.40	0.00	17.40	21.00	23.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 11:30 PM	258.00	3.90	22.70	17.20	0.00	17.20	20.40	22.70	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/11/14 11:45 PM	262.00	3.90	21.80	16.90	0.00	16.90	19.40	21.80	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 12:00 AM	261.00	3.50	20.80	16.90	0.00	16.90	19.00	20.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 12:15 AM	270.00	3.30	6.40	17.90	11.50	15.80	17.90	19.90	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 12:30 AM	264.00	3.80	19.30	15.40	0.00	15.40	17.60	19.30	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 12:45 AM	260.00	4.00	17.30	14.40	0.00	14.40	17.90	17.30	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 1:00 AM	263.00	4.60	14.30	12.50	0.00	12.50	13.80	14.30	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 1:15 AM	276.00	4.50	4.40	13.60	9.20	12.80	13.60	13.60	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 1:30 AM	264.00	4.30	12.20	10.80	0.00	10.80	12.50	12.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 1:45 AM	258.00	4.30	10.20	9.40	0.00	9.40	11.10	10.20	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 2:00 AM	260.00	3.80	10.60	10.10	0.00	10.10	11.30	10.60	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 2:15 AM	251.00	3.90	10.60	10.40	0.00	10.40	11.30	10.60	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 2:30 AM	269.00	2.60	10.80	10.60	0.00	10.60	12.00	10.80	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 2:45 AM	264.00	2.40	11.30	11.10	0.00	11.10	0.00	11.30	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 3:00 AM	266.00	3.00	13.10	11.30	0.00	11.30	15.50	13.10	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/12/14 3:15 AM	258.00	3.60	15.00	12.70	0.00	12.70	17.90	1												



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August, 2014

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
8/14/14 4:15 PM	57.00	6.10	5.00	6.10	1.10	5.00	0.90	6.10	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 4:30 PM	60.00	7.20	4.80	5.70	0.90	4.80	2.70	5.70	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 4:45 PM	64.00	5.80	5.00	7.10	2.10	5.00	4.90	7.10	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 5:00 PM	14.00	4.90	5.60	4.40	0.00	5.60	2.80	4.40	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 5:15 PM	61.00	6.10	2.90	5.60	2.70	2.90	5.20	5.60	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 5:30 PM	29.00	6.40	5.00	5.80	0.80	5.00	2.90	5.80	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 5:45 PM	43.00	4.80	8.40	4.90	0.00	8.40	4.60	4.90	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 6:00 PM	52.00	4.80	6.40	4.60	0.00	6.40	3.00	4.60	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 6:15 PM	34.00	5.30	6.30	5.00	0.00	6.30	4.70	5.00	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 6:30 PM	50.00	5.40	4.20	4.90	0.70	4.20	8.50	4.90	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 6:45 PM	52.00	4.80	3.80	4.90	1.10	3.80	2.50	4.90	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 7:00 PM	40.00	4.30	3.40	4.60	1.20	3.40	1.90	4.60	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 7:15 PM	70.00	2.40	7.90	4.40	0.00	7.90	3.40	4.40	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 7:30 PM	52.00	3.10	2.80	4.80	2.00	2.80	8.80	4.80	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 7:45 PM	52.00	3.00	3.40	4.80	1.40	3.40	11.60	4.80	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 8:00 PM	88.00	1.90	14.00	5.90	0.00	14.00	8.20	5.90	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 8:15 PM	63.00	3.00	4.20	4.60	0.40	4.20	7.20	4.60	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 8:30 PM	66.00	3.10	9.50	6.70	0.00	9.50	13.40	6.70	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 8:45 PM	67.00	2.70	10.70	6.50	0.00	10.70	10.80	6.50	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 9:00 PM	55.00	2.70	16.40	7.00	0.00	16.40	14.80	7.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 9:15 PM	60.00	3.70	12.40	8.20	0.00	12.40	21.10	8.20	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 9:30 PM	77.00	1.50	18.60	7.70	0.00	18.60	13.60	7.70	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 9:45 PM	155.00	1.80	17.30	11.60	0.00	14.90	17.30	8.50	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 10:00 PM	157.00	1.70	14.60	8.10	0.00	9.80	14.60	9.30	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 10:15 PM	155.00	2.00	36.50	11.20	0.00	25.00	36.50	9.60	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 10:30 PM	120.00	1.20	26.60	10.40	0.00	15.20	26.60	9.20	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 10:45 PM	210.00	0.90	7.80	21.70	13.90	21.70	36.30	7.80	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 11:00 PM	208.00	1.20	8.10	19.60	11.50	19.60	10.00	8.10	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 11:15 PM	218.00	1.40	9.40	9.60	0.20	9.60	10.90	9.40	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 11:30 PM	97.00	0.80	11.80	4.60	0.00	13.60	11.80	9.50	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/14/14 11:45 PM	113.00	0.70	11.90	9.20	0.00	24.70	11.90	10.50	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 12:00 AM	195.00	0.30	16.30	12.70	0.00	12.70	12.70	16.30	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 12:15 AM	185.00	1.40	19.10	12.80	0.00	12.80	18.70	19.10	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 12:30 AM	213.00	1.10	20.90	15.60	0.00	15.60	32.90	20.90	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 12:45 AM	231.00	1.10	19.50	36.90	17.40	36.90	31.50	19.50	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 1:00 AM	225.00	1.40	19.20	51.20	32.00	51.20	0.00	19.20	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 1:15 AM	203.00	0.80	16.90	14.10	0.00	14.10	19.60	16.90	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 1:30 AM	233.00	1.80	22.60	24.90	2.30	24.90	30.10	22.60	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 1:45 AM	222.00	1.30	23.00	24.10	1.10	24.10	38.00	23.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 2:00 AM	234.00	1.10	26.10	22.70	0.00	22.70	38.10	26.10	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 2:15 AM	240.00	1.90	26.60	30.50	3.90	30.50	42.70	26.60	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 2:30 AM	219.00	1.70	27.90	25.20	0.00	25.20	45.40	27.90	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 2:45 AM	225.00	1.90	27.30	21.70	0.00	21.70	30.70	27.30	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 3:00 AM	230.00	2.30	27.30	19.60	0.00	19.60	31.50	27.30	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 3:15 AM	244.00	0.80	24.30	18.00	0.00	18.00	28.20	24.30	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 3:30 AM	217.00	1.40	21.60	14.80	0.00	14.80	21.50	21.60	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 3:45 AM	234.00	1.90	20.20	13.80	0.00	13.80	19.90	20.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 4:00 AM	203.00	0.80	19.90	14.30	0.00	14.30	19.80	19.90	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 4:15 AM	210.00	1.30	19.70	12.60	0.00	12.60	16.40	19.70	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 4:30 AM	221.00	1.40	20.30	15.70	0.00	15.70	19.10	20.30	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 4:45 AM	217.00	1.80	24.60	15.70	0.00	15.70	27.50	24.60	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 5:00 AM	198.00	1.10	24.80	19.90	0.00	19.90	28.70	24.80	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 5:15 AM	216.00	1.10	23.70	19.90	0.00	19.90	27.40	23.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 5:30 AM	204.00	0.90	21.80	15.60	0.00	15.60	25.00	21.80	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 5:45 AM	194.00	0.90	21.40	17.00	0.00	17.00	22.00	21.40	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 6:00 AM	220.00	0.60	20.50	20.80	0.30	20.80	20.80	20.50	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 6:15 AM	193.00	1.00	20.80	18.80	0.00	18.80	21.20	20.80	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 6:30 AM	221.00	1.30	21.60	17.80	0.00	17.80	22.40	21.60	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 6:45 AM	220.00	2.20	21.50	17.80	0.00	17.80	22.40	21.50	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 7:00 AM	228.00	2.50	21.20	19.80	0.00	19.80	21.90	21.20	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 7:15 AM	235.00	2.50	20.40	20.00	0.00	20.00	0.00	20.40	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 7:30 AM	236.00	2.30	22.00	17.40	0.00	17.40	20.10	22.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 7:45 AM	222.00	1.80	20.20	17.90	0.00	17.90	20.10	20.20	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 8:00 AM	231.00	2.10	19.40	16.30	0.00	16.30	18.50	19.40	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 8:15 AM	209.00	2.10	18.10	16.00	0.00	16.00	16.60	18.10	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 8:30 AM	197.00	3.00	18.70	25.40	6.70	25.40	16.50	18.70	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 8:45 AM	210.00	4.00	17.00	24.00	7.00	24.00	0.00	17.00	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 9:00 AM	207.00	2.00	14.50	17.40	2.90	17.40	14.10	14.50	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 9:15 AM	178.00	3.70	16.80	7.40	0.00	15.60	16.80	14.40	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/15/14 9:30 AM	207.00	2.90	13.90	17.00	3.1											



**US Army Corps
of Engineers®**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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		
8/16/14 6:45 PM	213.00	3.20	11.00	10.90	0.00	10.90	9.60	11.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 7:00 PM	226.00	4.10	10.00	10.90	0.90	10.90	7.70	10.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 7:15 PM	228.00	2.20	9.90	11.00	1.10	11.00	8.30	9.90	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 7:30 PM	207.00	2.40	10.30	11.50	1.20	11.50	9.50	10.30	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 7:45 PM	203.00	2.20	10.70	0.00	0.00	0.00	11.10	10.70	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 8:00 PM	223.00	2.20	12.80	12.70	0.00	12.70	13.40	12.80	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 8:15 PM	212.00	1.70	14.00	13.20	0.00	13.20	14.30	14.00	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 8:30 PM	0.00	0.00	0.00	0.00	0.00	13.80	16.50	15.70	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 8:45 PM	197.00	2.70	17.50	13.10	0.00	13.10	17.30	17.50	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 9:00 PM	192.00	3.10	18.50	13.50	0.00	13.50	18.20	18.50	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 9:15 PM	197.00	2.60	19.10	13.70	0.00	13.70	19.60	19.10	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 9:30 PM	197.00	2.40	19.70	14.20	0.00	14.20	19.80	19.70	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 9:45 PM	202.00	2.90	21.00	14.00	0.00	14.00	21.20	21.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 10:00 PM	201.00	2.40	22.10	15.10	0.00	15.10	21.80	22.10	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/14 10:15 PM	206.00	2.30	22.80	15.50	0.00	15.50	25.30	22.80	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 12:00 AM	202.00	2.00	33.70	18.90	0.00	18.90	34.50	33.70	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 12:15 AM	211.00	2.40	37.30	19.20	0.00	19.20	37.20	37.30	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 12:30 AM	198.00	2.20	38.70	18.30	0.00	18.30	39.70	38.70	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 12:45 AM	0.00	0.00	0.00	0.00	0.00	18.10	37.80	38.90	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 1:00 AM	201.00	2.10	40.10	18.90	0.00	18.90	38.60	40.10	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 1:15 AM	216.00	1.90	42.60	18.70	0.00	18.70	38.80	42.60	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 1:30 AM	231.00	1.80	42.10	19.20	0.00	19.20	38.40	42.10	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 1:45 AM	236.00	1.80	41.40	18.80	0.00	18.80	39.20	41.40	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 2:00 AM	248.00	0.80	44.30	20.50	0.00	20.50	39.50	44.30	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 2:15 AM	208.00	1.10	56.30	29.10	0.00	29.10	45.10	56.30	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 2:30 AM	253.00	0.80	53.00	23.10	0.00	23.10	56.50	53.00	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 2:45 AM	219.00	0.60	41.40	20.40	0.00	20.40	43.30	41.40	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 3:00 AM	213.00	0.90	35.80	19.30	0.00	19.30	36.80	35.80	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 3:15 AM	0.00	0.00	0.00	0.00	0.00	19.70	37.00	35.60	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 3:30 AM	194.00	1.00	36.60	19.70	0.00	19.70	35.30	36.60	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 3:45 AM	233.00	0.50	38.50	20.10	0.00	20.10	36.00	38.50	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 4:00 AM	251.00	0.70	38.80	19.80	0.00	19.80	38.10	38.80	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 4:15 AM	218.00	1.00	39.70	20.70	0.00	20.70	38.90	39.70	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 4:30 AM	235.00	0.50	36.70	21.10	0.00	21.10	39.90	36.70	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 4:45 AM	179.00	0.60	40.90	13.20	0.00	25.10	40.90	39.80	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 5:00 AM	290.00	0.40	12.30	47.50	35.20	22.60	47.50	40.10	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 5:15 AM	315.00	0.60	13.10	48.30	35.20	22.60	48.30	41.40	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 5:30 AM	313.00	0.70	14.00	53.10	39.10	23.90	53.10	53.20	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 5:45 AM	13.00	1.40	22.50	62.10	39.60	22.50	60.70	62.10	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 6:00 AM	351.00	1.40	14.00	61.40	47.40	21.70	61.40	53.60	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 6:15 AM	2.00	1.40	18.90	46.00	27.10	18.90	57.30	46.00	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 6:30 AM	28.00	4.60	18.00	43.60	25.60	18.00	47.40	43.60	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 6:45 AM	35.00	3.90	18.00	37.30	19.30	18.00	46.20	37.30	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 7:00 AM	38.00	2.60	17.90	44.90	27.00	17.90	35.20	44.90	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 7:15 AM	354.00	3.10	12.70	32.80	20.10	12.70	32.80	45.30	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 7:30 AM	347.00	1.80	12.90	42.80	29.90	20.20	42.80	103.90	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 7:45 AM	357.00	2.50	14.10	42.80	28.70	19.10	42.80	133.10	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 8:00 AM	0.00	0.00	0.00	0.00	0.00	17.40	34.40	114.80	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 8:15 AM	324.00	0.90	10.40	29.20	18.80	15.60	29.20	69.60	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 8:30 AM	0.00	0.00	0.00	0.00	0.00	16.10	26.50	53.10	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 8:45 AM	355.00	3.70	11.10	28.00	16.90	15.70	28.00	32.80	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 9:00 AM	357.00	3.70	11.00	21.50	10.50	18.30	21.50	23.90	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 9:15 AM	353.00	4.30	11.10	16.90	5.80	15.30	16.90	17.00	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 9:30 AM	354.00	5.50	10.10	13.60	3.50	15.50	13.60	13.50	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 9:45 AM	353.00	4.90	9.90	13.10	3.20	13.90	13.10	11.70	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 10:00 AM	350.00	5.90	9.70	11.30	1.60	15.00	11.30	8.30	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 10:15 AM	10.00	6.40	15.20	7.70	0.00	15.20	10.30	7.70	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 10:30 AM	9.00	5.50	16.10	7.60	0.00	16.10	12.40	7.60	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 10:45 AM	4.00	7.60	19.40	8.90	0.00	19.40	14.10	8.90	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 11:00 AM	26.00	6.40	26.70	12.00	0.00	26.70	17.20	12.00	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 11:15 AM	7.00	6.20	24.60	13.40	0.00	24.60	16.20	13.40	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 11:30 AM	21.00	4.80	22.10	14.50	0.00	22.10	20.50	14.50	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 11:45 AM	351.00	5.40	16.40	22.30	5.90	25.30	22.30	20.30	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 12:00 PM	19.00	4.40	25.80	21.80	0.00	25.80	22.50	21.80	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 12:15 PM	39.00	5.70	22.70	26.10	3.40	22.70	23.00	26.10	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 12:30 PM	25.00	6.20	16.90	25.00	8.10	16.90	19.40	25.00	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 12:45 PM	31.00	6.50	23.20	26.90	3.70	23.20	19.70	26.90	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 1:00 PM	28.00	6.40	19.30	26.80	7.50	19.30	22.10	26.80	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/14 1:15 PM	15.00	6.90	20.10	27.20	7.10	20.10	21.90	27.20	14.30	0.00								



US Army Corps
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Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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
8/17/14 9:30 PM	31.00	5.30	16.90	41.10	24.20	16.90	30.10	41.10	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/14 9:45 PM	18.00	6.00	11.50	46.40	34.90	11.50	29.10	46.40	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/14 10:00 PM	22.00	6.40	10.70	36.10	25.40	10.70	31.20	36.10	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/14 10:15 PM	25.00	6.00	16.00	41.30	25.30	16.00	30.40	41.30	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/14 10:30 PM	27.00	4.60	11.20	38.70	27.50	11.20	31.80	38.70	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/14 10:45 PM	10.00	4.90	11.40	44.20	32.80	11.40	32.30	44.20	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/14 11:00 PM	15.00	5.80	10.50	28.70	18.20	10.50	32.80	28.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/14 11:15 PM	24.00	6.20	10.00	43.40	33.40	10.00	25.30	43.40	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/14 11:30 PM	31.00	5.60	12.40	48.40	36.00	12.40	27.00	48.40	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/14 11:45 PM	36.00	5.70	10.90	28.80	17.90	10.90	26.00	28.80	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 12:00 AM	20.00	5.40	10.70	26.90	16.20	10.70	25.30	26.90	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 12:15 AM	37.00	5.00	10.30	25.40	15.10	10.30	23.90	25.40	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 12:30 AM	30.00	4.90	8.80	27.90	19.10	8.80	20.40	27.90	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 12:45 AM	15.00	6.10	8.70	28.40	19.70	8.70	19.70	28.40	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 1:00 AM	24.00	5.80	7.90	38.40	30.50	7.90	18.80	38.40	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 1:15 AM	31.00	5.10	6.30	26.80	20.50	6.30	15.70	26.80	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 1:30 AM	29.00	4.30	6.50	24.70	18.20	6.50	13.80	24.70	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 1:45 AM	34.00	4.80	9.10	20.70	11.60	9.10	11.60	20.70	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 2:00 AM	38.00	4.00	6.90	13.00	6.10	6.90	11.50	13.00	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 2:15 AM	37.00	4.50	5.50	14.60	9.10	5.50	9.80	14.60	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 2:30 AM	56.00	2.70	5.80	15.00	9.20	5.80	9.80	15.00	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 2:45 AM	37.00	1.80	5.60	16.70	11.10	5.60	9.80	16.70	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 3:00 AM	43.00	2.00	6.20	14.80	8.60	6.20	12.50	14.80	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 3:15 AM	53.00	2.00	6.00	14.00	8.00	6.00	12.10	14.00	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 3:30 AM	352.00	3.10	5.80	10.30	4.50	6.40	10.30	13.10	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 3:45 AM	352.00	3.50	4.80	14.50	9.70	8.20	14.50	13.30	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 4:00 AM	354.00	2.50	6.60	14.30	7.70	8.90	14.30	18.90	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 4:15 AM	11.00	3.30	9.20	16.50	7.30	9.20	11.70	16.50	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 4:30 AM	336.00	2.30	4.30	12.30	8.00	7.70	12.30	12.20	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 4:45 AM	333.00	1.60	4.40	12.70	8.30	8.10	12.70	10.50	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 5:00 AM	345.00	2.60	4.30	12.40	8.10	7.40	12.40	11.10	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 5:15 AM	324.00	3.00	4.20	12.30	8.10	9.90	12.30	11.50	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 5:30 AM	339.00	2.30	4.80	12.50	7.70	7.70	12.50	12.30	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 5:45 AM	332.00	2.50	5.40	13.20	7.80	8.90	13.20	13.30	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 6:00 AM	347.00	2.20	6.60	15.20	8.60	8.40	15.20	14.20	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 6:15 AM	316.00	1.70	5.40	15.50	10.10	8.20	15.50	13.80	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 6:30 AM	357.00	3.10	5.50	14.10	8.60	8.60	14.10	15.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 6:45 AM	2.00	4.70	8.40	15.40	7.00	8.40	14.70	15.40	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 7:00 AM	22.00	3.40	8.90	15.60	6.70	8.90	14.60	15.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 7:15 AM	8.00	3.50	9.20	15.60	6.40	9.20	14.70	15.60	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 7:30 AM	8.00	3.60	9.00	16.20	7.20	9.00	14.50	16.20	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 7:45 AM	25.00	2.90	11.30	17.50	6.20	11.30	15.30	17.50	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 8:00 AM	4.00	1.90	10.30	17.30	7.00	10.30	16.60	17.30	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 8:15 AM	7.00	3.50	9.00	17.50	8.50	9.00	15.40	17.50	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 8:30 AM	29.00	3.30	9.90	18.50	8.60	9.90	14.20	18.50	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 8:45 AM	11.00	3.80	10.40	18.70	8.30	10.40	14.40	18.70	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 9:00 AM	353.00	2.80	6.90	14.00	7.10	10.30	14.00	16.40	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 9:15 AM	339.00	2.00	7.60	14.70	7.10	10.40	14.70	16.30	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 9:30 AM	356.00	3.20	7.40	13.70	6.30	11.20	13.70	16.40	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 9:45 AM	345.00	2.40	6.80	13.80	7.00	11.30	13.80	16.00	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 10:00 AM	350.00	2.60	7.00	13.10	6.10	11.30	13.10	15.70	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 10:15 AM	353.00	2.20	6.90	12.60	5.70	10.30	12.60	14.40	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 10:30 AM	349.00	2.30	8.00	12.20	4.20	11.50	12.20	13.90	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 10:45 AM	351.00	0.80	7.70	12.10	4.40	11.10	12.10	12.90	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 11:00 AM	304.00	1.10	7.30	12.10	4.80	11.10	12.10	12.40	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 11:15 AM	320.00	1.40	7.20	12.40	5.20	11.00	12.40	11.80	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 11:30 AM	345.00	1.10	7.60	12.50	4.90	11.20	12.50	11.10	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 11:45 AM	359.00	1.80	9.50	12.50	3.00	11.30	12.50	10.10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 12:00 PM	329.00	0.80	8.20	12.60	4.40	11.70	12.60	8.40	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 12:15 PM	36.00	0.70	12.30	7.30	0.00	12.30	10.70	7.30	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 12:30 PM	335.00	1.20	9.70	10.90	1.20	13.50	10.90	7.70	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 12:45 PM	0.00	1.00	15.20	7.20	0.00	15.20	11.20	7.20	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 1:00 PM	5.00	1.70	16.40	6.70	0.00	16.40	11.90	6.70	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 1:15 PM	51.00	1.80	16.20	6.00	0.00	16.20	12.30	6.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 1:30 PM	11.00	1.00	18.30	4.70	0.00	18.30	12.60	4.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 1:45 PM	120.00	2.00	12.00	14.10	2.10	19.70	12.00	4.50	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 2:00 PM	89.00	2.10	24.40	5.00	0.00	24.40	13.10	5.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 2:15 PM	125.00	2.60	14.00	15.10	1.10	23.20	14.00	5.50	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 2:30 PM	112.00	2.60	14.00	15.70	1.70	23.40	14.00	5.50	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 2:45 PM	100.00	2.30	17.10	18.80	1.70											



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August, 2014

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
8/18/14 10:45 PM	178.00	1.90	34.30	17.70	0.00	31.50	34.30	45.90	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 11:00 PM	185.00	1.90	51.40	32.10	0.00	32.10	34.30	51.40	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 11:15 PM	186.00	2.30	53.00	32.20	0.00	32.20	40.20	53.00	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 11:30 PM	177.00	2.10	43.50	22.50	0.00	30.60	43.50	53.00	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/14 11:45 PM	182.00	1.80	52.80	31.60	0.00	31.60	41.40	52.80	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 12:00 AM	208.00	1.40	52.90	31.70	0.00	31.70	42.10	52.90	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 12:15 AM	195.00	1.90	53.60	34.90	0.00	34.90	42.80	53.60	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 12:30 AM	199.00	1.60	53.50	33.40	0.00	33.40	43.60	53.50	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 12:45 AM	187.00	2.50	54.40	29.90	0.00	29.90	43.40	54.40	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 1:00 AM	197.00	1.70	55.30	30.10	0.00	30.10	44.60	55.30	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 1:15 AM	194.00	2.40	60.30	30.20	0.00	30.20	45.60	60.30	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 1:30 AM	200.00	2.80	61.50	29.30	0.00	29.30	45.10	61.50	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 1:45 AM	193.00	2.80	60.60	28.00	0.00	28.00	44.80	60.60	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 2:00 AM	201.00	3.70	58.00	28.00	0.00	28.00	44.40	58.00	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 2:15 AM	183.00	3.20	57.70	27.00	0.00	27.00	44.60	57.70	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 2:30 AM	201.00	3.50	58.10	26.70	0.00	26.70	44.60	58.10	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 2:45 AM	205.00	2.50	67.40	26.00	0.00	26.00	44.20	67.40	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 3:00 AM	205.00	2.60	68.70	25.60	0.00	25.60	44.20	68.70	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 3:15 AM	199.00	2.70	70.50	26.00	0.00	26.00	44.70	70.50	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 3:30 AM	185.00	2.40	71.70	26.10	0.00	26.10	43.90	71.70	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 3:45 AM	201.00	2.70	71.40	26.90	0.00	26.90	43.90	71.40	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 4:00 AM	198.00	2.70	71.00	27.20	0.00	27.20	44.80	71.00	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 4:15 AM	196.00	3.20	73.40	0.00	0.00	0.00	45.30	73.40	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 4:30 AM	206.00	3.30	75.30	27.40	0.00	27.40	47.10	75.30	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 4:45 AM	206.00	3.80	77.90	27.50	0.00	27.50	50.70	77.90	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 5:00 AM	200.00	3.10	119.70	40.20	0.00	40.20	81.80	119.70	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 5:15 AM	191.00	3.90	133.60	48.30	0.00	48.30	82.10	133.60	34.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 5:30 AM	201.00	2.90	114.40	42.90	0.00	42.90	64.80	114.40	33.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 5:45 AM	195.00	3.20	100.20	32.90	0.00	32.90	61.00	100.20	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 6:00 AM	189.00	3.50	86.40	30.10	0.00	30.10	50.10	86.40	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 6:15 AM	190.00	3.30	80.30	27.50	0.00	27.50	47.40	80.30	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 6:30 AM	189.00	3.10	74.30	25.70	0.00	25.70	45.90	74.30	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 6:45 AM	204.00	3.30	70.20	25.60	0.00	25.60	44.20	70.20	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 7:00 AM	211.00	3.60	67.80	25.10	0.00	25.10	43.20	67.80	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 7:15 AM	201.00	4.50	66.00	25.30	0.00	25.30	42.40	66.00	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 7:30 AM	192.00	3.40	63.70	24.70	0.00	24.70	41.00	63.70	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 7:45 AM	180.00	4.60	60.10	24.60	0.00	24.60	40.10	60.10	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 8:00 AM	201.00	4.90	59.70	23.40	0.00	23.40	38.10	59.70	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 8:15 AM	204.00	4.50	57.20	23.20	0.00	23.20	37.40	57.20	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 8:30 AM	206.00	4.70	53.50	22.20	0.00	22.20	35.60	53.50	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 8:45 AM	206.00	5.10	50.00	20.80	0.00	20.80	32.30	50.00	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 9:00 AM	213.00	6.70	46.20	20.30	0.00	20.30	31.00	46.20	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 9:15 AM	202.00	5.50	38.30	19.60	0.00	19.60	29.10	38.30	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 9:30 AM	197.00	5.80	29.30	19.30	0.00	19.30	23.00	29.30	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 9:45 AM	202.00	4.50	23.80	19.00	0.00	19.00	19.80	23.80	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 10:00 AM	210.00	6.20	20.50	18.00	0.00	18.00	18.20	20.50	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 10:15 AM	218.00	8.40	18.70	17.60	0.00	17.60	16.90	18.70	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 10:30 AM	229.00	8.90	15.60	17.10	1.50	17.10	16.00	15.60	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 10:45 AM	217.00	8.30	14.30	18.10	3.80	18.10	15.60	14.30	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 11:00 AM	209.00	8.70	12.90	17.80	4.90	17.80	16.80	12.90	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 11:15 AM	223.00	8.50	10.70	17.40	6.70	17.40	13.60	10.70	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 11:30 AM	218.00	7.50	8.50	18.90	10.40	18.90	15.70	8.50	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 11:45 AM	212.00	8.60	8.50	18.90	10.40	18.90	12.90	8.50	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 12:00 PM	221.00	8.00	8.70	20.20	11.50	20.20	14.10	8.70	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 12:15 PM	206.00	7.90	9.10	19.60	10.50	19.60	20.30	9.10	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 12:30 PM	210.00	7.50	9.80	19.80	10.00	19.80	14.10	9.80	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 12:45 PM	217.00	8.80	9.80	19.20	9.40	19.20	14.40	9.80	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 1:00 PM	223.00	6.90	9.90	20.00	10.10	20.00	16.20	9.90	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 1:15 PM	222.00	7.50	10.20	20.80	10.60	20.80	15.60	10.20	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 1:30 PM	218.00	6.90	11.40	23.00	11.60	23.00	17.00	11.40	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 1:45 PM	242.00	5.40	11.80	21.30	9.50	21.30	16.00	11.80	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 2:00 PM	244.00	5.40	8.70	13.20	4.50	13.20	9.50	8.70	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 2:15 PM	271.00	4.70	7.10	13.60	6.50	12.90	13.60	13.00	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 2:30 PM	273.00	4.20	5.20	11.50	6.30	10.30	11.50	11.70	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 2:45 PM	272.00	5.90	5.30	11.20	5.90	10.10	11.20	12.60	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 3:00 PM	269.00	5.30	12.10	11.00	0.00	11.00	13.30	12.10	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 3:15 PM	238.00	5.20	12.00	11.70	0.00	11.70	12.70	12.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 3:30 PM	207.00	4.20	10.70	13.50	2.80	13.50	12.10	10.70	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/14 3:45 PM	195.00	3.80	8.60	13.40	4.80	13.40										



US Army Corps
of Engineers®

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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
8/20/14 12:00 AM	220.00	1.60	16.20	16.70	0.50	16.70	14.50	16.20	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 12:15 AM	215.00	1.70	16.60	17.60	1.00	17.60	15.40	16.60	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 12:30 AM	219.00	1.80	17.10	17.90	0.80	17.90	16.90	17.10	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 12:45 AM	223.00	1.90	19.10	19.50	0.40	19.50	17.20	19.10	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 1:00 AM	224.00	2.00	22.60	18.30	0.00	18.30	17.60	22.60	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 1:15 AM	234.00	2.50	23.10	19.10	0.00	19.10	18.40	23.10	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 1:30 AM	235.00	2.10	24.00	20.10	0.00	20.10	18.60	24.00	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 1:45 AM	245.00	1.90	26.40	21.20	0.00	21.20	19.30	26.40	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 2:00 AM	241.00	2.30	27.70	22.30	0.00	22.30	19.70	27.70	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 2:15 AM	254.00	2.20	26.60	22.90	0.00	22.90	19.60	26.60	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 2:30 AM	219.00	1.60	25.20	22.70	0.00	22.70	20.00	25.20	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 2:45 AM	224.00	1.70	25.20	22.40	0.00	22.40	20.30	25.20	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 3:00 AM	240.00	1.60	24.10	22.30	0.00	22.30	20.50	24.10	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 3:15 AM	225.00	1.50	22.90	21.40	0.00	21.40	20.30	22.90	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 3:30 AM	236.00	1.60	22.80	22.10	0.00	22.10	20.90	22.80	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 3:45 AM	229.00	1.70	23.10	22.90	0.00	22.90	21.40	23.10	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 4:00 AM	236.00	2.20	24.90	21.80	0.00	21.80	21.30	24.90	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 4:15 AM	263.00	2.50	25.20	22.10	0.00	22.10	21.30	25.20	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 4:30 AM	261.00	2.30	27.00	22.80	0.00	22.80	21.70	27.00	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 4:45 AM	232.00	1.40	27.20	22.30	0.00	22.30	22.00	27.20	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 5:00 AM	243.00	1.20	26.30	21.50	0.00	21.50	21.60	26.30	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 5:15 AM	222.00	1.50	25.00	21.00	0.00	21.00	21.60	25.00	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 5:30 AM	231.00	0.80	22.50	21.00	0.00	21.00	20.60	22.50	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 5:45 AM	232.00	1.10	20.20	20.90	0.70	20.90	19.90	20.20	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 6:00 AM	216.00	1.00	21.00	20.30	0.00	20.30	20.40	21.00	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 6:15 AM	204.00	2.00	20.30	20.40	0.10	20.40	20.40	20.30	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 6:30 AM	207.00	1.50	19.70	20.40	0.70	20.40	20.20	19.70	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 6:45 AM	237.00	1.90	19.30	20.40	1.10	20.40	20.90	19.30	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 7:00 AM	230.00	2.60	20.10	21.10	1.00	21.10	22.10	20.10	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 7:15 AM	228.00	2.80	21.10	21.40	0.30	21.40	22.60	21.10	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 7:30 AM	238.00	2.50	23.10	21.90	0.00	21.90	23.20	23.10	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 7:45 AM	248.00	2.50	22.70	25.40	2.70	25.40	21.60	22.70	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 8:00 AM	250.00	2.60	16.50	20.80	4.30	20.80	19.10	16.50	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 8:15 AM	248.00	2.80	14.20	22.20	8.00	22.20	17.20	14.20	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 8:30 AM	243.00	3.10	13.00	26.40	13.40	26.40	16.40	13.00	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 8:45 AM	246.00	2.10	12.80	24.30	11.50	24.30	16.60	12.80	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 9:00 AM	226.00	1.70	12.30	24.30	12.00	24.30	16.60	12.30	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 9:15 AM	223.00	0.70	10.80	25.10	14.30	25.10	16.60	10.80	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 9:30 AM	316.00	1.90	17.10	16.90	0.00	16.90	16.90	17.10	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 9:45 AM	243.00	3.50	7.40	26.10	18.70	26.10	16.60	7.40	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 10:00 AM	258.00	2.70	6.90	25.70	18.80	25.70	15.40	6.90	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 10:15 AM	256.00	2.10	5.00	23.90	18.90	23.90	12.70	5.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 10:30 AM	299.00	1.60	12.90	12.90	0.00	12.90	12.90	12.90	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 10:45 AM	266.00	3.00	2.70	23.70	21.00	23.70	11.40	2.70	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 11:00 AM	222.00	3.30	4.00	22.60	18.60	22.60	11.60	4.00	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 11:15 AM	252.00	5.20	4.20	20.80	16.60	20.80	10.90	4.20	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 11:30 AM	239.00	5.80	4.00	23.60	19.60	23.60	19.60	4.00	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 11:45 AM	229.00	5.70	3.80	18.80	15.00	18.80	8.50	3.80	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 12:00 PM	235.00	6.50	4.50	20.10	15.60	20.10	8.80	4.50	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 12:15 PM	222.00	7.80	4.90	20.20	15.30	20.20	8.40	4.90	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 12:30 PM	227.00	6.40	5.50	20.50	15.00	20.50	8.60	5.50	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 12:45 PM	222.00	5.10	5.70	21.10	15.40	21.10	9.20	5.70	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 1:00 PM	237.00	5.10	6.40	21.20	14.80	21.20	10.40	6.40	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 1:15 PM	200.00	3.90	6.40	20.50	14.10	20.50	11.30	6.40	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 1:30 PM	226.00	4.20	7.00	20.10	13.10	20.10	11.40	7.00	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 1:45 PM	239.00	6.60	7.60	20.70	13.10	20.70	11.80	7.60	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 2:00 PM	229.00	6.40	7.30	20.60	13.30	20.60	11.50	7.30	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 2:15 PM	223.00	7.90	6.90	19.50	12.60	19.50	15.20	6.90	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 2:30 PM	208.00	4.90	6.40	18.90	12.50	18.90	10.50	6.40	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 2:45 PM	228.00	5.50	4.90	18.80	13.90	18.80	9.00	4.90	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 3:00 PM	213.00	5.20	5.80	19.10	13.30	19.10	9.40	5.80	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 3:15 PM	236.00	5.80	5.80	18.30	12.50	18.30	9.40	5.80	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 3:30 PM	261.00	2.80	5.40	17.20	11.80	17.20	8.60	5.40	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 3:45 PM	209.00	5.80	5.60	17.30	11.70	17.30	7.50	5.60	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 4:00 PM	210.00	2.20	5.30	16.30	11.00	16.30	6.70	5.30	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 4:15 PM	207.00	4.10	5.70	16.30	10.60	16.30	6.90	5.70	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 4:30 PM	196.00	3.00	5.40	16.50	11.10	16.50	6.90	5.40	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 4:45 PM	229.00	3.90	5.70	16.10	10.40	16.10	7.10	5.70	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/14 5:00 PM	232.00	4.80	5.60	17.70	12.10	17.70	6.90	5.60	14.10	0.00						



**US Army Corps
of Engineers®**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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
8/21/14 1:15 AM	220.00	2.50	13.90	11.40	0.00	11.40	13.10	13.90	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 1:30 AM	213.00	3.70	14.20	11.10	0.00	11.10	13.00	14.20	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 1:45 AM	228.00	3.70	14.10	11.40	0.00	11.40	12.90	14.10	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 2:00 AM	206.00	3.40	16.60	12.70	0.00	12.70	15.80	16.60	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 2:15 AM	203.00	2.90	20.00	13.30	0.00	13.30	17.50	20.00	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 2:30 AM	218.00	3.10	20.10	13.20	0.00	13.20	17.10	20.10	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 2:45 AM	308.00	0.80	7.80	20.20	12.40	14.00	20.20	22.10	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 3:00 AM	251.00	1.00	26.40	13.50	0.00	13.50	20.10	26.40	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 3:15 AM	209.00	1.60	24.70	11.90	0.00	11.90	19.40	24.70	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 3:30 AM	157.00	1.90	18.20	4.90	0.00	11.80	18.20	24.30	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 3:45 AM	169.00	2.00	16.40	17754.40	17738.00	9.80	16.40	22.20	17754.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 4:00 AM	157.00	2.30	18.50	18464.20	18445.70	10.60	18.50	24.30	18464.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 4:15 AM	176.00	3.00	20.00	19568.60	19548.60	11.90	20.00	27.60	19568.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 4:30 AM	167.00	2.40	23.30	19657.60	19634.30	10.40	23.30	30.50	19657.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 4:45 AM	199.00	2.40	35.10	11.30	0.00	11.30	25.00	35.10	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 5:00 AM	199.00	2.80	39.80	12.50	0.00	12.50	25.50	39.80	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 5:15 AM	210.00	2.40	40.70	11.50	0.00	11.50	29.60	40.70	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 5:30 AM	259.00	2.50	41.60	10.70	0.00	10.70	22.60	41.60	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 5:45 AM	0.00	2.80	10.50	42.70	32.20	10.50	22.50	42.70	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 6:00 AM	181.00	3.50	45.60	10.70	0.00	10.70	23.70	45.60	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 6:15 AM	154.00	2.30	26.60	0.30	0.00	11.50	26.60	54.30	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 6:30 AM	187.00	2.00	58.90	10.70	0.00	10.70	26.30	58.90	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 6:45 AM	189.00	3.00	71.70	11.90	0.00	11.90	31.00	71.70	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 7:00 AM	190.00	1.70	106.20	13.60	0.00	13.60	40.20	106.20	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 7:15 AM	192.00	3.20	102.90	12.40	0.00	12.40	37.30	102.90	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 7:30 AM	210.00	2.50	111.90	14.60	0.00	14.60	42.90	111.90	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 7:45 AM	225.00	3.90	124.50	13.70	0.00	13.70	43.10	124.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 8:00 AM	202.00	2.80	123.40	14.50	0.00	14.50	43.10	123.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 8:15 AM	227.00	3.80	131.00	12.30	0.00	12.30	40.60	131.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 8:30 AM	240.00	2.30	136.20	11.70	0.00	11.70	36.80	136.20	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 8:45 AM	202.00	4.10	208.10	15.90	0.00	15.90	45.80	208.10	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 9:00 AM	144.00	3.20	50.90	0.60	0.00	14.90	50.90	155.10	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 9:15 AM	194.00	1.50	158.40	14.40	0.00	14.40	37.10	158.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 9:30 AM	169.00	3.10	39.60	0.40	0.00	13.40	39.60	177.50	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 9:45 AM	171.00	3.60	41.20	0.40	0.00	14.00	41.20	182.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 10:00 AM	186.00	3.00	169.00	12.40	0.00	12.40	38.90	169.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 10:15 AM	189.00	3.00	172.30	14.70	0.00	14.70	49.80	172.30	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 10:30 AM	175.00	3.50	60.70	0.50	0.00	15.20	60.70	190.90	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 10:45 AM	181.00	4.20	230.90	15.30	0.00	15.30	58.80	230.90	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 11:00 AM	179.00	4.20	45.50	0.50	0.00	13.00	45.50	218.60	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 11:15 AM	197.00	4.50	185.90	12.20	0.00	12.20	38.80	185.90	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 11:30 AM	183.00	6.10	172.90	12.90	0.00	12.90	39.30	172.90	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 11:45 AM	199.00	5.20	149.50	10.50	0.00	10.50	27.00	149.50	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 12:00 PM	178.00	4.60	18.10	0.30	0.00	9.50	18.10	131.10	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 12:15 PM	208.00	3.60	89.50	9.50	0.00	9.50	16.70	89.50	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 12:30 PM	211.00	3.10	56.60	10.10	0.00	10.10	17.20	56.60	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 12:45 PM	185.00	2.90	49.50	10.70	0.00	10.70	17.80	49.50	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 1:00 PM	208.00	2.70	6.80	10.60	3.80	10.60	15.80	6.80	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 1:15 PM	221.00	3.30	-8.40	11.00	19.40	11.00	14.70	-8.40	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 1:30 PM	209.00	1.40	-14.00	12.20	26.20	12.20	14.10	-14.00	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 1:45 PM	213.00	0.70	6.90	13.10	6.20	13.10	14.10	6.90	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 2:00 PM	193.00	2.10	4.20	13.30	9.10	13.30	14.60	4.20	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 2:15 PM	165.00	2.20	15.10	6.80	0.00	13.70	15.10	3.90	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 2:30 PM	153.00	2.10	15.50	6.50	0.00	14.30	15.50	5.30	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 2:45 PM	147.00	1.80	16.70	6.60	0.00	14.40	16.70	19.60	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 3:00 PM	138.00	1.70	15.10	7.70	0.00	14.80	15.10	21.40	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 3:15 PM	120.00	2.00	13.00	7.20	0.00	15.80	13.00	10.50	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 3:30 PM	155.00	2.40	11.80	7.40	0.00	16.20	11.80	9.80	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 3:45 PM	69.00	3.20	17.00	11.20	0.00	17.00	10.30	11.20	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 4:00 PM	68.00	3.70	17.60	7.10	0.00	17.60	9.20	7.10	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 4:15 PM	64.00	4.20	18.20	4.40	0.00	18.20	8.30	4.40	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 4:30 PM	323.00	4.50	9.50	8.70	0.00	19.10	8.70	4.80	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 4:45 PM	7.00	5.80	24.60	8.90	0.00	24.60	12.40	8.90	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 5:00 PM	0.00	5.50	20.40	29.80	9.40	20.40	23.50	29.80	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 5:15 PM	21.00	5.70	25.70	35.90	10.20	25.70	34.20	35.90	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 5:30 PM	124.00	2.80	56.80	14.40	0.00	24.80	56.80	63.20	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 5:45 PM	128.00	3.00	41.10	5.50	0.00	24.90	41.10	21.60	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 6:00 PM	129.00	4.10	40.70	5.00	0.00	17.80	40.70	61.10	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/14 6:15 PM	166.00	3.00	38.40	3.40	0.00	11.40	38.40	47.10	3.40	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
8/22/14 2:30 AM	7.00	4.20	15.40	238.60	223.20	15.40	23.30	238.60	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 2:45 AM	11.00	1.60	17.00	86.80	69.80	17.00	21.20	86.80	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 3:00 AM	121.00	3.30	20.70	11.20	0.00	18.50	20.70	27.60	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 3:15 AM	113.00	1.60	24.00	13.10	0.00	20.10	24.00	21.40	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 3:30 AM	0.00	0.00	0.00	0.00	0.00	12.50	16.90	8.70	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 3:45 AM	160.00	1.90	35.30	9.00	0.00	23.60	35.30	43.40	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 4:00 AM	215.00	1.30	140.40	39.20	0.00	39.20	62.10	140.40	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 4:15 AM	187.00	2.80	254.00	55.60	0.00	55.60	78.70	254.00	50.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 4:30 AM	191.00	2.50	219.20	34.10	0.00	34.10	57.50	219.20	30.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 4:45 AM	217.00	2.50	221.90	22.10	0.00	22.10	49.20	221.90	21.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 5:00 AM	217.00	3.40	239.20	19.30	0.00	19.30	47.60	239.20	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 5:15 AM	206.00	3.50	214.50	20.20	0.00	20.20	47.90	214.50	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 5:30 AM	226.00	2.10	220.70	21.20	0.00	21.20	49.20	220.70	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 5:45 AM	202.00	2.50	233.70	21.60	0.00	21.60	54.90	233.70	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 6:00 AM	203.00	1.60	259.90	15.70	0.00	15.70	47.80	259.90	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 6:15 AM	199.00	1.40	239.30	12.90	0.00	12.90	36.60	239.30	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 6:30 AM	174.00	1.50	34.80	5.70	0.00	12.20	34.80	217.60	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 6:45 AM	176.00	2.30	32.90	5.00	0.00	11.30	32.90	228.60	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 7:00 AM	191.00	2.00	274.50	11.50	0.00	11.50	35.80	274.50	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 7:15 AM	180.00	2.70	310.70	12.00	0.00	12.00	37.80	310.70	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 7:30 AM	177.00	3.50	37.70	5.70	0.00	12.20	37.70	316.30	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 7:45 AM	196.00	1.80	321.20	12.50	0.00	12.50	39.80	321.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 8:00 AM	183.00	3.60	349.60	13.30	0.00	13.30	40.00	349.60	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 8:15 AM	169.00	3.60	45.50	7.60	0.00	13.20	45.50	340.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 8:30 AM	177.00	3.40	41.80	6.50	0.00	12.00	41.80	265.60	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 8:45 AM	188.00	5.20	223.80	10.10	0.00	10.10	19.90	223.80	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 9:00 AM	189.00	4.40	218.60	8.90	0.00	8.90	13.40	218.60	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 9:15 AM	192.00	3.50	220.70	8.70	0.00	8.70	12.20	220.70	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 9:30 AM	189.00	3.00	191.40	9.50	0.00	9.50	11.60	191.40	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 9:45 AM	200.00	3.70	157.10	0.00	0.00	0.00	10.50	157.10	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 10:00 AM	208.00	3.30	109.30	9.20	0.00	9.20	10.80	109.30	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 10:15 AM	210.00	3.20	96.50	9.00	0.00	9.00	10.90	96.50	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 10:30 AM	193.00	2.80	78.90	8.60	0.00	8.60	9.10	78.90	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 10:45 AM	233.00	4.30	58.90	9.30	0.00	9.30	8.30	58.90	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 11:00 AM	232.00	4.70	47.60	9.10	0.00	9.10	9.20	47.60	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 11:15 AM	239.00	3.70	41.00	9.70	0.00	9.70	9.40	41.00	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 11:30 AM	258.00	2.20	32.70	9.90	0.00	9.90	9.70	32.70	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 11:45 AM	279.00	2.00	4.70	10.30	5.60	10.00	10.30	26.60	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 12:00 PM	270.00	2.30	5.40	8.30	2.90	10.10	8.30	23.70	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 12:15 PM	266.00	3.20	16.80	10.70	0.00	10.70	8.20	16.80	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 12:30 PM	261.00	3.10	11.20	10.50	0.00	10.50	6.00	11.20	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 12:45 PM	300.00	3.00	4.90	6.20	1.30	11.00	6.20	0.00	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 1:00 PM	256.00	3.10	0.00	12.10	12.10	12.10	6.40	0.00	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 1:15 PM	284.00	0.80	6.10	7.40	1.30	12.40	7.40	0.00	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 1:30 PM	237.00	1.90	1.90	12.30	10.40	12.30	9.40	1.90	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 1:45 PM	250.00	3.50	5.40	13.80	8.40	13.80	11.20	5.40	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 2:00 PM	261.00	2.70	0.00	13.60	13.60	13.60	10.90	0.00	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 2:15 PM	269.00	2.60	0.00	13.80	13.80	13.80	11.30	0.00	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 2:30 PM	255.00	3.90	0.00	13.70	13.70	13.70	12.70	0.00	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 2:45 PM	306.00	2.40	8.20	13.10	4.90	14.50	13.10	0.00	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 3:00 PM	300.00	1.40	6.10	5.90	0.00	11.80	5.90	0.00	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 3:15 PM	255.00	3.20	0.00	9.90	9.90	9.90	3.40	0.00	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 3:30 PM	275.00	2.90	4.40	2.70	0.00	10.00	2.70	0.00	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 3:45 PM	273.00	3.00	4.40	2.60	0.00	9.60	2.60	0.00	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 4:00 PM	251.00	4.40	0.00	10.10	10.10	10.10	2.00	0.00	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 4:15 PM	260.00	3.50	0.00	9.10	9.10	9.10	1.20	0.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 4:30 PM	274.00	3.00	3.10	0.70	0.00	7.90	0.70	0.00	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 4:45 PM	270.00	3.60	2.80	0.50	0.00	8.10	0.50	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 5:00 PM	242.00	3.30	0.00	8.80	8.80	8.80	1.10	0.00	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 5:15 PM	0.00	0.00	0.00	0.00	0.00	9.10	1.50	0.00	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 5:30 PM	239.00	4.50	0.00	9.50	9.50	9.50	1.60	0.00	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 5:45 PM	256.00	3.40	0.00	10.80	10.80	10.80	2.00	0.00	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 6:00 PM	257.00	3.60	0.00	11.30	11.30	11.30	2.40	0.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 6:15 PM	239.00	3.50	0.00	12.00	12.00	12.00	2.90	0.00	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 6:30 PM	239.00	3.60	0.00	12.50	12.50	12.50	3.60	0.00	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 6:45 PM	239.00	2.60	0.00	12.30	12.30	12.30	4.40	0.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 7:00 PM	257.00	2.00	0.00	13.20	13.20	13.20	6.00	0.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 7:15 PM	249.00	1.70	6.70	13.90	7.20	13.90	8.00	6.70	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 7:30 PM	226.00	1.70	9.80	13.80	4.00	13.80	8.80	9.80	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/22/14 7:45 PM	258.00	1.70	11.80	1												



US Army Corps
of Engineers®

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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		
8/23/14 3:45 AM	165.00	1.10	44.20	8.90	0.00	17.50	44.20	334.90	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 4:00 AM	199.00	1.10	332.00	17.80	0.00	17.80	42.50	332.00	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 4:15 AM	193.00	1.20	336.90	19.10	0.00	19.10	42.00	336.90	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 4:30 AM	189.00	1.10	341.80	17.70	0.00	17.70	43.60	341.80	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 4:45 AM	151.00	1.40	42.90	12.40	0.00	19.30	42.90	363.90	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 5:00 AM	134.00	0.80	45.10	11.80	0.00	19.70	45.10	365.10	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 5:15 AM	205.00	0.90	377.70	19.90	0.00	19.90	47.20	377.70	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 5:30 AM	207.00	1.10	396.00	24.30	0.00	24.30	48.20	396.00	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 5:45 AM	201.00	0.90	392.30	25.90	0.00	25.90	45.70	392.30	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 6:00 AM	189.00	1.00	407.90	25.30	0.00	25.30	44.90	407.90	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 6:15 AM	207.00	1.10	391.80	21.70	0.00	21.70	44.50	391.80	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 6:30 AM	236.00	0.90	392.60	20.60	0.00	20.60	40.80	392.60	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 6:45 AM	235.00	0.80	401.40	20.60	0.00	20.60	36.20	401.40	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 7:00 AM	210.00	1.40	426.80	22.60	0.00	22.60	35.70	426.80	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 7:15 AM	229.00	1.40	426.60	22.60	0.00	22.60	37.10	426.60	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 7:30 AM	271.00	1.00	14.60	38.10	23.50	21.60	38.10	385.90	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 7:45 AM	230.00	1.20	355.00	22.90	0.00	22.90	43.10	355.00	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 8:00 AM	0.00	0.00	0.00	0.00	0.00	22.80	46.90	318.30	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 8:15 AM	253.00	0.80	334.10	23.80	0.00	23.80	39.70	334.10	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 8:30 AM	240.00	1.00	349.70	22.80	0.00	22.80	33.10	349.70	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 8:45 AM	6.00	0.90	24.00	360.20	336.20	24.00	30.90	360.20	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 9:00 AM	325.00	0.50	13.40	24.60	11.20	23.40	24.60	313.00	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 9:15 AM	357.00	1.20	17.90	18.90	1.00	21.20	18.90	244.50	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 9:30 AM	2.00	1.70	20.10	141.40	121.30	20.10	15.40	141.40	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 9:45 AM	182.00	1.60	105.50	19.00	0.00	19.00	14.40	105.50	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 10:00 AM	130.00	3.00	9.50	10.30	0.80	18.80	9.50	0.00	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 10:15 AM	188.00	2.60	0.00	19.50	19.50	19.50	8.70	0.00	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 10:30 AM	188.00	1.90	0.00	21.20	21.20	21.20	8.70	0.00	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 10:45 AM	114.00	2.10	11.10	9.40	0.00	20.60	11.10	0.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 11:00 AM	349.00	2.90	11.90	9.30	0.00	22.10	9.30	0.00	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 11:15 AM	356.00	2.60	14.30	8.10	0.00	24.80	8.10	0.00	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 11:30 AM	351.00	3.40	15.70	7.80	0.00	26.50	7.80	0.00	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 11:45 AM	1.00	2.50	30.00	0.00	0.00	30.00	7.70	0.00	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 12:00 PM	0.00	0.00	0.00	0.00	0.00	34.00	7.20	0.00	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 12:15 PM	31.00	4.00	41.70	0.00	0.00	41.70	16.00	0.00	27.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 12:30 PM	28.00	4.80	41.90	0.00	0.00	41.90	25.30	0.00	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 12:45 PM	27.00	4.80	46.10	0.00	0.00	46.10	26.00	0.00	25.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 1:00 PM	21.00	4.90	39.60	0.00	0.00	39.60	31.60	0.00	27.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 1:15 PM	15.00	4.70	43.80	0.00	0.00	43.80	39.80	0.00	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 1:30 PM	39.00	4.00	41.50	0.00	0.00	41.50	39.10	0.00	29.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 1:45 PM	61.00	2.70	38.10	0.00	0.00	38.10	39.40	0.00	26.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 2:00 PM	85.00	2.00	39.90	0.00	0.00	39.90	37.90	0.00	29.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 2:15 PM	65.00	2.90	42.90	0.00	0.00	42.90	41.30	0.00	30.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 2:30 PM	64.00	4.20	44.00	15.00	0.00	44.00	43.40	15.00	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 2:45 PM	291.00	12.60	32.60	73.20	40.60	43.50	73.20	23.40	32.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 3:00 PM	323.00	4.10	32.00	92.40	60.40	54.50	92.40	46.40	32.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 3:15 PM	74.00	3.70	65.40	31.70	0.00	65.40	54.50	31.70	44.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 3:30 PM	75.00	3.80	76.70	49.90	0.00	76.70	68.50	49.90	52.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 3:45 PM	113.00	3.60	12.20	6.70	0.00	18.40	12.20	0.00	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 4:00 PM	147.00	2.70	27.00	2.80	0.00	11.90	27.00	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 4:15 PM	74.00	5.20	10.40	-0.60	0.00	10.40	15.00	-0.60	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 4:30 PM	106.00	4.70	18.90	11.80	0.00	25.20	18.90	5.80	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 4:45 PM	108.00	4.40	30.60	14.20	0.00	26.80	30.60	16.00	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 5:00 PM	120.00	3.40	16.00	1.90	0.00	9.20	16.00	5.90	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 5:15 PM	117.00	5.60	17.70	4.30	0.00	9.60	17.70	5.80	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 5:30 PM	128.00	3.90	27.30	4.30	0.00	9.70	27.30	30.40	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 5:45 PM	174.00	1.40	43.50	3.70	0.00	11.90	43.50	31.40	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 6:00 PM	162.00	2.70	106.70	8.40	0.00	15.10	106.70	96.90	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 6:15 PM	189.00	2.00	96.90	24.20	0.00	24.20	52.20	96.90	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 6:30 PM	195.00	2.20	19.00	9.10	0.00	9.10	24.20	19.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 6:45 PM	219.00	1.30	15.90	8.30	0.00	8.30	22.60	15.90	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 7:00 PM	229.00	1.40	16.10	7.90	0.00	7.90	0.00	16.10	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 7:15 PM	279.00	1.50	1.70	18.90	17.20	7.80	18.90	17.30	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 7:30 PM	275.00	2.60	2.10	17.70	15.60	7.60	17.70	17.70	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 7:45 PM	302.00	2.00	2.70	16.50	13.80	8.20	16.50	12.80	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 8:00 PM	333.00	1.50	3.00	16.80	13.80	8.80	16.80	14.50	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 8:15 PM	275.00	1.80	2.40	15.80	13.40	8.60	15.80	14.60	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 8:30 PM	266.00	2.00	14.50	8.90	0.00	8.90	16.50	14.50	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/23/14 8:45 PM	244.00	1.30	14.00	9.00	0.00	9.00	17.40	14.00	3.30	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, 2014

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		
8/25/14 6:15 AM	186.00	0.70	504.30	30.10	0.00	30.10	74.20	504.30	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 6:30 AM	123.00	0.70	78.00	20.30	0.00	32.70	78.00	529.60	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 6:45 AM	180.00	0.80	519.00	34.20	0.00	34.20	78.70	519.00	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 7:00 AM	136.00	1.10	78.50	19.20	0.00	32.10	78.50	513.30	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 7:15 AM	158.00	1.90	78.00	19.20	0.00	31.50	78.00	515.90	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 7:30 AM	203.00	0.80	529.30	30.90	0.00	30.90	79.90	529.30	19.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 7:45 AM	219.00	0.80	568.10	31.00	0.00	31.00	80.30	568.10	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 8:00 AM	168.00	2.50	73.60	19.60	0.00	34.00	73.60	498.20	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 8:15 AM	160.00	2.60	56.00	19.30	0.00	34.90	56.00	395.30	19.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 8:30 AM	197.00	3.20	334.30	28.20	0.00	28.20	39.70	334.30	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 8:45 AM	195.00	3.50	314.80	26.80	0.00	26.80	33.90	314.80	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 9:00 AM	189.00	2.90	309.40	24.60	0.00	24.60	31.10	309.40	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 9:15 AM	220.00	1.90	267.60	25.40	0.00	25.40	30.40	267.60	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 9:30 AM	209.00	3.30	258.30	24.00	0.00	24.00	27.20	258.30	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 9:45 AM	206.00	3.60	246.30	23.30	0.00	23.30	22.00	246.30	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 10:00 AM	215.00	2.80	215.00	23.10	0.00	23.10	19.40	215.00	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 10:15 AM	173.00	2.50	16.80	14.50	0.00	22.90	16.80	166.30	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 10:30 AM	187.00	4.40	133.10	24.40	0.00	24.40	14.10	133.10	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 10:45 AM	178.00	3.30	13.10	15.80	2.70	25.10	13.10	106.80	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 11:00 AM	164.00	3.40	12.30	16.70	4.40	26.50	12.30	99.00	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 11:15 AM	187.00	5.40	-3.40	26.70	30.10	26.70	11.50	-3.40	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 11:30 AM	169.00	4.80	10.40	16.70	6.30	26.80	10.40	6.70	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 11:45 AM	200.00	3.60	-8.80	27.70	36.50	27.70	9.50	-8.80	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 12:00 PM	182.00	5.00	-31.50	28.00	59.50	28.00	10.30	-31.50	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 12:15 PM	176.00	2.70	9.20	18.30	9.10	30.10	9.20	-48.90	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 12:30 PM	188.00	2.80	-54.50	31.80	86.30	31.80	9.90	-54.50	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 12:45 PM	191.00	2.20	-60.50	31.40	91.90	31.40	11.40	-60.50	20.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 1:00 PM	177.00	0.50	12.10	21.80	9.70	32.40	12.10	-60.20	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 1:15 PM	7.00	13.60	33.20	-62.40	0.00	33.20	12.70	-62.40	21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 1:30 PM	359.00	11.90	21.90	13.90	0.00	32.80	13.90	-64.20	21.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 1:45 PM	2.00	10.90	34.80	-67.00	0.00	34.80	13.50	-67.00	22.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 2:00 PM	35.00	2.10	34.60	-154.00	0.00	34.60	14.00	-154.00	23.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 2:15 PM	191.00	5.70	9.10	22.40	13.30	22.40	12.90	9.10	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 2:30 PM	191.00	5.30	4.90	23.50	18.60	23.50	2.20	4.90	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 2:45 PM	178.00	4.10	3.80	12.70	8.90	23.90	3.80	8.60	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 3:00 PM	180.00	2.80	7.20	22.40	15.20	22.40	3.10	7.20	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 3:15 PM	180.00	4.50	6.60	15.90	9.30	15.90	4.80	6.60	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 3:30 PM	153.00	1.80	9.90	5.10	0.00	12.10	9.90	8.90	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 3:45 PM	152.00	2.30	7.80	3.10	0.00	9.30	7.80	5.70	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 4:00 PM	122.00	2.50	7.90	2.90	0.00	9.60	7.90	6.40	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 4:15 PM	140.00	2.20	7.90	2.90	0.00	9.60	7.90	6.40	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 4:30 PM	142.00	3.70	8.70	2.70	0.00	28.40	8.70	5.40	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 4:45 PM	135.00	3.20	31.70	34.50	2.80	32.10	31.70	6.60	34.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 5:00 PM	154.00	3.40	31.70	159.00	127.30	26.00	31.70	211.80	159.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 5:15 PM	290.00	5.90	6.80	8.10	1.30	14.90	8.10	166.00	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 5:30 PM	271.00	2.80	4.50	7.30	2.80	11.60	7.30	15.90	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 5:45 PM	182.00	2.50	21.40	11.30	0.00	11.30	8.80	21.40	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 6:00 PM	156.00	2.80	11.80	4.60	0.00	11.30	11.80	27.30	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 6:15 PM	165.00	4.40	15.40	5.00	0.00	15.40	15.40	33.50	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 6:30 PM	167.00	2.20	13.00	5.30	0.00	12.90	13.00	29.30	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 6:45 PM	179.00	3.00	12.00	4.90	0.00	11.60	12.00	27.80	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 7:00 PM	182.00	4.90	23.60	11.00	0.00	11.00	10.40	23.60	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 7:15 PM	188.00	5.10	28.90	16.40	0.00	16.40	10.80	28.90	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 7:30 PM	188.00	4.60	48.70	17.30	0.00	17.30	44.90	48.70	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 7:45 PM	229.00	4.50	48.70	10.40	0.00	10.40	13.00	48.70	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 8:00 PM	240.00	2.90	48.70	11.60	0.00	11.60	16.00	48.70	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 8:15 PM	188.00	1.60	48.70	11.30	0.00	11.30	19.40	48.70	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 8:30 PM	191.00	2.40	48.70	10.90	0.00	10.90	13.20	48.70	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 8:45 PM	270.00	2.50	4.70	12.80	8.10	11.30	12.80	48.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 9:00 PM	278.00	1.40	5.10	15.10	10.00	11.30	15.10	48.70	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 9:15 PM	355.00	1.10	5.20	15.10	9.90	11.70	15.10	48.70	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 9:30 PM	60.00	1.70	11.70	48.70	37.00	11.70	14.60	48.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 9:45 PM	2.00	0.50	11.20	48.70	37.50	11.20	13.90	48.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 10:00 PM	261.00	1.50	48.70	11.30	0.00	11.30	13.70	48.70	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 10:15 PM	165.00	0.50	13.60	5.40	0.00	12.00	13.60	48.70	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 10:30 PM	206.00	1.10	48.70	13.20	0.00	13.20	14.00	48.70	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 10:45 PM	147.00	1.20	13.00	7.10	0.00	13.50	13.00	48.70	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 11:00 PM	147.00	0.60	14.20	6.30	0.00	13.20	14.20	48.70	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/25/14 11:15 PM	197.00	1.00	48.70	13.40	0.00	13.40	16.20	48.70	9.50	0.0								



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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		
8/26/14 7:30 AM	192.00	2.90	48.70	11.10	0.00	11.10	10.30	48.70	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 7:45 AM	183.00	3.60	48.70	10.90	0.00	10.90	10.80	48.70	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 8:00 AM	191.00	3.00	48.70	10.90	0.00	10.90	10.60	48.70	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 8:15 AM	217.00	3.10	48.70	11.40	0.00	11.40	11.00	48.70	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 8:30 AM	257.00	2.60	48.70	11.80	0.00	11.80	10.80	48.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 8:45 AM	217.00	2.00	25.20	13.10	0.00	13.10	12.20	25.20	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 9:00 AM	236.00	2.90	26.90	13.30	0.00	13.30	12.30	26.90	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 9:15 AM	206.00	4.00	26.90	14.10	0.00	14.10	12.80	26.90	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 9:30 AM	223.00	2.80	26.90	15.10	0.00	15.10	13.70	26.90	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 9:45 AM	223.00	3.20	26.90	15.30	0.00	15.30	15.30	26.90	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 10:00 AM	215.00	2.90	26.90	16.80	0.00	16.80	17.00	26.90	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 10:15 AM	246.00	1.90	26.90	18.10	0.00	18.10	16.40	26.90	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 10:30 AM	259.00	1.60	26.90	19.70	0.00	19.70	16.70	26.90	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 10:45 AM	219.00	2.30	26.90	19.60	0.00	19.60	16.40	26.90	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 11:00 AM	279.00	1.20	12.20	16.50	4.30	20.30	16.50	26.90	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 11:15 AM	292.00	1.60	13.30	18.30	5.00	21.60	18.30	5.00	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 11:30 AM	305.00	4.60	14.00	19.70	5.70	22.20	19.70	23.20	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 11:45 AM	6.00	9.50	23.90	0.00	0.00	23.90	20.80	0.00	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 12:00 PM	6.00	5.60	24.00	39.30	15.30	24.00	25.70	39.30	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 12:15 PM	23.00	8.40	25.00	44.40	19.40	25.00	27.70	44.40	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 12:30 PM	42.00	5.10	25.70	52.30	26.60	25.70	31.80	52.30	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 12:45 PM	55.00	6.00	22.10	50.80	28.70	22.10	28.50	50.80	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 1:00 PM	43.00	4.50	16.60	17.50	0.90	16.60	15.60	17.50	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 1:15 PM	58.00	4.60	11.70	11.80	0.10	11.70	12.30	11.80	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 1:30 PM	82.00	4.20	13.90	23.50	9.60	13.90	12.30	23.50	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 1:45 PM	113.00	4.60	25.90	8.30	0.00	16.30	25.90	39.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 2:00 PM	124.00	3.10	31.90	7.70	0.00	17.40	31.90	58.70	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 2:15 PM	106.00	3.00	28.80	22.00	0.00	39.20	28.80	71.20	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 2:30 PM	142.00	1.90	22.40	10.30	0.00	14.80	22.40	31.80	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 2:45 PM	164.00	3.70	11.30	8.50	0.00	10.60	11.30	20.30	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 3:00 PM	156.00	3.90	9.60	4.90	0.00	9.80	9.60	22.60	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 3:15 PM	187.00	3.60	20.60	10.80	0.00	10.80	11.00	20.60	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 3:30 PM	152.00	1.90	12.40	9.80	0.00	18.80	12.40	37.50	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 3:45 PM	177.00	1.70	15.10	9.50	0.00	17.20	15.10	40.00	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 4:00 PM	228.00	1.40	37.60	15.60	0.00	15.60	12.70	37.60	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 4:15 PM	324.00	0.90	8.50	11.30	2.80	16.10	11.30	40.60	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 4:30 PM	232.00	1.70	34.80	15.20	0.00	15.20	10.80	34.80	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 4:45 PM	292.00	1.60	8.40	8.80	0.40	15.60	8.80	26.60	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 5:00 PM	0.00	4.10	15.20	24.70	9.50	15.20	7.70	24.70	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 5:15 PM	1.00	2.50	14.50	25.10	10.60	14.50	6.80	25.10	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 5:30 PM	357.00	1.50	7.60	7.00	0.00	13.60	7.00	19.60	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 5:45 PM	1.00	1.90	13.90	17.40	3.50	13.90	6.50	17.40	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 6:00 PM	349.00	0.70	11.80	10.90	0.00	19.00	10.90	18.50	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 6:15 PM	17.00	4.70	17.50	31.00	13.50	17.50	12.00	31.00	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 6:30 PM	29.00	4.00	13.30	23.30	10.00	13.30	11.50	23.30	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 6:45 PM	27.00	3.70	16.20	24.70	8.50	16.20	11.20	24.70	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 7:00 PM	44.00	3.20	16.30	27.20	10.90	16.30	12.80	27.20	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 7:15 PM	69.00	0.90	13.40	35.80	22.40	13.40	12.10	35.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 7:30 PM	41.00	2.70	14.30	27.40	13.10	14.30	9.90	27.40	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 7:45 PM	126.00	2.50	10.20	4.40	0.00	11.60	10.20	33.40	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 8:00 PM	69.00	3.90	11.90	36.40	24.50	11.90	12.70	36.40	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 8:15 PM	65.00	3.20	26.00	51.90	25.90	26.00	18.50	51.90	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 8:30 PM	88.00	2.30	19.10	69.60	50.50	19.10	19.70	69.60	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 8:45 PM	66.00	4.50	17.20	73.00	55.80	17.20	26.00	73.00	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 9:00 PM	71.00	3.60	14.10	80.40	66.30	14.10	23.90	80.40	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 9:15 PM	123.00	3.30	24.80	13.30	0.00	21.00	24.80	92.70	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 9:30 PM	65.00	2.30	19.10	104.00	84.90	19.10	28.90	104.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 9:45 PM	72.00	2.70	11.00	113.60	102.60	11.00	29.00	113.60	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 10:00 PM	116.00	3.00	24.90	3.70	0.00	10.90	24.90	95.80	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 10:15 PM	69.00	4.20	16.30	93.60	77.30	16.30	26.30	93.60	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 10:30 PM	71.00	2.60	14.40	71.80	57.40	14.40	23.70	71.80	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 10:45 PM	77.00	2.30	14.40	109.00	94.60	14.40	26.00	109.00	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 11:00 PM	48.00	3.40	38.30	110.40	72.10	38.30	32.40	110.40	27.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 11:15 PM	75.00	2.80	12.70	91.10	78.40	12.70	25.40	91.10	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 11:30 PM	64.00	2.20	19.00	132.40	113.40	19.00	36.40	132.40	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/26/14 11:45 PM	61.00	2.70	25.90	191.20	165.30	25.90	44.10	191.20	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/14 12:00 AM	60.00	2.90	11.40	68.80	57.40	11.40	28.70	68.80	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/14 12:15 AM	52.00	4.40	17.20	71.50	54.30	17.20	23.80	71.50	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/27/14 12:30 AM	59.00	2.80	23.10	119.00	95.90	23.10	41.80	119.00	8.20	0.00	0.00</							



US Army Corps
of Engineers®

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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
8/27/14 8:45 AM	42.00	3.10	16.50	5.50	0.00	16.50	14.20	5.50	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 9:00 AM	61.00	2.90	14.90	3.20	0.00	14.90	11.10	3.20	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 9:15 AM	73.00	4.60	14.00	2.00	0.00	14.00	9.00	2.00	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 9:30 AM	122.00	3.80	10.00	4.10	0.00	11.80	10.00	3.80	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 9:45 AM	111.00	3.70	11.00	5.60	0.00	12.90	11.00	2.10	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 10:00 AM	123.00	3.40	14.10	10.20	0.00	18.20	14.10	9.00	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 10:15 AM	66.00	3.00	25.50	4.90	0.00	25.50	13.60	4.90	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 10:30 AM	123.00	3.90	11.10	17.60	6.50	26.60	11.10	2.10	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 10:45 AM	120.00	3.90	9.20	11.00	1.80	15.90	9.20	3.50	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 11:00 AM	70.00	2.50	14.30	1.30	0.00	14.30	7.30	1.30	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 11:15 AM	58.00	2.60	14.60	2.40	0.00	14.60	8.50	2.40	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 11:30 AM	72.00	2.80	12.50	1.10	0.00	12.50	13.60	1.10	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 11:45 AM	45.00	3.20	15.30	2.00	0.00	15.30	13.40	2.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 12:00 PM	64.00	2.40	26.20	6.10	0.00	26.20	10.30	6.10	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 12:15 PM	17.00	4.90	29.50	6.50	0.00	29.50	11.50	6.50	22.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 12:30 PM	40.00	4.80	23.60	5.90	0.00	23.60	15.80	5.90	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 12:45 PM	29.00	4.80	27.90	6.60	0.00	27.90	14.80	6.60	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 1:00 PM	37.00	5.40	29.70	6.00	0.00	29.70	11.00	6.00	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 1:15 PM	45.00	5.40	22.50	5.20	0.00	22.50	16.60	5.20	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 1:30 PM	45.00	4.80	15.10	6.30	0.00	15.10	14.40	6.30	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 1:45 PM	15.00	6.60	14.20	0.70	0.00	14.20	11.00	0.70	27.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 2:00 PM	26.00	5.50	12.90	1.70	0.00	12.90	11.60	1.70	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 2:15 PM	30.00	4.80	19.70	5.50	0.00	19.70	14.40	5.50	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 2:30 PM	18.00	4.60	15.10	0.90	0.00	15.10	13.90	0.90	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 2:45 PM	56.00	5.10	15.10	3.90	0.00	15.10	12.60	3.90	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 3:00 PM	35.00	4.90	12.80	4.60	0.00	12.80	13.80	4.60	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 3:15 PM	57.00	3.80	13.50	5.30	0.00	13.50	15.10	5.30	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 3:30 PM	44.00	5.00	20.30	13.80	0.00	20.30	17.40	13.80	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 3:45 PM	23.00	5.70	16.00	10.30	0.00	16.00	15.10	10.30	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 4:00 PM	18.00	6.00	15.30	18.50	3.20	15.30	21.80	18.50	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 4:15 PM	49.00	6.20	15.00	12.20	0.00	15.00	17.30	12.20	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 4:30 PM	30.00	7.20	16.80	14.60	0.00	16.80	14.10	14.60	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 4:45 PM	61.00	5.10	16.40	7.80	0.00	16.40	21.40	7.80	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 5:00 PM	33.00	5.50	15.20	10.40	0.00	15.20	18.80	10.40	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 5:15 PM	42.00	5.10	17.10	13.80	0.00	17.10	14.70	13.80	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 5:30 PM	41.00	4.40	14.80	16.00	1.20	14.80	17.20	16.00	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 5:45 PM	7.00	3.60	13.90	16.40	2.50	13.90	20.30	16.40	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 6:00 PM	41.00	4.90	14.80	22.20	7.40	14.80	19.90	22.20	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 6:15 PM	36.00	5.80	15.10	26.50	11.40	15.10	29.40	26.50	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 6:30 PM	42.00	3.50	20.50	24.70	4.20	20.50	21.00	24.70	6.70	0.00	0.00	0.00	0.90	0.00	0.00	0.00
8/27/14 6:45 PM	50.00	3.60	15.40	19.60	4.20	15.40	22.60	19.60	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 7:00 PM	54.00	4.20	14.60	20.00	5.40	14.60	23.00	20.00	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 7:15 PM	53.00	3.80	11.90	9.40	0.00	11.90	16.40	9.40	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 7:30 PM	58.00	5.70	13.50	14.30	0.80	13.50	18.90	14.30	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 7:45 PM	38.00	5.20	13.90	16.90	3.00	13.90	21.40	16.90	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 8:00 PM	49.00	4.30	15.30	22.10	6.80	15.30	28.00	22.10	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 8:15 PM	54.00	4.90	16.30	19.00	2.70	16.30	20.30	19.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 8:30 PM	48.00	4.90	23.10	24.10	1.00	23.10	16.80	24.10	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 8:45 PM	57.00	4.00	23.10	31.60	8.50	23.10	21.20	31.60	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 9:00 PM	62.00	3.80	15.90	22.70	6.80	15.90	30.30	22.70	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 9:15 PM	0.00	0.00	0.00	0.00	0.00	26.20	13.20	6.90	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 9:30 PM	59.00	4.80	21.70	4.00	0.00	21.70	13.80	4.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 9:45 PM	76.00	4.30	12.80	22.60	9.80	12.80	17.00	22.60	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 10:00 PM	61.00	5.40	19.40	4.30	0.00	19.40	10.20	4.30	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 10:15 PM	53.00	4.10	16.20	1.40	0.00	16.20	11.70	1.40	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 10:30 PM	54.00	3.80	14.20	5.10	0.00	14.20	12.20	5.10	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 10:45 PM	63.00	5.00	17.90	5.10	0.00	17.90	10.10	5.10	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 11:00 PM	63.00	4.30	22.40	2.40	0.00	22.40	10.20	2.40	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 11:15 PM	58.00	5.50	21.70	7.50	0.00	21.70	10.90	7.50	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 11:30 PM	67.00	3.60	21.80	9.40	0.00	21.80	13.50	9.40	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/27/14 11:45 PM	59.00	4.90	23.70	35.20	11.50	23.70	23.00	35.20	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/14 12:00 AM	50.00	4.10	17.30	9.60	0.00	17.30	13.30	9.60	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/14 12:15 AM	54.00	4.20	12.40	7.30	0.00	12.40	14.00	7.30	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/14 12:30 AM	61.00	4.60	9.60	9.20	0.00	9.60	13.50	9.20	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/14 12:45 AM	63.00	4.70	10.70	7.10	0.00	10.70	10.00	7.10	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/14 1:00 AM	53.00	3.50	17.80	11.80	0.00	17.80	10.50	11.80	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/14 1:15 AM	66.00	5.70	23.30	6.90	0.00	23.30	9.80	6.90	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/14 1:30 AM	69.00	3.20	12.50	5.30	0.00	12.50	8.80	5.30	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/14 1:45 AM	65.00	3.70	14.40	2.00	0.00	14.40	8.00	2.00	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/14 2:00 AM	109.00	1.20	8.70	5.10	0.00	14.10	8.70	8.0								



**US Army Corps
of Engineers®**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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		
8/28/14 10:00 AM	81.00	2.60	22.80	31.40	8.60	22.80	15.80	31.40	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 10:15 AM	73.00	4.20	18.40	30.40	12.00	18.40	14.80	30.40	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 10:30 AM	83.00	3.60	19.90	33.80	13.90	19.90	14.20	33.80	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 10:45 AM	67.00	3.40	22.10	32.60	10.50	22.10	13.80	32.60	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 11:00 AM	72.00	4.30	21.80	16.70	0.00	21.80	9.80	16.70	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 11:15 AM	45.00	3.80	30.80	13.40	0.00	30.80	14.40	13.40	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 11:30 AM	140.00	2.80	6.00	2.90	0.00	22.10	6.00	7.30	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 11:45 AM	99.00	1.90	5.00	3.70	0.00	18.70	5.00	0.20	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 12:00 PM	7.00	2.40	23.80	4.20	0.00	23.80	8.30	4.20	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 12:15 PM	21.00	4.60	20.40	5.70	0.00	20.40	4.20	5.70	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 12:30 PM	19.00	4.50	27.60	19.10	0.00	27.60	7.60	19.10	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 12:45 PM	21.00	4.40	25.30	23.00	0.00	25.30	12.00	23.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 1:00 PM	20.00	4.40	44.70	32.20	0.00	44.70	17.30	32.20	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 1:15 PM	24.00	6.00	37.80	51.50	13.70	37.80	26.10	51.50	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 1:30 PM	30.00	4.80	24.10	47.00	22.90	24.10	17.90	47.00	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 1:45 PM	22.00	3.90	23.20	50.70	27.50	23.20	10.10	50.70	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 2:00 PM	37.00	5.20	21.40	47.80	26.40	21.40	20.20	47.80	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 2:15 PM	30.00	4.70	20.40	43.60	23.20	20.40	16.40	43.60	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 2:30 PM	17.00	5.70	18.90	54.10	35.20	18.90	18.10	54.10	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 2:45 PM	22.00	5.90	25.20	62.50	37.30	25.20	15.60	62.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 3:00 PM	26.00	3.90	21.60	52.50	30.90	21.60	12.30	52.50	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 3:15 PM	14.00	5.60	22.80	53.60	30.80	22.80	12.40	53.60	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 3:30 PM	21.00	5.40	29.20	56.30	27.10	29.20	19.40	56.30	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 3:45 PM	12.00	5.40	26.10	60.80	34.70	26.10	19.40	60.80	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 4:00 PM	25.00	5.40	22.20	53.90	31.70	22.20	33.60	53.90	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 4:15 PM	28.00	5.10	53.80	58.20	4.40	53.80	19.90	58.20	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 4:30 PM	30.00	5.30	22.60	61.50	38.90	22.60	24.00	61.50	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 4:45 PM	24.00	5.20	30.50	67.80	37.30	30.50	17.20	67.80	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 5:00 PM	23.00	4.90	35.40	66.00	30.60	35.40	19.20	66.00	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 5:15 PM	16.00	5.00	25.30	70.70	45.40	25.30	21.30	70.70	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 5:30 PM	41.00	4.40	38.20	65.70	27.50	38.20	19.40	65.70	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 5:45 PM	63.00	3.20	32.40	86.40	54.00	32.40	25.00	86.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 6:00 PM	55.00	4.70	43.80	82.00	38.20	43.80	48.90	82.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 6:15 PM	56.00	4.80	32.10	83.00	50.90	32.10	50.10	83.00	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 6:30 PM	63.00	4.10	35.20	93.70	58.50	35.20	56.20	93.70	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 6:45 PM	56.00	4.30	38.00	65.20	27.20	38.00	42.60	65.20	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 7:00 PM	64.00	3.70	36.40	52.70	16.30	36.40	40.30	52.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 7:15 PM	60.00	3.20	30.20	64.70	34.50	30.20	53.90	64.70	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 7:30 PM	71.00	4.00	27.00	87.70	60.70	27.00	48.00	87.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 7:45 PM	57.00	3.80	30.40	88.20	57.80	30.40	46.80	88.20	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 8:00 PM	57.00	3.40	67.10	86.70	19.60	67.10	52.80	86.70	38.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 8:15 PM	68.00	5.60	61.10	84.80	23.70	61.10	53.40	84.80	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 8:30 PM	79.00	4.20	60.80	123.60	62.80	60.80	46.90	123.60	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 8:45 PM	104.00	3.70	39.00	29.70	0.00	39.00	39.00	59.20	29.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 9:00 PM	64.00	2.70	40.30	63.00	22.70	40.30	52.80	63.00	30.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 9:15 PM	84.00	1.70	37.10	55.80	18.70	37.10	38.80	55.80	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 9:30 PM	72.00	1.70	19.50	59.60	40.10	19.50	40.40	59.60	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 9:45 PM	98.00	1.40	49.20	10.80	0.00	22.80	49.20	68.20	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 10:00 PM	126.00	3.70	61.60	10.10	0.00	22.00	61.60	77.40	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 10:15 PM	118.00	1.80	52.70	10.00	0.00	20.80	52.70	68.10	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 10:30 PM	155.00	2.80	55.40	9.20	0.00	20.60	55.40	82.60	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 10:45 PM	143.00	2.60	51.80	10.70	0.00	26.10	51.80	77.20	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 11:00 PM	141.00	2.70	53.80	13.50	0.00	24.20	53.80	77.20	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 11:15 PM	147.00	2.70	55.60	13.40	0.00	32.90	55.60	76.60	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 11:30 PM	158.00	1.90	62.70	17.00	0.00	35.10	62.70	82.90	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/28/14 11:45 PM	149.00	2.10	60.40	14.20	0.00	31.40	60.40	72.90	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 12:00 AM	141.00	2.40	51.00	13.80	0.00	29.20	51.00	64.50	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 12:15 AM	149.00	3.00	50.30	11.70	0.00	25.70	50.30	62.60	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 12:30 AM	153.00	3.10	50.30	11.50	0.00	25.10	50.30	68.20	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 12:45 AM	157.00	3.20	50.90	11.00	0.00	23.10	50.90	70.60	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 1:00 AM	156.00	3.60	50.70	11.70	0.00	23.90	50.70	79.10	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 1:15 AM	162.00	3.10	48.80	10.80	0.00	24.20	48.80	77.90	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 1:30 AM	155.00	4.00	46.60	10.30	0.00	21.80	46.60	68.80	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 1:45 AM	146.00	4.30	44.20	9.40	0.00	19.50	44.20	72.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 2:00 AM	160.00	3.90	39.60	8.60	0.00	19.20	39.60	64.30	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 2:15 AM	151.00	2.70	35.90	8.80	0.00	19.40	35.90	53.30	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 2:30 AM	0.00	0.00	0.00	0.00	0.00	18.30	34.10	48.80	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 2:45 AM	152.00	2.50	32.90	7.70	0.00	18.50	32.90	41.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/29/14 3:00 AM	161.00	4.00	30.90	7.70	0.00	17.50	30.90	39.00	7.70	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 (ug/m ³)							Naphthalene (ug/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/29/14 11:15 AM	188.00	5.50	-7.40	22.00	29.40	22.00	26.10	-7.40	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 11:30 AM	214.00	5.20	-0.50	23.50	24.00	23.50	25.60	-0.50	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 11:45 AM	190.00	4.90	0.40	24.00	23.60	24.00	26.60	0.40	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 12:00 PM	200.00	5.50	3.10	26.70	23.60	26.70	29.40	3.10	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 12:15 PM	186.00	6.10	5.20	28.30	23.10	28.30	29.80	5.20	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 12:30 PM	209.00	5.00	34.70	29.60	0.00	29.60	33.30	34.70	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 12:45 PM	195.00	6.80	31.50	28.20	0.00	28.20	29.10	31.50	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 1:00 PM	165.00	4.90	29.20	17.40	0.00	27.80	29.20	33.00	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 1:15 PM	203.00	6.20	36.50	28.70	0.00	28.70	30.40	36.50	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 1:30 PM	195.00	4.50	38.60	28.50	0.00	28.50	30.70	38.60	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 1:45 PM	199.00	4.20	49.50	29.60	0.00	29.60	32.20	49.50	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 2:00 PM	192.00	4.50	49.10	30.90	0.00	30.90	32.00	49.10	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 2:15 PM	178.00	4.60	31.30	22.00	0.00	31.50	31.30	55.20	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 2:30 PM	192.00	4.40	57.40	31.10	0.00	31.10	30.20	57.40	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 2:45 PM	207.00	4.20	61.30	31.90	0.00	31.90	31.10	61.30	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 3:00 PM	183.00	4.30	58.50	32.40	0.00	32.40	32.30	58.50	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 3:15 PM	170.00	5.80	33.20	22.50	0.00	32.90	33.20	63.10	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 3:30 PM	226.00	6.70	64.80	33.20	0.00	33.20	32.40	64.80	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 3:45 PM	136.00	3.60	33.20	22.50	0.00	33.30	33.20	64.00	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 4:00 PM	91.00	1.30	35.90	24.30	0.00	35.00	35.90	75.30	24.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 4:15 PM	59.00	3.70	37.30	77.30	40.00	37.30	39.30	77.30	26.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 4:30 PM	140.00	2.20	64.50	32.00	0.00	51.20	64.50	125.20	32.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 4:45 PM	113.00	2.10	30.40	23.50	0.00	29.10	30.40	60.00	23.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 5:00 PM	148.00	5.10	37.70	15.10	0.00	23.70	37.70	44.50	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 5:15 PM	145.00	5.60	43.40	15.50	0.00	25.50	43.40	62.60	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 5:30 PM	145.00	4.60	64.30	40.90	0.00	51.50	64.30	112.20	40.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 5:45 PM	146.00	5.00	49.20	23.40	0.00	37.70	49.20	115.90	23.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 6:00 PM	145.00	3.80	56.80	24.00	0.00	34.90	56.80	147.90	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 6:15 PM	154.00	4.70	55.10	21.40	0.00	32.20	55.10	149.90	21.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 6:30 PM	137.00	3.10	47.10	21.90	0.00	31.50	47.10	148.00	21.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 6:45 PM	154.00	3.30	43.60	21.50	0.00	32.20	43.60	132.80	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 7:00 PM	154.00	3.70	41.80	22.40	0.00	29.70	41.80	110.70	22.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 7:15 PM	169.00	3.60	39.50	21.10	0.00	29.50	39.50	107.90	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 7:30 PM	162.00	4.30	39.10	22.30	0.00	27.30	39.10	106.70	22.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 7:45 PM	145.00	5.90	14.00	9.60	0.00	16.20	14.00	30.50	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 8:00 PM	159.00	3.40	11.40	7.40	0.00	14.50	11.40	14.70	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 8:15 PM	165.00	3.80	9.60	7.00	0.00	13.30	9.60	6.60	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 8:30 PM	161.00	3.90	10.70	7.90	0.00	15.30	10.70	8.50	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 8:45 PM	156.00	2.70	16.30	9.20	0.00	16.90	16.30	18.00	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 9:00 PM	150.00	4.10	12.70	9.40	0.00	14.80	12.70	16.70	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 9:15 PM	156.00	5.80	11.60	8.90	0.00	13.80	11.60	10.40	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 9:30 PM	160.00	3.50	12.40	9.00	0.00	14.60	12.40	10.40	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 9:45 PM	171.00	3.60	14.50	10.00	0.00	14.80	14.50	16.10	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 10:00 PM	169.00	5.40	22.60	14.50	0.00	18.60	22.60	31.90	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 10:15 PM	151.00	4.90	28.80	14.10	0.00	18.30	28.80	55.40	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 10:30 PM	152.00	4.80	27.90	12.50	0.00	20.10	27.90	61.80	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 10:45 PM	159.00	4.20	27.90	11.70	0.00	17.70	27.90	47.20	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 11:00 PM	158.00	4.90	25.10	12.80	0.00	19.90	25.10	45.20	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 11:15 PM	164.00	4.30	26.20	12.80	0.00	19.50	26.20	45.20	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 11:30 PM	161.00	3.60	26.20	14.70	0.00	18.50	26.20	49.40	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/14 11:45 PM	166.00	5.20	29.30	14.40	0.00	20.20	29.30	53.40	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 12:00 AM	170.00	5.60	30.40	14.40	0.00	21.60	30.40	59.90	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 12:15 AM	166.00	3.90	31.20	14.90	0.00	20.40	31.20	63.90	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 12:30 AM	172.00	3.40	32.10	15.20	0.00	21.00	32.10	65.20	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 12:45 AM	161.00	4.50	32.20	14.80	0.00	21.10	32.20	66.40	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 1:00 AM	176.00	4.90	32.90	15.00	0.00	22.10	32.90	66.20	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 1:15 AM	175.00	3.30	31.90	15.90	0.00	22.10	31.90	64.50	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 1:30 AM	0.00	0.00	0.00	0.00	0.00	23.20	32.30	64.80	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 1:45 AM	206.00	3.50	67.70	23.10	0.00	23.10	32.50	67.70	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 2:00 AM	193.00	5.80	69.90	23.00	0.00	23.00	32.50	69.90	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 2:15 AM	190.00	4.70	70.90	23.70	0.00	23.70	32.40	70.90	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 2:30 AM	193.00	5.10	70.40	23.60	0.00	23.60	32.00	70.40	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 2:45 AM	186.00	5.80	67.30	24.00	0.00	24.00	31.50	67.30	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 3:00 AM	183.00	5.60	61.20	24.60	0.00	24.60	27.80	61.20	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 3:15 AM	194.00	5.20	62.20	25.00	0.00	25.00	27.80	62.20	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 3:30 AM	187.00	5.60	62.80	26.10	0.00	26.10	27.60	62.80	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 3:45 AM	202.00	6.60	67.10	26.40	0.00	26.40	29.00	67.10	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 4:00 AM	196.00	5.20	64.60	26.40	0.00	26.40	29.20	64.60	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 4:15 AM	183.00	5.50	64.00	26.90	0.00	26.90	28.80	64.00								



**US Army Corps
of Engineers®**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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
8/30/14 12:30 PM	208.00	6.30	2.00	12.40	10.40	12.40	7.50	2.00	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 12:45 PM	236.00	5.10	1.70	12.40	10.70	12.40	7.00	1.70	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 1:00 PM	222.00	4.50	1.70	12.20	10.50	12.20	6.70	1.70	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 1:15 PM	231.00	4.10	1.80	11.70	9.90	11.70	6.70	1.80	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 1:30 PM	233.00	5.50	2.90	12.10	9.20	12.10	8.90	2.90	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 1:45 PM	227.00	4.60	2.30	12.20	9.90	12.20	12.10	2.30	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 2:00 PM	190.00	6.60	15.70	13.10	0.00	13.10	18.80	15.70	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 2:15 PM	201.00	5.70	40.40	13.10	0.00	13.10	26.10	40.40	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 2:30 PM	199.00	6.40	31.90	12.00	0.00	12.00	16.80	31.90	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 2:45 PM	210.00	8.00	9.10	12.10	3.00	12.10	16.20	9.10	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 3:00 PM	218.00	6.40	8.80	12.90	4.10	12.90	15.20	8.80	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 3:15 PM	244.00	4.50	11.90	12.50	0.60	12.50	15.20	11.90	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 3:30 PM	258.00	2.00	8.80	13.10	4.30	13.10	14.00	8.80	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 3:45 PM	226.00	4.60	8.00	12.80	4.80	12.80	13.80	8.00	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 4:00 PM	233.00	4.30	4.20	12.40	8.20	12.40	10.50	4.20	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 4:15 PM	0.00	0.00	0.00	0.00	0.00	13.30	8.70	2.60	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 4:30 PM	208.00	2.70	1.80	11.70	9.90	11.70	6.80	1.80	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 4:45 PM	198.00	2.20	2.80	14.60	11.80	14.60	10.90	2.80	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 5:00 PM	200.00	4.00	24.50	14.40	0.00	14.40	23.90	24.50	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 5:15 PM	219.00	2.90	67.20	15.00	0.00	15.00	35.90	67.20	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 5:30 PM	208.00	5.60	81.70	14.30	0.00	14.30	35.70	81.70	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 5:45 PM	223.00	3.50	62.10	12.90	0.00	12.90	28.30	62.10	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 6:00 PM	219.00	3.70	56.70	13.10	0.00	13.10	28.40	56.70	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 6:15 PM	216.00	2.00	27.70	12.00	0.00	12.00	22.80	27.70	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 6:30 PM	219.00	3.50	9.10	11.40	2.30	11.40	17.30	9.10	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 6:45 PM	209.00	2.30	3.20	10.20	7.00	10.20	8.90	3.20	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 7:00 PM	220.00	2.60	2.80	10.50	7.70	10.50	7.60	2.80	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 7:15 PM	209.00	3.10	3.20	11.40	8.20	11.40	8.60	3.20	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 7:30 PM	198.00	3.30	3.40	12.20	8.80	12.20	8.70	3.40	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 7:45 PM	194.00	2.70	3.90	12.00	8.10	12.00	9.30	3.90	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 8:00 PM	191.00	3.70	7.10	12.50	5.40	12.50	10.70	7.10	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 8:15 PM	225.00	1.80	11.60	12.80	1.20	12.80	11.80	11.60	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 8:30 PM	187.00	2.50	15.70	12.90	0.00	12.90	13.30	15.70	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 8:45 PM	190.00	3.10	24.20	13.50	0.00	13.50	16.00	24.20	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 9:00 PM	190.00	2.50	17.90	12.50	0.00	12.50	14.10	17.90	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 9:15 PM	198.00	3.20	14.40	12.80	0.00	12.80	12.90	14.40	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 9:30 PM	203.00	3.70	19.20	12.80	0.00	12.80	14.00	19.20	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 9:45 PM	224.00	2.90	23.10	13.30	0.00	13.30	16.40	23.10	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 10:00 PM	209.00	2.60	33.60	13.70	0.00	13.70	17.80	33.60	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 10:15 PM	208.00	2.50	42.60	13.70	0.00	13.70	19.20	42.60	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 10:30 PM	212.00	3.40	42.80	12.90	0.00	12.90	19.30	42.80	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 10:45 PM	207.00	3.90	36.60	13.00	0.00	13.00	16.90	36.60	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 11:00 PM	211.00	2.50	26.40	12.90	0.00	12.90	16.10	26.40	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 11:15 PM	0.00	0.00	0.00	0.00	0.00	13.20	14.70	21.30	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 11:30 PM	200.00	3.90	12.80	13.00	0.20	13.00	12.20	12.80	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/14 11:45 PM	206.00	2.50	6.70	11.10	4.40	11.10	9.90	6.70	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 12:00 AM	218.00	3.20	6.20	11.50	5.30	11.50	9.90	6.20	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 12:15 AM	216.00	1.80	5.60	11.20	5.60	11.20	9.00	5.60	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 12:30 AM	201.00	2.20	6.00	11.10	5.10	11.10	8.90	6.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 12:45 AM	199.00	2.60	6.10	10.90	4.80	10.90	8.80	6.10	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 1:00 AM	181.00	2.70	7.30	11.00	3.70	11.00	8.50	7.30	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 1:15 AM	192.00	3.00	8.30	11.00	2.70	11.00	8.70	8.30	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 1:30 AM	197.00	2.70	7.80	10.60	2.80	10.60	8.50	7.80	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 1:45 AM	210.00	2.00	6.80	10.10	3.30	10.10	8.50	6.80	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 2:00 AM	186.00	3.30	6.00	10.10	4.10	10.10	8.30	6.00	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 2:15 AM	206.00	1.90	6.40	10.20	3.80	10.20	8.20	6.40	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 2:30 AM	208.00	1.90	6.50	10.10	3.60	10.10	8.60	6.50	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 2:45 AM	184.00	2.10	6.80	9.70	2.90	9.70	8.60	6.80	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 3:00 AM	192.00	1.90	6.50	9.80	3.30	9.80	7.40	6.50	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 3:15 AM	199.00	1.90	6.00	9.20	3.20	9.20	7.10	6.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 3:30 AM	192.00	3.00	7.00	9.20	2.20	9.20	7.40	7.00	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 3:45 AM	223.00	1.80	7.30	9.00	1.70	9.00	7.20	7.30	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 4:00 AM	209.00	1.90	7.30	8.80	1.50	8.80	7.30	7.30	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 4:15 AM	207.00	2.00	6.50	8.80	2.30	8.80	6.50	6.50	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 4:30 AM	199.00	2.00	5.30	8.60	3.30	8.60	6.50	5.30	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 4:45 AM	212.00	2.00	3.70	8.80	5.10	8.80	5.60	3.70	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 5:00 AM	211.00	1.40	3.70	8.80	5.10	8.80	5.80	3.70	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 5:15 AM	206.00	1.70	3.60	8.80	5.20	8.80	6.10	3.60	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 5:30 AM	233.00	1.90	3.80	9.20	5.40	9.20	6.20	3.80	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 5:45 AM	236.00	0.80	3.70	8.90	5.20	8.90	6.30	3.70	3.50	0.00						



**US Army Corps
of Engineers®**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
August, 2014

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
8/31/14 1:45 PM	218.00	3.50	1.50	10.30	8.80	10.30	6.00	1.50	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 2:00 PM	228.00	1.80	1.60	10.60	9.00	10.60	7.40	1.60	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 2:15 PM	218.00	4.40	1.70	10.60	8.90	10.60	5.90	1.70	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 2:30 PM	255.00	3.30	1.70	11.90	10.20	11.90	6.00	1.70	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 2:45 PM	261.00	2.90	1.00	12.00	11.00	12.00	4.30	1.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 3:00 PM	211.00	4.20	1.70	13.50	11.80	13.50	5.00	1.70	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 3:15 PM	211.00	4.40	1.10	15.00	13.90	15.00	3.80	1.10	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 3:30 PM	213.00	3.60	1.00	14.90	13.90	14.90	3.70	1.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 3:45 PM	199.00	5.10	1.00	11.30	10.30	11.30	1.50	1.00	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 4:00 PM	228.00	3.20	0.40	12.30	11.90	12.30	1.80	0.40	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 4:15 PM	207.00	5.00	0.70	12.50	11.80	12.50	1.80	0.70	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 4:30 PM	191.00	4.40	0.80	13.30	12.50	13.30	3.30	0.80	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 4:45 PM	223.00	4.80	0.40	12.60	12.20	12.60	2.90	0.40	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 5:00 PM	205.00	4.10	0.20	11.90	11.70	11.90	1.90	0.20	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 5:15 PM	220.00	5.30	0.30	12.20	11.90	12.20	1.70	0.30	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 5:30 PM	215.00	5.70	0.70	11.70	11.00	11.70	2.60	0.70	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 5:45 PM	216.00	4.00	0.70	11.50	10.80	11.50	3.00	0.70	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 6:00 PM	212.00	5.20	0.50	10.70	10.20	10.70	2.80	0.50	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 6:15 PM	208.00	4.00	1.00	11.30	10.30	11.30	4.50	1.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 6:30 PM	193.00	3.60	1.00	11.30	10.30	11.30	5.10	1.00	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 6:45 PM	195.00	4.80	2.10	12.00	9.90	12.00	6.20	2.10	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 7:00 PM	204.00	3.00	6.30	12.50	6.20	12.50	9.20	6.30	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 7:15 PM	209.00	2.80	6.80	12.70	5.90	12.70	9.90	6.80	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 7:30 PM	196.00	3.50	6.30	12.40	6.10	12.40	9.80	6.30	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 7:45 PM	201.00	2.00	7.30	10.80	3.50	10.80	10.40	7.30	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 8:00 PM	199.00	2.90	8.60	9.70	1.10	9.70	11.00	8.60	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 8:15 PM	186.00	1.90	9.80	10.10	0.30	10.10	12.50	9.80	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 8:30 PM	183.00	2.20	11.50	10.30	0.00	10.30	15.30	11.50	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 8:45 PM	174.00	2.50	17.90	6.40	0.00	10.80	17.90	16.70	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 9:00 PM	179.00	2.70	19.60	7.00	0.00	10.50	19.60	20.40	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 9:15 PM	168.00	3.10	21.80	7.30	0.00	11.50	21.80	24.60	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 9:30 PM	177.00	3.10	23.60	7.50	0.00	12.00	23.60	30.30	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 9:45 PM	170.00	2.40	32.00	9.30	0.00	12.20	32.00	34.10	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 10:00 PM	181.00	2.70	51.00	17.50	0.00	17.50	36.00	51.00	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 10:15 PM	164.00	2.00	36.50	13.00	0.00	17.90	36.50	52.40	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 10:30 PM	186.00	1.60	63.00	19.00	0.00	19.00	37.40	63.00	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 10:45 PM	181.00	2.60	70.40	21.00	0.00	21.00	40.20	70.40	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 11:00 PM	176.00	3.30	40.20	16.60	0.00	22.80	40.20	77.10	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 11:15 PM	189.00	2.90	82.80	22.40	0.00	22.40	43.90	82.80	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 11:30 PM	182.00	3.40	86.30	21.70	0.00	21.70	42.40	86.30	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/14 11:45 PM	182.00	3.10	81.40	22.80	0.00	22.80	42.70	81.40	16.70	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: 8/18/2014 5:00AM Email sent to site Technician? (Yes or No)

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

- | | |
|-------------------------------------|-----------------------------|
| <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: Dusty roads/ windy |

3. Corrective Actions taken? (Yes or No)

4. Dredging suspended? (Yes or No)

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

Description of Action Taken:

A) No problems were found. Driving too fast causing dust and dry site conditions is believed to have caused the alarms. Unit was checked on 8/19/2014.

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: 8/13/2014 5:00PM 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: Road dust |

3. Corrective Actions taken? (Yes or **No**)

4. Dredging suspended? (Yes or **No**)

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

Description of Action Taken:

A) No problems were found. Driving to fast causing dust and dry site condicions is believe to have caused the alarms. The other contractors on the site were made aware of the air alarms and to drive slower on the top dike road.

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: 8/05/2014 12:30AM 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: Weather 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:

A) Server weather with high wind and thunder storms caused the Thermo units high particle alarms. The air units calibrations were checked on 8/5/2014. No problems were found wrong with the air units.