



US Army Corps of Engineers

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

Table with columns: Reading Time (EST), Wind Direction, Wind Speed, Particulates (ug/m3) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4), and Naphthalene (ug/m3) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4). Rows represent hourly data from 5/4/15 3:45 AM to 5/5/15 4:45 AM.



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Indiana Harbor and Canal Confinement Disposal Facility Real-Time Air Monitoring Data May 2015

Table with columns for Reading Time (EST), Wind Direction, Wind Speed, and concentrations of Particulates and Naphthalene (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4). Rows represent hourly data from 5/6/15 6:15 AM to 5/7/15 7:15 AM.



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Table with columns: Reading Time (EST), Wind Direction, Wind Speed, Particulates (ug/m³) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4), Naphthalene (ug/m³) (Upwind, Downwind, CDF Contribution, M1, M2, M3, M4). Rows represent hourly data from 5/16/15 6:45 PM to 5/17/15 8:00 PM.



US Army Corps of Engineers

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

Table with 17 columns: Reading Time (EST), Wind Direction, Wind Speed, and two sets of 4 columns for Particulates (M1-M4) and Naphthalene (M1-M4). Rows represent hourly data from 5/17/15 8:15 PM to 5/18/15 9:15 PM.



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Indiana Harbor and Canal
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Real-Time Air Monitoring Data
May 2015

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
			5/26/15 8:15 AM	187.00	3.60	33.00	12.60	0.00	12.60	21.80	33.00	2.10	0.00	0.00	0.00	0.00	0.00	0.00
5/27/15 9:45 AM	245.00	7.20	8.90	11.50	2.60	11.50	9.30	8.90	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		



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

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)							Naphthalene (µg/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
5/31/15 3:15 PM	1.00	11.20	7.20	2.10	0.00	7.20	7.50	2.10	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 3:30 PM	1.00	10.60	6.20	2.00	0.00	6.20	8.00	2.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 3:45 PM	12.00	7.50	15.90	2.20	0.00	15.90	7.90	2.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 4:00 PM	8.00	10.00	7.70	2.10	0.00	7.70	6.40	2.10	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 4:15 PM	12.00	9.30	0.00	1.90	0.00	0.00	5.70	1.90	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 4:30 PM	12.00	10.30	21.40	2.30	0.00	21.40	9.60	2.30	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 4:45 PM	14.00	8.90	21.40	2.20	0.00	21.40	7.50	2.20	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 5:00 PM	0.00	10.40	16.10	2.30	0.00	16.10	6.10	2.30	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 5:15 PM	5.00	9.60	18.20	2.50	0.00	18.20	6.40	2.50	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 5:30 PM	3.00	9.80	18.20	2.10	0.00	18.20	7.10	2.10	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 5:45 PM	13.00	8.90	25.40	2.20	0.00	25.40	5.40	2.20	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 6:00 PM	8.00	9.10	29.30	2.10	0.00	29.30	6.00	2.10	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 6:15 PM	8.00	9.50	18.80	2.10	0.00	18.80	7.80	2.10	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 6:30 PM	5.00	9.00	6.20	2.50	0.00	6.20	9.00	2.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 6:45 PM	16.00	10.50	21.10	2.50	0.00	21.10	7.90	2.50	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 7:00 PM	13.00	8.60	4.30	2.40	0.00	4.30	7.10	2.40	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 7:15 PM	20.00	8.00	26.80	3.30	0.00	26.80	5.40	3.30	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 7:30 PM	23.00	8.50	0.00	3.60	0.00	0.00	5.40	3.60	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 7:45 PM	24.00	9.70	6.10	4.90	0.00	6.10	4.10	4.90	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 8:00 PM	22.00	8.50	11.80	4.20	0.00	11.80	3.70	4.20	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 8:15 PM	18.00	7.40	0.00	4.40	0.00	0.00	4.00	4.40	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 8:30 PM	17.00	8.50	0.00	7.30	0.00	0.00	4.20	7.30	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 8:45 PM	14.00	8.30	7.20	5.40	0.00	7.20	4.90	5.40	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 9:00 PM	12.00	6.10	3.30	10.00	6.70	3.30	3.80	10.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 9:15 PM	13.00	7.40	2.90	10.60	7.70	2.90	4.00	10.60	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 9:30 PM	9.00	7.80	0.00	11.60	0.00	0.00	4.20	11.60	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 9:45 PM	12.00	7.60	2.70	8.50	5.80	2.70	4.20	8.50	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 10:00 PM	18.00	5.70	0.00	10.00	0.00	0.00	4.30	10.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 10:15 PM	23.00	5.00	3.10	10.80	7.70	3.10	4.90	10.80	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 10:30 PM	34.00	5.80	0.00	9.80	0.00	0.00	4.10	9.80	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 10:45 PM	47.00	5.40	0.00	7.10	0.00	0.00	4.00	7.10	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 11:00 PM	37.00	2.50	8.90	5.80	0.00	8.90	4.90	5.80	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 11:15 PM	61.00	1.70	12.60	10.40	0.00	12.60	4.20	10.40	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 11:30 PM	37.00	1.60	3.40	14.30	10.90	3.40	4.00	14.30	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/31/15 11:45 PM	31.00	4.00	2.50	8.80	6.30	2.50	4.00	8.80	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

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

Date & Time of alarm: 5/04/2015 5:00 PM Email sent to site Technician? (Yes or **No**)

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

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

Date & Time of alarm: 5/06/2015 5:00 PM Email sent to site Technician? (Yes or **No**)

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

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. Fog caused the alarm.

IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

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

Date & Time of alarm: 5/09/2015 10:00 PM Email sent to site Technician? (Yes or **No**)

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

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. Fog caused the alarm.

Air Unit



IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

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

Date & Time of alarm: 5/14/2015 2:30 AM Email sent to site Technician? (Yes or No)

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

3. Corrective Actions taken? (Yes or No)

4. Dredging suspended? (Yes or No)

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

Description of Action Taken:

A) No problems were found.

IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

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

Date & Time of alarm: 5/20/2015 10:30 AM Email sent to site Technician? (Yes or No)

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

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) USACE maintenace installation of stone rip-rap on the south end of west cell is causing dust from the machinery and stone truck delivery's.



IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

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

Date & Time of alarm: 5/22/2015 All Day

Email sent to site Technician? (Yes or No)

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

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) USACE maintenace installation of stone rip-rap on the south end of west cell is causing dust from the machinary.



IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

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

Date & Time of alarm: 5/24/2015 8:45-2:00 Email sent to site Technician? (Yes or No)

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

3. Corrective Actions taken? (Yes or No)

4. Dredging suspended? (Yes or No)

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

Description of Action Taken:

A) No problems found wrong with the air unit.