











Table with columns: Reading Time (EST), Wind Direction, Wind Speed, Particulates (µg/m³), and Naphthalene (µg/m³). The table contains 100 rows of monitoring data.



Table with columns: Reading Time (EST), Wind Direction, Wind Speed, Particulates (µg/m³), and Naphthalene (µg/m³). Rows represent hourly data from 4/27/13 12:00 PM to 4/28/13 12:30 PM.









**US Army Corps  
of Engineers®**

Indiana Harbor and Canal  
Confined Disposal Facility  
Real-Time Air Monitoring Data  
4-22-13 to 4-30-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m <sup>3</sup> )							Naphthalene (µg/m <sup>3</sup> )						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
4/30/13 2:15 PM	207.00	7.30	15.50	18.00	2.50	18.00	17.30	15.50	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 2:30 PM	215.00	5.60	20.20	18.00	0.00	18.00	15.40	20.20	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 2:45 PM	202.00	10.10	18.60	17.90	0.00	17.90	16.30	18.60	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 3:00 PM	185.00	7.60	16.80	17.50	0.70	17.50	16.50	16.80	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 3:15 PM	183.00	8.00	16.20	19.20	3.00	19.20	29.80	16.20	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 3:30 PM	213.00	7.30	15.90	17.80	1.90	17.80	16.30	15.90	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 3:45 PM	186.00	6.10	15.80	17.60	1.80	17.60	15.70	15.80	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 4:00 PM	227.00	8.00	14.90	0.00	0.00	0.00	15.80	14.90	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 4:15 PM	209.00	6.10	14.50	17.40	2.90	17.40	16.60	14.50	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 4:30 PM	203.00	7.60	14.30	17.10	2.80	17.10	15.90	14.30	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 4:45 PM	220.00	7.20	13.80	12.90	0.00	12.90	15.70	13.80	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 5:00 PM	201.00	10.40	14.40	12.90	0.00	12.90	15.00	14.40	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 5:15 PM	199.00	5.80	15.50	13.10	0.00	13.10	16.50	15.50	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 5:30 PM	197.00	6.60	16.70	13.30	0.00	13.30	17.30	16.70	19.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 5:45 PM	194.00	8.30	16.70	13.20	0.00	13.20	15.70	16.70	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 6:00 PM	202.00	7.20	16.80	13.20	0.00	13.20	15.50	16.80	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 6:15 PM	200.00	7.60	17.60	13.40	0.00	13.40	17.90	17.60	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 6:30 PM	198.00	9.40	18.20	13.40	0.00	13.40	16.70	18.20	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 6:45 PM	194.00	6.20	19.10	14.40	0.00	14.40	20.20	19.10	21.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 7:00 PM	196.00	7.40	20.00	14.40	0.00	14.40	21.20	20.00	21.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 7:15 PM	191.00	6.30	19.50	14.30	0.00	14.30	18.10	19.50	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 7:30 PM	188.00	5.70	21.80	14.80	0.00	14.80	15.60	21.80	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 7:45 PM	192.00	5.90	18.90	15.20	0.00	15.20	17.60	18.90	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 8:00 PM	202.00	5.70	20.00	15.90	0.00	15.90	16.20	20.00	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 8:15 PM	192.00	6.80	19.70	16.50	0.00	16.50	17.20	19.70	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 8:30 PM	199.00	4.40	19.30	17.50	0.00	17.50	12.80	19.30	20.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 8:45 PM	196.00	4.80	18.40	18.20	0.00	18.20	11.90	18.40	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 9:00 PM	207.00	4.80	17.70	18.70	1.00	18.70	11.70	17.70	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 9:15 PM	198.00	5.30	16.70	19.30	2.60	19.30	10.80	16.70	19.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 9:30 PM	197.00	5.50	17.50	19.90	2.40	19.90	10.40	17.50	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 9:45 PM	203.00	6.70	16.30	21.00	4.70	21.00	9.90	16.30	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 10:00 PM	201.00	5.20	15.50	21.60	6.10	21.60	9.10	15.50	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 10:15 PM	208.00	5.20	15.80	21.90	6.10	21.90	9.00	15.80	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 10:30 PM	203.00	4.70	16.10	22.20	6.10	22.20	9.60	16.10	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 10:45 PM	193.00	6.10	16.90	22.90	6.00	22.90	9.90	16.90	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 11:00 PM	195.00	4.80	18.60	24.10	5.50	24.10	11.00	18.60	19.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 11:15 PM	194.00	4.20	20.50	24.20	3.70	24.20	12.70	20.50	19.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 11:30 PM	208.00	4.00	20.30	24.10	3.80	24.10	13.70	20.30	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/30/13 11:45 PM	201.00	4.00	19.90	23.80	3.90	23.80	14.60	19.90	19.60	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: 4/30/2013 1:15 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

3. Corrective Actions taken?                  ( Yes or No )

4. Dredging suspended?                  ( Yes or No )

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

**Description of Action Taken:**

M1 Thermo Unit alarm was caused by spiders inside of the nephelometer and paper filter. The spiders were vacuumed out of the inlet tube and nephelometer. Unit was recalibrated at 8:30 AM 4/30/13 and inspected at 9:00 AM 4/30/13 to confirm proper function.



Spiders



# 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: 4/27/2013 8:00 PM                      Email sent to site Technician?      (  Yes or  No )

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

3. Corrective Actions taken?                      ( Yes or  No )

4. Dredging suspended?                      ( Yes or  No )

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

***Description of Action Taken:***

Thermo units alarmed from high winds kicking up dust. Units were inspected at 9:30 PM 4/28/13 to confirm proper functions. Units were re-inspected at 7:30 AM 4/29/13 to confirm proper functions.

# 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: 4/07/2013 4:45 AM                                Email sent to site Technician?    ( Yes) or ( No)

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

3. Corrective Actions taken?                                ( Yes or  No)

4. Dredging suspended?                                ( Yes or  No)

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

***Description of Action Taken:***

Thermo units alarmed from high winds kicking up dust. Units were inspected at 7:30 PM 4/8/13 to confirm proper functions. Units were re-inspected at 3:30 PM 4/8/13 to confirm proper functions.

# 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: 4/06/2013 11:30, 12:15, 1:45, 2:00, 3:15, 3:30    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              |

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:***

Thermo units alarmed from hurricane type winds on Saturday. There were walls of dirt/dust coming from on and off the site. Units were inspected at 4:30 PM 4/6/13 to confirm proper functions. All units were working correctly. Site Project Manager was notified of the alarms.

# 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: 4/04/2013 2:15 PM and 3:45 PM            Email sent to site Technician?    (  Yes or  No )

Technician responded to the alarm; Scott Peterson

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

2. Alarm caused by:

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

3. Corrective Actions taken?            ( Yes or  No )

4. Dredging suspended?            ( Yes or  No )

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

***Description of Action Taken:***

Thermo units alarmed from lawn mowing and trimming around air monitoring stations. Units were inspected at 7:30 PM 4/5/13 to confirm proper functions. Units were re-inspected at 3:30 PM 4/5/13 to confirm proper functions.