

HUSKY ENERGY INC.

Addendum to Air Monitoring Plan

2018 Superior Refinery Fire

David Beattie
6/12/2018

Environmental Unit Leader

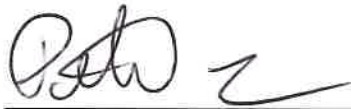


Signature

06/12/2018

Date

Operations Section Chief

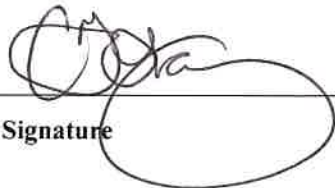


Signature

6/12/2018

Date

Planning Section Chief



Signature

12 JUNE 18

Date

Incident Commander



Signature

6/12/18

Date



Superior Refining Company LLC

2407 Stinson Avenue
Superior, WI 54880

Addendum to Air Monitoring Plan

June 12, 2018

Existing Air Monitoring:

Air monitoring currently underway during deinventory work following the April 26, 2018 Superior Refinery Fire includes the following:

Hot Zone Work Area:

- 24/7 continuous air monitoring at 17 fixed locations using AreaRae monitors
- Real-time monitoring at various locations by GHD technicians with hand-held instruments
- Additional continuous monitoring with AreaRae monitors and real-time monitoring with handheld instruments associated with deinventory work as determined in coordination with SRC.
- Worksite industrial hygiene monitoring for asbestos fibers in air (worker and area) in conjunction with ongoing asbestos abatement activities.

Fenceline Perimeter:

- 24/7 continuous air monitoring at 15 fixed locations at the refinery fenceline using AreaRae monitors. Existing fenceline monitoring required by the Refinery Sector Rule.

Community:

- One mobile community air quality monitoring team active during day shift at times when deinventory operations are ongoing.

Revised Air Monitoring:

In consideration of the progress made to date in deinventorying refinery units, and the associated decreasing risk of significant air emissions during the remaining deinventory work, the Superior Refinery is reducing the level of air monitoring. Specifically, GHD and the Superior Refinery have developed the following air monitoring scope of work that will apply once the GasCon deinventory is complete and the GasCon stripper tower is removed from its compromised position:

Hot Zone Work Area:

- 24/7 continuous air monitoring at 13 fixed locations using AreaRae monitors (immediate removal of the 3 AreaRae monitors at the SRU and 1 AreaRae monitor at the Platformer. These monitors will be further reduced over time as site cleanup and deinventory progresses.
- Real-time monitoring at various locations by GHD technicians with hand-held instruments
- Additional continuous monitoring with AreaRae monitors (typically 4) and real-time monitoring with handheld instruments (2 technicians) associated with deinventory work as determined in coordination with the Superior Refinery.

Fenceline Perimeter:

- AreaRae monitoring discontinued. On-going fenceline monitoring required by the Refinery Sector Rule will continue.

Community:

- Scheduled community monitoring to be discontinued. GHD will maintain the capacity to initiate one mobile community monitoring team using GHD technicians currently working within the refinery in the event that an activity in the work area causes a significant air release that may extend beyond the facility fenceline.

The associated and estimated change in GHD personnel requirements from the present level of effort to the reduced level of effort is presented below:

	<u>Present Air Monitoring</u>	<u>Reduced Air Monitoring</u>
<u>Day Shift</u>		
Supervisor	1	1
Assistant - Data/QA/Reporting	1	
Assistant – Data/GIS	1	
Technician – Site Monitoring	7	5
Technician – Community Monitoring	2	
<u>Night Shift</u>		
Supervisor	1	1
Technician – Site Monitoring	5	2
<u>Day Shift - Asbestos</u>		
Industrial Hygienist	1	1
Technician	3	3
Total Staff	22	13