ASTI ENVIRONMENTAL

April and May Perimeter Air Monitoring and Manganese Sampling

LOCATION: Former McLouth Steel Facility – County Property
DATE: June 15, 2021
Monitoring Duration: April 22, 2021 – May 31, 2021

Perimeter Monitoring (Refer to Attachment A for additional details)

- The site experienced no exceedance of PM-2.5 particulate concentrations above the NAAQS standard of 0.035 mg/m³ for Air Quality and did not have any downwind station particulate concentrations exceeding 15% of the average of all upwind stations over a 24-hour period. The air monitoring schedule for the month was one workday per work week monitoring. Air monitoring was conducted on April 22 and 28, 2021 and May 5, 10, 18, and 26, 2021.

Perimeter Sampling

- Sampling was not performed on April 22, 2021 pending EPA and EGLE decision of a request to suspend sampling. Brian Kelly, EPA OSC, spoke with Tim Francis, PM, and suggested that we resume sampling until a final decision was rendered.
- The site had no exceedances of the ATSDR MRL standard for PM-10 Manganese during the sampling which occurred on April 28, 2021 and May 5, 10, 18, and 26, 2021. The ATSDR MRL standard is 0.3 ug/m³ over 24 hours.

Real-time Dust Monitoring

- The site experienced no exceedances for TPM or PM-10 sized particulate in any work area during the months of April and May 2021.

Conclusion

- **Perimeter Monitoring/Sampling:** During the months of April and May 2021 the concentrations of PM-2.5 particulate matter were not in exceedance of the NAAQS of 0.035 mg/m³ for Air Quality, or the concentration was 15% or less when comparing the average of all upwind stations to the downwind station per the Dust Control Work Plan. Perimeter Sampling during April and May 2021 did not exceed the ATSDR MRL standard for PM-10 Manganese.

- **Real-time Monitoring:** The site experienced no exceedances for TPM or PM-10 sized particulate in any work area during the months of April and May 2021.

ASTI ENVIRONMENTAL

Attachment A
April and May Perimeter Air Monitoring, Manganese Sampling, and Weather Charts and Data

LOCATION: Former McLouth Steel Facility – County Property
DATE: June 15, 2021

Perimeter Air Monitoring Charts and Data

Former McLouth Steel County Property Site Preparation Project
Perimeter PM 2.5 Air Monitoring Results - 24 hour average (mg/m³)

	Station 1	Station 2	Station 3	Station 4	24-hr Avg. All Stations		
Date	24-hr Avg.	24-hr Avg.	24-hr Avg.	24-hr Avg.	Downwind station max value	Upwind station average value	Diff.
4/22-23/21	0.007	0.012	0.009	0.013	0.009	0.009	NA
4/ 28-29/21	0.012	0.022	0.021	0.021	0.021	0.018	NA
5/4-5/21	0.004	0.008	0.006	0.002	0.006	0.004	NA
5/10-11/21	0.002	0.005	0.003	0.004	0.003	0.004	NA
5/18-19/21	0.009	0.018	0.012	0.020	0.012	0.016	NA
5/26-27/21	0.003	0.008	0.004	0.005	0.004	0.006	NA

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	Downwind Location
	Exceeds particulate concentrations of the upwind station(s) by over 15% or the NAAQS standard
BOLD	Max Value for Daily Average for all Stations
N/A	No Data
	Data not a 24-hr Avg. due to equipment malfunction
NA	Comparison of downwind and upwind Not Applicable

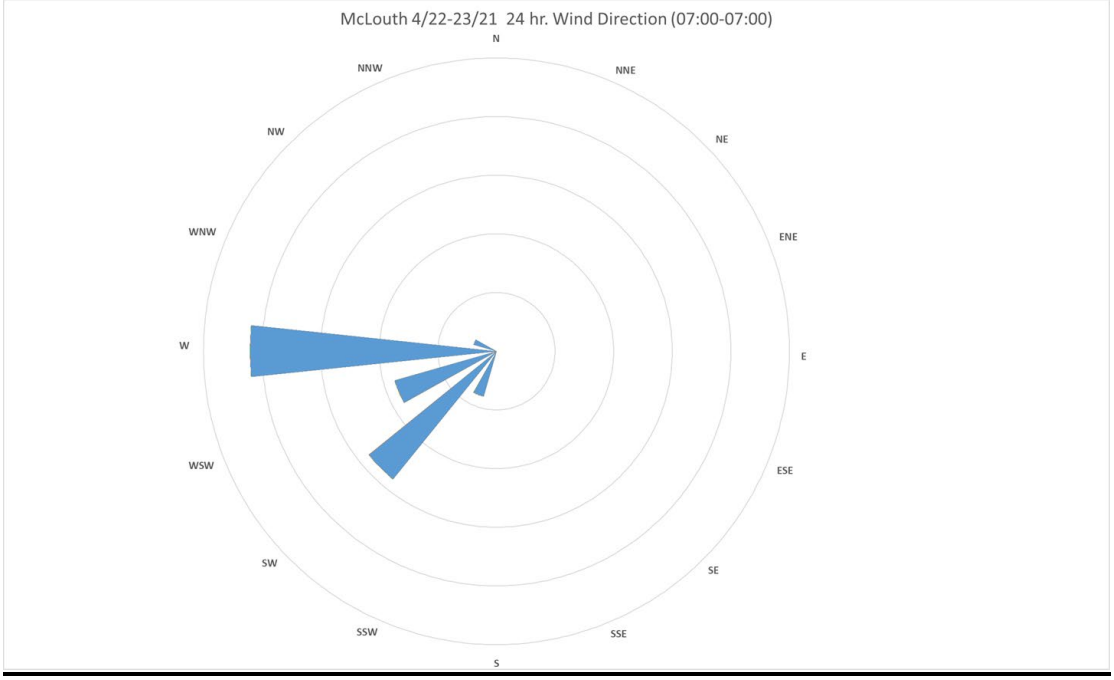
Manganese Sampling Chart

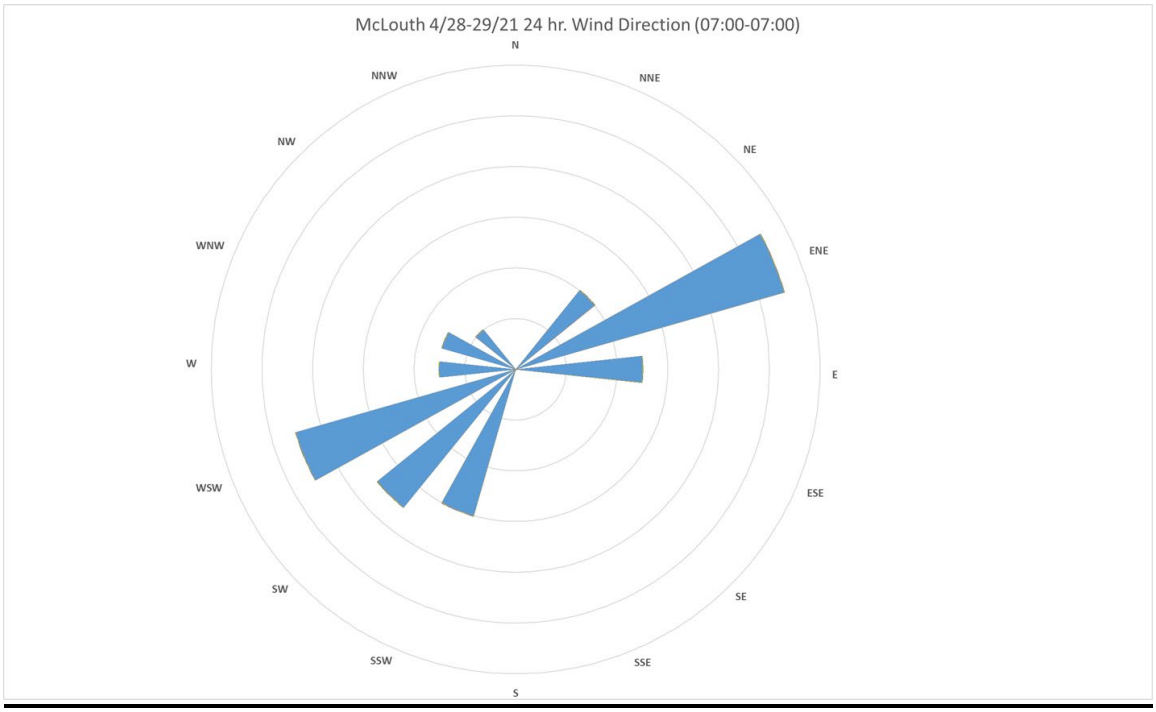
Former McLouth Steel Facility Air Sampling Analytical Results						
Analytical results for PM-10 Manganese(Mn) (results are in ug/m³ average over 24 hrs)						
Start Date	Start time (approx)	Time Interval (hrs)	Site 1	Site 2	Site 3	Screening Level 0.3ug/m³
4/28/2021	8:00	24	0.02	0.01	0.01	0.3
5/4/2021	8:00	24	0.01	0.01	0.01	0.3
5/10/2021	8:00	24	0.02	0.01	0.01	0.3
5/18/2021	8:00	24	0.02	0.02	0.03	0.3
5/26/2021	8:00	24	0.01	0.01	0.04	0.3

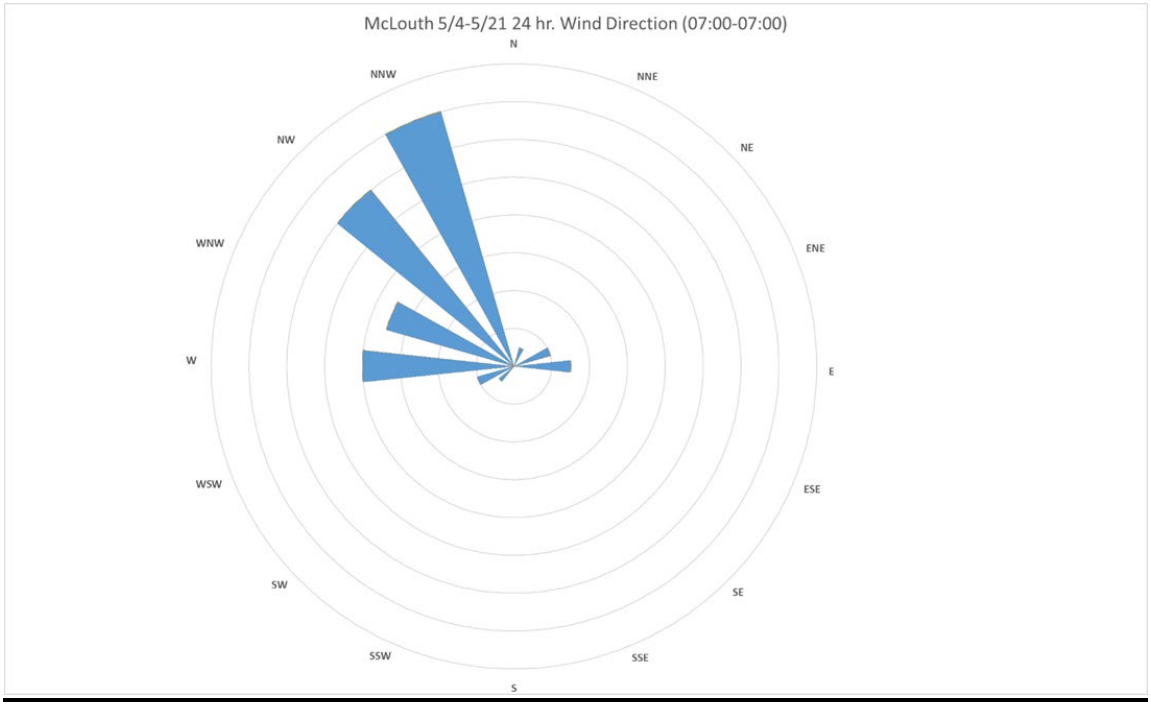
Weather Data

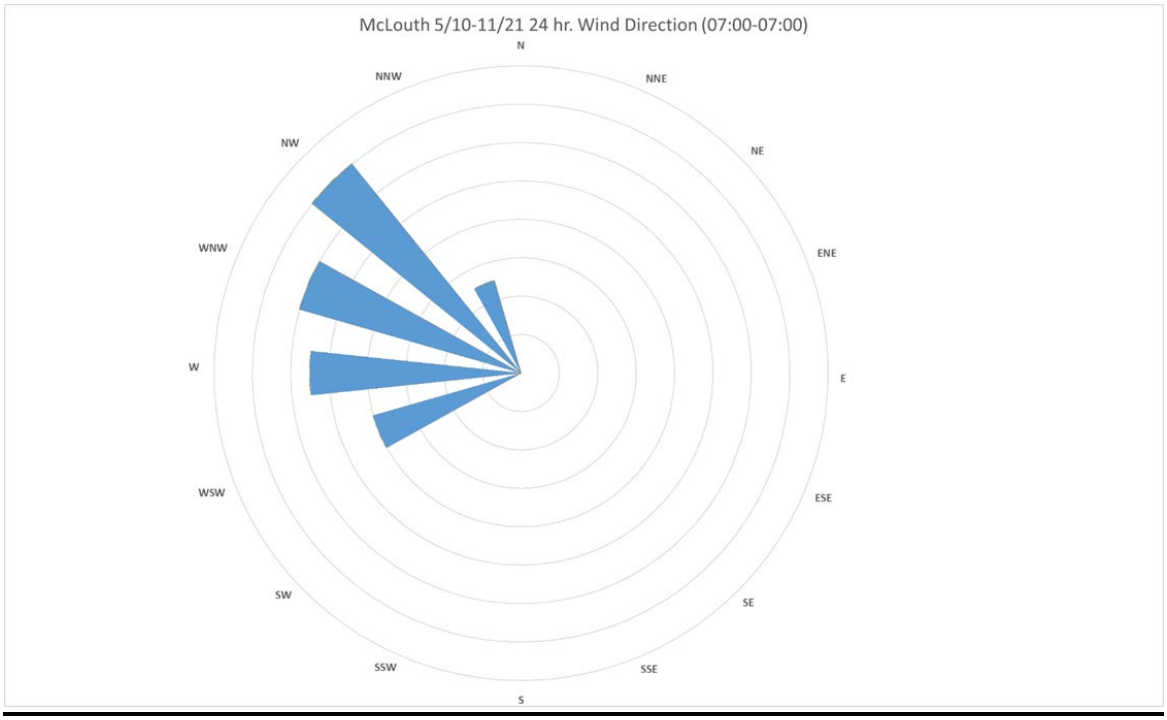
Former McClouth Steel Facility-County Property				
Perimeter Monitoring and Sampling Wind Data				
Instrumentation: Davis Vantage Pro 2 Weather Station				
Weather Station Site: Southwest corner of property-approx 100' due south of job trailer set up on top of light pole.				
	24 Hour			
Date:	Start time:	Avg. wind speed:	Predominate wind direction:	Notes:
4/22-23/2021	7:00	W	W	
4/28-29/2021	7:00	ENE	ENE	
5/4-5/2021	7:00	6.84	NNW	
5/10-11/2021	7:00	5.48	NW	
5/18-19/2021	7:00	1.72	SE	
5/26-27/2021	7:00	6.00	WSW	

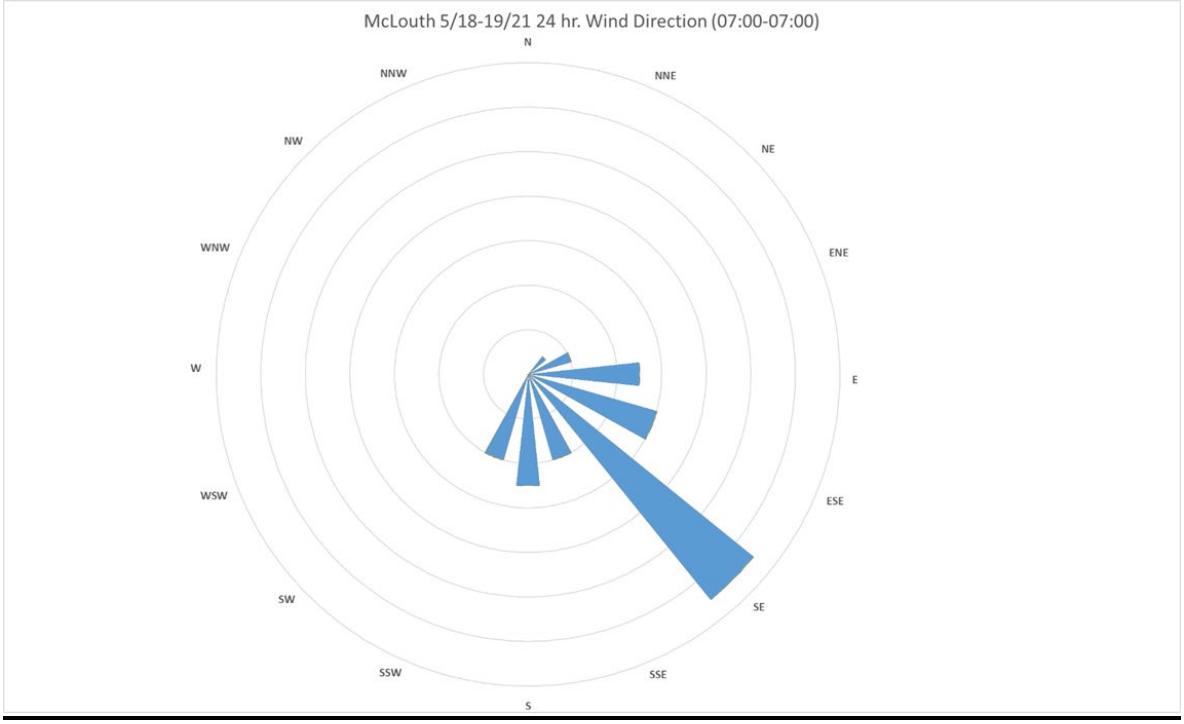
Wind Roses

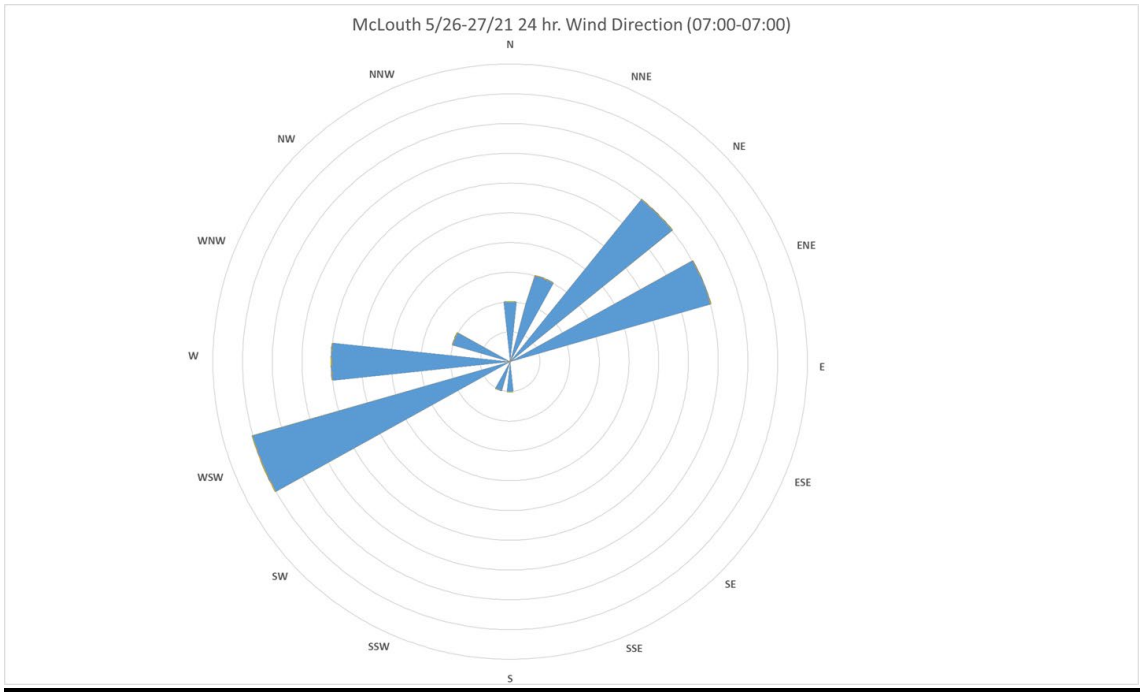



McLouth 4/28-29/21 24 hr. Wind Direction (07:00-07:00)
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW


McLouth 5/4-5/21 24 hr. Wind Direction (07:00-07:00)
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW


McLouth 5/10-11/21 24 hr. Wind Direction (07:00-07:00)
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW


McLouth 5/18-19/21 24 hr. Wind Direction (07:00-07:00)
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW


McLouth 5/26-27/21 24 hr. Wind Direction (07:00-07:00)
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW