

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

N557848236

FACILITY: ANR Pipeline Co. - Winfield Compressor Station		SRN / ID: N5578
LOCATION: 21453 Tamarack Rd., HOWARD CITY		DISTRICT: Grand Rapids
CITY: HOWARD CITY		COUNTY: MONTCALM
CONTACT: Brad Stermer, Sr. Environmental Specialist		ACTIVITY DATE: 03/29/2019
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: FY '19 on-site inspection to determine the facility's compliance status with MI-ROP-N5578-2015 and other applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

AQD staff, Chris Robinson (CR), conducted an on-site scheduled announced inspection of ANR Pipeline Company's Winfield Compressor Station (Winfield) located at 21453 Tamarack Road in Howard City, Michigan on March 29, 2019. Winfield is remotely operated from ANR's Woolfolk Compressor Station, therefore typically unmanned. To ensure site personnel were onsite CR contacted Mr. Brad Stermer, ANR's Senior Environmental Specialist, on March 28, 2019 notifying him of intent to conduct an inspection on March 29, 2019. CR met with Mr. Stermer on site on March 29, 2019 providing AQD identification and again announcing intent to conduct an inspection of the facility to determine Winfield's current compliance status with respect to Renewable Operating Report (ROP) No. MI-ROP-N5576-2015 and any other applicable air quality rules and regulations. Mr. Stermer provided pertinent information and a tour of the facility.

Weather conditions were sunny approximately 51°F with South East winds at approximately 3mph and no precipitation (www.weatherunderground.com). None of the compressor engines were operating. No odors or visible emissions were observed during the inspection.

Facility Description

Winfield is located in Winfield Township, Montcalm County in a remote rural area. It was constructed from 1971 through 1972 and is used for natural gas storage and transmission, via pipeline and natural underground reservoirs. This facility consists of a Compressor station and associated naturally occurring underground reservoir used for storing natural gas. The compressor station consists of three gas compressors/reciprocating engines (EUWF001-3), an emergency generator and a boiler. Specifics regarding equipment discussed in this report are provided in the table below.

Winfield's function is to maintain pipeline pressure for transporting natural gas to storage wells for temporary storage and for transporting natural gas to other storage and local distribution facilities. Prior to entering the pipeline, the natural gas is conditioned through the Winfield Dehydration Unit to remove moisture that accumulated in the gas stream from the underground reservoir. The Winfield Dehydration Unit is considered a separate facility (SRN No. N6245) since it is not "adjacent or contiguous" and is located several miles from this facility. This dehydration unit is permitted independently (PTI No. 125-97), therefore, not discussed further in this report.

Emission Unit ID	Installation Date	Description	ROP Flexible Group
EUWF001	1971	Superior model 12VGT825; 1,500 hp high speed, four cycle, turbo charged, spark ignited natural gas-fired internal combustion reciprocating compressor engines used to compress natural gas into the storage reservoir during injection and into the pipeline during withdrawal.	FGWFREC
EUWF002	1972		
EUWF003			
Emergency Generator	Disconnected and Inoperable		
BOILER	2014	Delta Limited (1.26 MMBtu/hr)	NA

Applicable Regulations

Winfield is located in Montcalm County, which is designated by the U.S. Environmental Protection Agency as attainment/unclassified for all criteria pollutants. Winfield is considered to be a Major Source because the Potential to emit of Nitrogen Oxide (NOX) emissions exceeds 100 tons per year (tpy). Potential Hazardous Air Pollutant (HAP) emissions are less than the Major Source threshold of 10tpy individual and 25tpy aggregate. Therefore, Winfield is considered a Minor (Area) Source for HAPS.

All the process equipment at this facility was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations, therefore not subject to PSD requirements.

The three compressor engines at the facility are all existing lean burn engines, therefore not subject to Subpart ZZZZ of 40 CFR Part 63.

On January 18, 2008, the USEPA promulgated a new source standard of performance for stationary spark ignition internal combustion engines (40 CFR Part 60, Subpart JJJJ). This regulation does not apply to the existing compressor engines at the Winfield Station based on their installation dates.

Potential renovation/asbestos removal and remediation projects at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Asbestos promulgated in 40 CFR Part 61, Subparts A and M.

Compliance Evaluation

Except for the emergency generator, all emission units on-site are natural gas-fired only. The facility submitted semi-annual reports and annual certifications as required. No issues were reported.

ROP Source-wide Conditions: Asbestos Neshap

As discussed with Mr. Stermer, asbestos records are maintained for 5 years, as required. No asbestos related work has taken place since the boiler was replaced in 2014, therefore no new waste shipment records are available nor was a notification required or submitted to AQD. The facility submitted semi-annual reports and annual certifications as required and on time. No issues or problems were reported.

ROP Flexible Group FGWFREC

All the engines located at Winfield are monitored and operated from the control room at the Woolfolk Compressor Station. Per discussions with Mr. Stermer, records are maintained for 5 years, as required. The facility only burns sweet natural gas. Records of operating hours and fuel usage were provided and are included in **Attachment A** and summarized in the table below.

Year	Month	EUWF001		EUWF002		EUWF003	
		Operating Hours	Fuel Usage (MMSCF)	Operating Hours	Fuel Usage (MMSCF)	Operating Hours	Fuel Usage (MMSCF)
*2018	Jan	397.83	2.91	8.00	0.05	--	--
	Feb	667.50	5.77	--	--	--	--
	March	654.42	5.24	--	--	--	--
	April	24.75	0.15	--	--	--	--
	Dec	--	--	0.33	0.00	--	--
2019	Jan	330.33	2.54	133.17	1.05	--	--
	Feb	576.50	4.91	67.75	0.63	--	--
	March	30.75	0.22	77.50	0.71	--	--

* None of the engines operated during May 2018 through November 2019.

Other (Non-ROP)

The facility replaced an existing boiler in 2014 with a natural gas-fired 1.26 MMBtu/hr Delta Limited boiler (EUWFBOILER). This boiler appears to be exempt from NSR permitting and not regulated by 40 CFR Part 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Area Source Boilers since the rule does not apply to natural gas-fired boilers.

The facility's emergency diesel fueled generator (EUWFEMGENERATOR1) has been evaluated in the past and determined to be disconnected and rendered inoperable. No changes have been made to the condition or operational status of this generator.

MAERS

The 2018 MAERS report for Winfield was submitted on time and reviewed by the AQD. The facility is using a combination of MAERS and EPA Emission factors where applicable. Per discussion with Mr. Chris Waltman, ANR's Senior Environmental Specialist, who prepares this facility's MAERS, the NOX emission factor for unit EUWF002 was incorrect. The input was initially 41,616 with an exponent of 3 and should have been 4.1616 with an exponent of 3. CR added the decimal with Mr. Waltman's approval. A follow-up email, which is included in

Attachment B, was sent to Mr. Waltman confirming that the minor change was made. The 2018 MAERS report is also included in **Attachment B**.

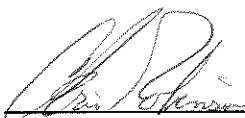
Conclusion

Based on observations made during this inspection and a records review, Winfield appears to be in compliance with ROP MI-ROP-N5578-2015 and any other applicable air rules and regulations.

Attachments

A - Monthly Operating Hours and Fuel Usage

B - 2018 MAERS Report

NAME 

DATE 4/8/2019

SUPERVISOR 

