

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

N557840140

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: 06/05/2017
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: FY '017 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 a scheduled on-site announced inspection on Tuesday June 5, 2017 at the ANR Pipeline Company - Winfield Compressor Station (Winfield) located at 21453 Tamarack Road, Howard City, MI. Winfield is typically remotely operated and therefore, unmanned. Prior notification is necessary for entry. CR arrived at approximately 11:00 am following inspection of ANR's Goodwell Compressor Station located in White Cloud, MI. No odors or visible emissions were detected upon arrival.

CR met with Mr. Brad Stermer, Sr. Environmental Specialist, and Mechanics Jim Vanassche and Wade Weber. CR presented proper AQD identification and a business card. CR also announced intent to conduct an inspection of the facility to determine compliance status with respect to their ROP No. MI-ROP-N5578-2015 and any other applicable air rules and regulations. All equipment was offline at the time of this inspection.

**Facility Description**

The Winfield gas compressor station, constructed from 1971 through 1972, is owned and operated by ANR Pipeline Company and used for natural gas storage and transmission, via pipeline and natural underground reservoirs. Winfield consists of a natural gas compressor station and underground storage field located in Howard City, Michigan. The compressor station consists of three gas compressors/reciprocating engines (EUWF001-3), an emergency generator and a boiler; see Table 1 below for additional emission unit information.

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 facilities and local distribution facilities.

Prior to entering the pipeline, the natural gas is conditioned through the Winfield Dehydration Unit to remove liquids that are transported out of the reservoir with the gas. 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.

Table 1: Emission Unit Summary

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
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**Regulatory Requirements**

Winfield is located in Montcalm County, which is designated by the U.S. Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants. Winfield is considered a major source of NOx because the potential to emit exceeds 100 tpy, and a minor source of HAP's because the potential to emit of any single HAP is less than 10 tpy and combined HAPs is less than 25 tpy. 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 (a minor source of HAPs) 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.

**On-site Observations & Records Review**

Except for the emergency generator, all emission units on-site are natural gas-fired only. The facility continuously monitors and records fuel consumption and operating hours (**Attachment A**) for all three engines. None of the engines were operating at the time of this inspection nor expected to operate in the near future due to low demand.

➤ **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, included in **Attachment B** and summarized in Table 2 below. The facility submitted semi-annual reports and annual certifications as required and on time. No issues or problems were reported.

Table 2: 2016 & 2017 Engine Operating and Fuel usage summary

Year	Month	EUWF001		EUWF002		EUWF003	
		Operating Hours	Fuel Usage (MMSCF)	Operating Hours	Fuel Usage (MMSCF)	Operating Hours	Fuel Usage (MMSCF)
	Jan	729.25	6.6855	11.25	6.6855	--	--

*2016	Feb	103.75	0.9406	--	--	--	--
	Nov	--	--	205.92	1.5038	--	--
	Dec	--	--	655.00	5.6128	--	--
2017	Jan	111.25	0.9653	565.00	4.8633	--	--
	Feb	355.75	3.0834	5.00	0.0411	--	--
	March	264.08	2.2993	--	--	--	--

\* None of the engines operated during March 2016 through October 2016.

➤ **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, which was confirmed during this inspection.

**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

NAME Chris Robinson

DATE 6/20/2017 SUPERVISOR HB