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

3488533899		
FACILITY: TILDEN MINING COMPANY LC		SRN / ID: B4885
LOCATION: 1 TILDEN MINE ROAD, ISHPEMING		DISTRICT: Upper Peninsula
CITY: ISHPEMING		COUNTY: MARQUETTE
CONTACT: BRENT KETZENBERGER , AREA MGR - ENVIRONMENTAL		ACTIVITY DATE: 03/23/2016
STAFF: Ed Lancaster	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled partial complian	nce inspection and stack test observation.	•
RESOLVED COMPLAINTS:		

The Tilden Mining Company is located at 1 Tilden Mine Road, near the Village of National Mine, Marquette County, Michigan. The Tilden Mine is an open-pit iron ore mining, concentrating, and pelletizing facility producing iron ore pellets for steel making in blast furnaces. Tilden 1 was built in 1974 and Tilden 2 was built in 1978. The facility processes both hematite and magnetite ores.

Tilden Mine Company operates various material handling, crushing, milling, concentrating, ore drying, pellet manufacturing, cooling, and handling equipment controlled by wet scrubbers and baghouse dust collectors. The Tilden facility operates two (2) 590 million BTU per hour heat input grate-kiln indurating furnaces, fueled by coal, natural gas and/or used oil, and are controlled by electrostatic precipitators. There are two (2) ore concentrate dryers fired with natural gas and/or used oil. Emissions from the ore dryers are controlled by cyclone pre-cleaners and wet scrubbers. The facility operates two (2) natural gas/fuel oil fired boilers rated at 225 million BTU per hour heat input capacity and one (1) natural gas/fuel oil fired boiler rated at 240 million BTU per hour heat input. The company also has a general permit to operate one or more natural gas or propane fired boilers not to exceed 100 million Btu per hour heat input, each controlled by low-NOx burners.

The purpose of this partial compliance evaluation (PCE) was to observe particulate emission testing of the 17.1 to 17.2 wet scrubber and the Unit 2 Product Conveyor wet scrubber to demonstrate compliance with 40 CFR Part 63, Subpart RRRRR (The Taconite MACT) and determine the scrubber minimum pressure drop and flow rate.

When I arrived at the facility I was greeted by Mr. Brent Ketzenberger, he then introduced me to Mr. Ryan Mahosti, Pellet Plant Operations Day Coordinator. Mr. Ketzenberger explained that after a monthly preventative maintenance activity on the scrubber (employees cleaned the impingement panel in the wet scrubber); the company begin to notice the differential pressure across the scrubber was falling out of the established range of compliance for the Taconite MACT.

Network Environmental Inc. was hired to conduct the stack test. Rick Eerdmans and Scott Cargill representing Network Environmental were conducting the second test when I arrived. They informed me the first run began at 0821 hours. Mr. Cargill showed me the glass fiber filter from the first run. He stated the filter had very light contamination and he expected Tilden would have no problem passing the emissions test.

On April 22, 2016, I received an electronic copy of the test report. A final hard copy was received on May 3, 2016. Results of the test showed the average flow rate for the scrubber was 12,610 SCFM, the pressure drop was 5.4 inches of water column, the scrubber flow was 28.9 gallons per minute, the average particulate concentration was 0.00156 grains per dry standard cubic feet and 0.165 pounds per hour. The Taconite MACT particulate limit for existing ore crushing and handling emission units is 0.008 grains/dscf.

As of this time the company is in compliance with its particulate emission limit for the 17.1 to 17.2 wet scrubber

NAME / OF TONCANTIN