

Asheville-Buncombe Air Quality Agency Facility Inspection Report

Facility Inspection Information					
Facility Name:	City of Asheville Water Resources Department - North Fork Water Treatment Plant				
Date of Inspection:	May 30, 2023		Last Inspected:	June 19, 2015	
Mailing Address:	3374 North Fork - Left Fork Road Black Mountain, NC 28711		Physical Location:	3374 North Fork - Left Fork Road Black Mountain, NC 28711	
Contact Name:	Brendan Kelley		Phone Number:	(828)-259-5865	
Permit #:	11-536-15	Issued:	July 13, 2015	Expires:	July 31, 2023
Inspector(s):	Alexander (Alex) Latta				
Results:	Appears in Compliance		Inspection Time:	1100 Hours	

Introduction

On the above date, a comprehensive inspection was conducted at City of Asheville Water Resources Department - North Fork Water Treatment Plant. The purpose of this inspection was to determine compliance under the Asheville-Buncombe Air Quality Agency Air Quality Code (AB Air Quality Code). City of Asheville Water Resources Department - North Fork Water Treatment Plant, otherwise known as the facility, is a municipal water treatment plant. Operation of this facility is granted under permit number 11-536-15 which was issued on July 13, 2015 and expires on July 31, 2023. The inspection was conducted by Alex Latta. The facility was represented by Brendan Kelley. The following is a summary of the inspection results:

Safety Equipment / Special Instructions

Hearing protection is recommended while the generator is operating. Steel-toed boots, a safety vest, and safety glasses may be needed if walking through the treatment plant.

Permitted Equipment

- ES-1: One (1) Caterpillar diesel-fired emergency-use generator with a rated output capacity of 1,250 kilowatts
- ES-2: One (1) One (1) 1,000-gallon underground gasoline storage tank with a monthly throughput less than 10,000 gallons.

ES-1 was observed in operation during the inspection. The current hour meter reading was 1727.6 hours prior to the unit running during the inspection. ES-2 was observed during the inspection, but no vehicles were actively fueling.

Exempt Sources:

The following exempt equipment was observed during the inspection:

- One (1) sodium bicarbonate storage silo with emissions controlled by one (1) CP Environmental Baghouse
- One (1) 6,000-gallon aboveground zinc orthophosphate (phosphate) storage tank
- One (1) 6,000-gallon aboveground hydrofluosilic acid (fluoride) storage tank.
- Two (2) 6,000-gallon aboveground sodium hydroxide (caustic soda) storage tank
- Two (2) 10,000-gallon aboveground sodium hypochlorite storage tank
- Two (2) 6,000-gallon aboveground aluminum (aka alum) storage tanks
- One (1) 8,000-gallon aboveground diesel fuel storage tank.

Permit Conditions:

The following permit conditions were reviewed during this inspection:

- A.1 – The facility is required to operate according to AB Air Quality Code including but not limited to the following specified conditions and any other applicable Local, State, and Federal regulations.
- A.2 – This condition is informational in nature and the facility is aware of the requirements relating to permit changes and permit applications.
- A.3 – The facility is required to submit an application for any changes or alterations to processes and equipment to AB Air Quality Agency. Failure to do so could result in enforcement action.
- A.4 – This condition requires the permittee to notify the Agency in the event of a name or ownership change.
- A.5 – The facility is required to obtain a new air permit prior to installing and operating new sources of air emissions.

- A.6 – This permit does not absolve the facility of any liabilities related to any civil/criminal penalties for violations of AB Air Quality Code prior to permit issuance. The facility shall be subject to enforcement action if the terms of the permit are violated.
- A.7 – This condition requires that the permittee maintain and operate the facility at all times so that the overall reduction in air pollutants, in accordance with applicable standards, is achieved. The facility has developed a maintenance schedule for equipment and is maintaining records of all maintenance. Additionally, the facility is maintaining an inventory of spare parts for equipment. The facility has established standard operating procedures for equipment and is training equipment operators on the procedures. The unit is serviced on a quarterly and annual basis by Carolina CAT. The unit was last serviced on May 1, 2023 for the full annual service. The 1st quarter 2023 PM was conducted on January 9, 2023. The maintenance report shows no major issues were noted. During the May 1, 2023 service, the air filters were changed. The facility has a fluid and oil analysis plan in place. Carolina Cat samples the oil on a semiannual basis. Each report includes the preceding 3 tests as well as the current test results. The last fluid sample was taken on February 6, 2023. The fluid analysis shows the oil was last changed on August 15, 2022.
- A.8 – This condition requires that the facility notify the Agency in the event of a malfunction. The facility has not experienced any malfunctions during the reporting period.
- A.9 – This condition lists the Agency address that the facility is required to submit any required reports, data, notifications, and requests for renewal.
- A.10 – The facility shall allow authorized Local, State, and Federal representatives on-site for inspection upon presentation of credentials.
- A.11 – This condition requires that the facility pay their annual permit fee on a timely basis. The facility is up-to-date on fee payments. The facility last submitted their fee payment on August 8, 2022.

- A.12 – The facility is required to submit a permit renewal request no later than ninety (90) days prior to permit expiration. The facility’s request was received by the Agency on February 13, 2023.
- A.13 – This permit may be suspended or revoked by the AB Air Quality Agency Board under certain conditions.
- A.14 – This condition requires the facility retain a copy of the permit on the premises. The facility had a copy of their current operating permit on-site.
- B.1 – The previous issue of this permit shall become void with the issuance of this current version.
- B.2 – This condition states the facility shall be operated to prevent odorous emissions from being emitted beyond the boundary of the facility. The facility was not producing any odorous emissions during the inspection.
- B.3 – This condition states the facility shall be operated to ensure visible emissions do not exceed 20% opacity over a six-minute average. At the time of the inspection, the facility was not exceeding 20% opacity.
- B.4 - This condition establishes the sulfur dioxide emission limit for the facility. Emissions calculations show the potential sulfur dioxide emissions from ES-1 are below the 2.3 lb/MMBtu limit. Therefore, the facility is in compliance with this condition.
- B.5 – This condition states that equipment ID ES-1 is subject to 40 CFR Part 63, Subpart ZZZZ – “National Emission Standards for Reciprocating Internal Combustion Engines”. This condition lists management practice requirements for the source, including changing the oil, inspecting the spark plugs, hoses and belts annually or earlier if necessary. It also lists additional minimum maintenance and operation requirements, including installing a non-resettable hour meter. The condition also states that the engine is allowed to operate up to 100 hours for testing and maintenance and emergency demand response as described in the permit. The permit allows the engine to be operated up to 50 hours a year in non-emergency situations, but those hours will be counted as part of the 100 hours described above. Records are also required for how

many hours the engines ran for emergency purposes, so that can be distinguished from normal testing and maintenance. Records include dates and corresponding hours on the hour meter for oil and filter changes, and dates for inspection and replacement of air cleaners, hoses, and belts. The facility has quarterly and annual maintenance conducted by Carolina CAT. The unit was last serviced on May 1, 2023 for the full annual service. The 1st quarter 2023 PM was conducted on January 9, 2023 The maintenance report shows no major issues were noted. During the May 1, 2023 service, the air filters were changed. The facility has a fluid and oil analysis plan in place. Carolina Cat samples the oil on a semiannual basis. Each report includes the preceding 3 tests as well as the current test results. The last fluid sample was taken on February 6, 2023. The fluid analysis shows the oil was last changed on August 15, 2022. Run records were provided to the inspector post inspection and indicate reason for running and notes periods of power failures. These records indicate that the hours operated are below the above stated thresholds.

- B.6 – This condition states that equipment ID ES-2 is subject to the requirements of 40 CFR 63 Subpart CCCCCC – “National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities,”. Gasoline must not be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. No issues were noted with the facility’s gasoline dispensing operation.
- B.7 – This condition requires the facility to submit annual reports by February 15th each year. The facility is submitting annual reports as required. The most recent annual report was submitted on February 8, 2023 and contained all the required information. The facility used approximately 3943.1 gallons of fuel during 2022. The generator operated for 192.5 hours under load and 0.3 hours under no load during 2022.


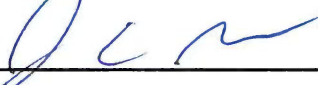
Compliance History:

One notice of deficiency (NOD) has been issued to the North Fork Water Treatment Plant in the last ten (10) years of operation. An NOD was issued on October 17, 2014 regarding failure to follow the Specific Conditions and Limitation 5 of Permit No. 11-536-10 which lists the work

practices required in 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants: Reciprocating Internal Combustion Engines (RICE). The work practice states that the oil must be changed in the generator every 500 hours of operation, or annually, whichever comes first. As an alternative to changing the oil (at least) annually, Subpart ZZZZ provides that an oil analysis program can be used to determine when the oil needs to be changed. The oil analysis program used at North Fork Water Treatment plant did not meet the requirements of Subpart ZZZZ. On September 22, 2014, the Agency received a letter from Bill Hart stating that the engine oil will be changed annually. No civil penalty was assessed

Conclusion:

Based on the above information, City of Asheville Water Resources Department - North Fork Water Treatment Plant appears to be in compliance with all applicable regulations of the AB Air Quality Code. It is recommended that this permit be renewed.

Signature: <u></u>	Date: <u>6/17/2023</u>
Reviewer Signature: <u></u>	Date: <u>7/21/2023</u>
Director Signature: <u></u>	Date: <u>7/21/2023</u>