Asheville-Buncombe Air Quality Agency Facility Inspection Report

Facility Inspection Information					
Facility Name:	City of Asheville Water Resources Department - DeBruhl Water Treatment Plant				
Date of Inspection:	August 5, 2025		**Last Inspected:**	September 9, 2024	
Mailing Address:	1370 Bee Tree Lake Road Swannanoa, NC 28778		**Physical Location:**	1370 Bee Tree Lake Road Swannanoa, NC 28778	
Contact Name:	Judson "Jud" Bledsoe, Oliver Burns		**Phone Number:**	(828)-298-7866	
Contact Email:	jbledsoe@ashevillenc.gov				
Permit #:	11-876-17	**Issued:**	November 13, 2017	**Expires:**	November 30, 2025
Inspector(s):	Alexander (Alex) Latta				
Results:	Appears in Compliance		**Inspection Time:**	1005 Hours	

Introduction

On the above date, a comprehensive inspection was conducted at City of Asheville Water Resources Department - DeBruhl 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 - DeBruhl Water Treatment Plant, otherwise known as the facility, is a municipal water treatment plant. Operation of this facility is granted under permit number 11-876-17 which was issued on November 13, 2017, and expires on November 30, 2025. The inspection was conducted by Alex Latta. The facility was represented by Oliver Burns as the main contact Judson "Jud" Bledsoe was on vacation. 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) Cummins Model DFEH diesel-fired emergency-use generator with a rated output capacity of 400 kilowatts

ES-1 was observed in operation during the inspection. Post run, the hour meter reading was 1009.6 hours. Facility representatives noted the generator is scheduled to run every Tuesday at 10:00 AM.

Exempt Sources:

The following exempt equipment was observed during the inspection:

- One (1) 2,380-gallon sodium bicarbonate storage silo with emissions controlled by one (1) U.S. Filter Baghouse
- One (1) 8,000-gallon aboveground sodium hydroxide (caustic soda) storage tank
- One (1) 8,000-gallon aboveground zinc orthophosphate (phosphate) storage tank
- One (1) 4,500-gallon aboveground hydrofluosilic acid (fluoride) storage tank. It should be noted this tank is listed as 8,000-gallons on the permit, but, according to facility representatives, the 8,000-gallon tank has been replaced with a temporary smaller tank.
- One (1) 4,500-gallon aboveground sodium hypochlorite storage tank. It should be noted this tank is listed as 8,000-gallons on the permit, but, according to facility representatives, the 8,000-gallon tank has been replaced with a temporary smaller tank.
- One (1) 600-gallon aboveground diesel fuel storage tank.
- One (1) 275-gallon aboveground diesel fuel storage tank.

During the inspection, facility personnel mentioned that the hydrofluosilic acid (fluoride) and sodium hypochlorite storage tanks both broke which resulted in the facility using smaller 4,500-gallon temporary tanks while the facility works to procure new tanks. Facility representatives noted that the new hydrofluosilic acid (fluoride) tank is expected to be 8,000 gallons and the new sodium hypochlorite tank is expected to be 10,000 gallons. As of the inspection, the facility was still using the temporary 4,500 gallon storage tanks.

Permit Conditions:

The following does not represent all permitted conditions, only the permit conditions that are directly relevant to the inspection. For all the conditions, please review the permit.

- **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 by Cummins. The most recent service inspections by Cummins occurred on August 26, 2024 and May 6, 2025. The reports shows no major issues were noted. The generator received its annual maintenance on May 6, 2025. During this service, a load test was conducted as well as an oil change and the air filters were changed.*
- **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.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 January 21, 2025.*
- **A.12 – This condition states that the facility is required to submit a permit renewal request no later than ninety (90) days prior to permit expiration.** *The facility submitted their permit renewal request on July 31, 2025.*
- **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.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 generator was not exhibiting an opacity during operation.*

- **B.4 - This condition establishes the sulfur dioxide emission limit for the facility.** *The AP-42 SO2 emission factor for diesel fuel combustion is 0.51 lb/MMBtu, and using the required ULSD, the emission factor is 0.0015 lb/MMBtu. Thus, the facility is in compliance.*
- **B.5 – This condition states that equipment ID ES-1 is subject to the general provisions of 40 CFR 60.1 to 60.19 and the standards for compression ignition engines from 40 CFR 60.4200 to 60.4219. As such, the engine shall be certified by the manufacturer. The engine is required to use fuel oil with a maximum sulfur content of 15 ppm and with either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. The facility is required to maintain the subject generator according to manufacturer's specifications over the life of the engine. Each subject generator is required to be equip with a non-resettable hour meter. Non-emergency operations are limited to testing and maintenance only as allowed in 60.4211(e) not to exceed 100 hours. Notification must be made to the Agency if the generator operates for more than 100 hours per year for maintenance and testing. Additionally, the facility is required to notify the Agency in the event the generator operates over 500 hours per year, including hours for testing and maintenance.** *The facility maintains fuel certifications showing only ULSD is used in the generator and submits hours operated annually as well as annual fuel use. The generator operated for 70.9 hours in 2024 and used approximately 451.1 gallons of fuel.*
- **B.6 – This condition states that equipment ID ES-1 is subject to the requirements of 40 CFR 63 Subpart ZZZZ.** *The facility is meeting the requirements of this subpart by meeting the requirements of condition B.5.*
- **B.7 – This condition requires the facility to submit annual reports by February 15th.** *The facility is submitting annual reports as required. The most recent annual report was postmarked on February 14, 2025, received February 18, 2025, and contained all the required information. The facility used 451.1 gallons of fuel during 2024. The generator operated for 70.9 hours during 2024.*

Compliance History:

The facility does not have any history of recorded violations in the last five (5) years.

Conclusion:

Based on the above information, City of Asheville Water Resources Department - DeBruhl 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: _____ **Date:** 8/29/25

Reviewer Signature: _____ **Date:** 10/30/25