Iowa Department of Natural Resources Draft Title V Operating Permit Fact Sheet

This document has been prepared to fulfill the public participation requirements of 40 CFR Part 70 and 567 Iowa Administrative Code (IAC) 22.107(6). 40 CFR Part 70 contains operating permit regulations pursuant to Title V of the Clean Air Act.

The Iowa Department of Natural Resources (DNR) finds that:

1. Cedar Falls Municipal Electric Utility, located at 2506 W 27th St. Cedar Falls, IA 50613 has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Tom Risse.

2. Cedar Falls Municipal Electric Utility is a peak electricity station. This facility consists of 5 emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions
		(Tons per Year)
Particulate Matter (≤ 2.5 µm)	PM _{2.5}	204.13
Particulate Matter (≤ 10 μm)	PM_{10}	204.13
Particulate Matter	PM	947.63
Sulfur Dioxide	SO_2	651.93
Nitrogen Oxides	NO _x	497.36
Volatile Organic Compounds	VOC	12.52
Carbon Monoxide	CO	181.46
Lead	Lead	0
Hazardous Air Pollutants (1)	HAP	1.71

⁽¹⁾ May include the following: Acetaldehyde, Acrolein, Benzene, 1,3-Butadiene, Ethylbenzene, Formaldehyde, Propylene, Propylene Oxide, Toluene, Xylene, PAH, Arsenic, Beryllium, Cadmium, Chromium, Manganese, Mercury, Nickel and Selenium.

- 3. Cedar Falls Municipal Electric Utility submitted a Title V Operating Permit renewal application on January 4, 2024. Based on the information provided in these documents, DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 22.107.
- 4. DNR has complied with the procedures set forth in 567 IAC 22.107, including those regarding public notice, opportunity for public hearing, and notification of EPA and surrounding state and local air pollution programs.

DNR procedures for reaching a final decision on the draft permit:

- 1. The public comment period for the draft permit will run from April 25, 2024 through May 25, 2024. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Zane Peters at the DNR address shown below. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.
- 2. Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Zane Peters at the DNR address shown below.
- 3. DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the renewal application. The responsiveness summary and the final permit will be available to the public upon request.

Zane Peters Iowa Department of Natural Resources - Air Quality Bureau 6200 Park Ave, Suite #200 Des Moines, Iowa 50321 Phone: (515) 808-0458

E-mail: zane.peters@dnr.iowa.gov

DNR concludes that:

- 1. DNR has authority under 455B.133 Code of Iowa to promulgate rules contained in 567 IAC Chapters 20-35, including, but not limited to, rules containing emission limits, providing for compliance schedules, compliance determination methods and issuance of permits.
- 2. DNR has the authority to issue operating permits for air contaminant sources and to include conditions in such permits under 455B.134 Code of Iowa.
- 3. The emission limits included in this permit are authorized by 455B.133 Code of Iowa and 567 IAC Chapters 20-35.
- 4. DNR is required to comply with 567 IAC Chapter 22 in conjunction with issuing a Title V Operating Permit.
- 5. The issuance of this permit does not preclude the DNR from pursuing enforcement action for any violation.

Title V Renewal 3 Review Notes

Facility Name: Cedar Falls Municipal Electric Utility Combustion Turbine Site

Facility #: 07-02-005 EIQ: 92-5630 Permit #: 01-TV-006R4 Reviewer: Zane Peters

Cedar Falls Municipal Electric Utility – Combustion Turbine Station has been in operation since 1968. This is a peak electricity station. This facility includes two combustion turbines, two start-up engines, and an auxiliary generator. This facility is considered one source with the facility's main coal plant and the Municipal Water Utility of the City of Cedar Falls. During peak hours or emergency situations, these combustion turbines can be used to generate electricity for the city of Cedar Falls.

The facility qualifies as a major stationary source for Title V for potential to emit 100tpy or more of any air pollutant for PM_{10} , SO_2 , NO_x and CO. Facility has the potential to emit:

Pollutant	Abbreviation	Potential Emissions
		(Tons per Year)
Particulate Matter (≤ 2.5 µm)	PM _{2.5}	204.13
Particulate Matter (≤ 10 µm)	PM_{10}	204.13
Particulate Matter	PM	947.63
Sulfur Dioxide	SO ₂	651.93
Nitrogen Oxides	NO _x	497.36
Volatile Organic Compounds	VOC	12.52
Carbon Monoxide	CO	181.46
Lead	Lead	0
Hazardous Air Pollutants (Total)	HAP	1.71

(1) May include the following: Acetaldehyde, Acrolein, Benzene, 1,3-Butadiene, Ethylbenzene, Formaldehyde, Propylene, Propylene Oxide, Toluene, Xylene, PAH, Arsenic, Beryllium, Cadmium, Chromium, Manganese, Mercury, Nickel and Selenium.

Applicability Requirements:

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines- The facility must comply with all applicable requirements of this subpart and demonstrate compliance by 5/3/2013. Affect units: 10.20, 10.21, and 10.23.

40 CFR 63 Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines - The Combustion turbines, at this site, are considered "existing" (built in 1968 and 1971) and therefore do not need to meet any applicable requirements as stated in 63.6090(b)(4).

40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines - None of the engines located at the combustion turbine station is subject to this subpart. These engines are old enough to be exempt (1968, 1968, 1974).

40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines - Facility is not subject as it was constructed prior to October 3, 1977. Turbine has also not been modified or reconstructed.

40 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines - Facility is not subject as it was constructed prior to February 18, 2005. Turbine has also not been modified or reconstructed.

Clean Power Rule

40 CFR 60 Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units (This facility is of the source category but not subject because this facility did not commence construction after January 8, 2014 or commence reconstruction after June 18, 2014.)

40 CFR 60 Subpart UUUU - Emission Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units (This facility is of the source category but not subject because rule is a requirement for states, not affected source, to develop a rule that applies to existing EGUs.)

On August 21, 2018, the U.S. Environmental Protection Agency proposed the Affordable Clean Energy (ACE) rule which would establish emission guidelines for states to develop plans to address greenhouse gas emissions from existing coal-fired power plants. The ACE rule would replace the 2015 Clean Power Plan, which EPA has proposed to repeal because it exceeded EPA's authority. The Clean Power Plan was stayed by the U.S. Supreme Court and has never gone into effect.

Changes Since the Last Issuance

General Changes

- Permit number and relevant dates updated
- Permit Contact information updated
- General Conditions updated to the most recent version

Emission Point Specific Changes

- Insignificant Emission Units 10.19 (CT Fuel Tanks) and 10.24 (Combustion Turbine DFO Tank) have been taken out of service due to non-compliance with SPCC regulations. The tanks remain on site but have been taken out of service in full compliance with SPCC requirements. They have been deleted from this renewal permit (pp. 4)
- We need to add the requirement to have the stack characteristics for EP 10.18 corrected and evaluated for increased modeled NOx emissions. Initial screening for a NOx emission increase was done and indicate the current stack diameter being different than the construction permit points to a net increase in NOx conentrations. A construction permit modification is required and remodeling will likely be required. The application for the correction will be 30 days from the issuance of the Title V permit.

Stack Testing

No stack testing requirements at this time.

Periodic Monitoring:

Periodic monitoring requirements were evaluated based on the Department's Periodic Monitoring Guidance. No control equipment is utilized at this facility, therefore no CAM requirements are needed at this time.

Notes:

The previous permit included two insignificant emission point from the vents of two aboveground storage tanks (ASTs) containing #2 diesel fuel. These tanks have been taken out of service due to non-compliance with SPCC regulations. The tanks remain on site but have been taken out of service in full compliance with SPCC requirements. They have been deleted from this renewal

application. Fuel oil is no longer stored on site, but both combustion turbines are permitted to burn fuel oil. EU 10.18 and EU 10.22 are included with two Forms 3.0 (A and B), designating different SCC and fuel types.