



State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

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Reply to: State of Utah
Division of Air Quality
Department of Environmental Quality
Salt Lake City, Utah 84114-4820

DAQE-894-91

November 25, 1991

James Van Orman
Dept. of the Air Force
AFLC
HAFB, Utah 84056-5990

Re: Approval Order; Wording Change to Approval Order Dated June 22, 1988
Davis County CDS A1 NA

Dear Mr. Van Orman:

The above-referenced project has been evaluated and found to be consistent with the requirements of the Utah Air Conservation Rules (UACR) and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this Approval Order (AO) reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality AO authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order:

1. Hill Air Force Base shall install and operate the boilers in Building 260 according to the information submitted in the Notice of Intent dated June 22, 1988.

A copy of this AO shall be posted on site and shall be available to the employees who operate the air emission producing equipment. All employees who operate the air emission producing equipment shall receive instruction as to their responsibilities in operating the equipment in compliance with all of the relevant conditions.

2. The approved installations shall consist of two Cleaver Brooks DL-86 boilers rated at 87.5 million BTU/hr each. The boiler installations shall be complete with Cleaver Brooks low-NO_x burner design.
3. This AO shall replace the AO dated June 22, 1988.

4.2.4-823

4. Visible emissions from any point or fugitive emission source associated with the installation or control facilities shall not exceed 20% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.
5. The combined total natural gas consumed for the two boilers shall not exceed 809.1 million standard cubic feet per 12-month period without prior approval from the Executive Secretary in accordance with R446-1-3.1, UAC. Compliance with the annual limitation shall be determined on a rolling 12-month total. Based on the first day of each month a new 12-month total shall be calculated using the previous 12 months. Records of consumption/production shall be kept for all periods when the plant is in operation. Records of consumption/production shall be made available to the Executive Secretary or his representative upon request and shall include a period of two years ending with the date of the request. Production/Consumption shall be determined by calculations based on meter readings and/or examination of fuel bills. The records shall be kept on a monthly basis.
6. The owner/operator shall use only natural gas as a primary fuel and No. 2 Fuel Oil as a backup fuel in the boilers approved by this AO. If any other fuel is to be used, an AO shall be required in accordance with R446-1-3.1, UAC.
7. The sulfur content of any fuel oil burned shall not exceed 0.85 pounds of sulfur per million BTU heat input as determined by ASTM Method D-4294-89 approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary.
8. Emissions to the atmosphere from the indicated emission point shall not exceed the following rates and concentrations:

A.	PM ₁₀	0.0053	lb per 10 ⁶ BTU heat input
B.	NO _x	0.10	
C.	CO	0.0038	
D.	VOC	0.004	

A stack test for any or all of the above pollutants shall be performed if directed by the Executive Secretary.

Notification

The applicant shall provide a notification of the test date at least 45 days prior to the test. A pretest conference shall be held if directed by the Executive Secretary. It shall be held at least 30 days prior to the test between the owner/operator, the tester, and the Executive Secretary. The emission point shall be

designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approvable access shall be provided to the test location.

PM₁₀

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. The back half condensibles shall also be tested using the method specified by the Executive Secretary.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using the method specified by the Executive Secretary. All particulate captured shall be considered PM₁₀.

The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

Sample Location

40 CFR 60, Appendix A, Method 1, if required by test method used

Volumetric flow rate

40 CFR 60, Appendix A, Method 2, if required by test method used

Nitrogen oxides

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E

Volatile organic compounds

40 CFR 60, Appendix A, Method 25

Carbon monoxide

40 CFR 60, Appendix A, Method 10

Calculations

To determine mass emission rates (lbs/hr, etc.), the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the production rate listed in this Approval Order. For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous 3 years.

9. All records referenced in this AO or in an applicable NSPS or NESHAPS, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or his representative upon request.
10. All installations and facilities authorized by this AO shall be adequately and properly maintained. The owner/operator shall comply with R446-1-3.5 and 4.7, UAC. R446-1-3.5, UAC addresses emission inventory reporting requirements. R446-1-4.7, UAC addresses unavoidable breakdown reporting requirements. The owner/operator shall calculate/estimate the excess emissions whenever a breakdown occurs. The sum total of excess emissions shall be reported to the Executive Secretary for each calendar year no later than January 31 of the following year.
11. The owner/operator of any new major source or major modification anywhere in Utah shall submit to the Executive Secretary an emergency plan within 60 days of the date of this AO. The plan shall identify what control/production measures the owner/operator shall implement when an emergency episode is declared by the Executive Director of the Department of Environmental Quality. Specific control/production measures shall be outlined for all three levels (Alert, Warning, Emergency). The values for the various levels are listed in R446-1-5, UAC. The emergency plan shall approved by the Executive Secretary.

Any future modifications to the equipment approved by this order must also be approved in accordance with R446-1-3.1.1, UAC.

Mr. Van Orman
November 25, 1991
Page 5

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the Utah Air Conservation Rules.

Annual emissions for these boilers are currently calculated at the following values:

- A. 2.02 tons/yr for Particulate
- B. 1.21 tons/yr for PM₁₀
- C. 0.24 tons/yr for SO₂
- D. 37.62 tons/yr for NO_x
- E. 1.50 tons/yr for VOC
- F. 14.16 tons/yr for CO

The annual emissions for the entire base are not quantified at this time. These calculations are for the purposes of determining the applicability of PSD and nonattainment area major source requirements of the UAC. They are not to be used for the purposes of determining compliance.

Sincerely,


F. Burnell Cordner, Executive Secretary
Utah Air Quality Board

FBC:DJ:cl

cc: EPA Region VIII, Mike Owens
Davis County Health Department