



DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

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Reply to: State of Utah

Division of Air Quality

P.O. Box 144820

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August 20, 1993

DAQE-0719-93

James R. Van Orman
Hill Air Force Base
OO-ALC/EM
7276 Wardleigh Road
Hill Air Force Base, Utah 84056-5127

Re: Approval Order for Air Permit for Emergency Power Generators
Davis County CDS A2 NA Title V

Dear Mr. 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.

General Conditions:

1. This AO applies to the following organization:

Headquarters, Ogden Air Logistics Center OO-ALC/EM (AFMC)
7276 Wardleigh Road
Hill Air Force Base, Utah 84056-5127

The emergency power generating equipment listed in Attachment 1 of this AO shall be operated at the specified locations listed in the attachment.

Universal Transverse Mercator (UTM) Coordinate System: 4,552,000 meters Northing,
418,000 meters Easting (Modeling will require more accurate UTM coordinates)

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the UACR, Utah Administrative Codes (UAC), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.
3. Hill Air Force Base (HAFB) shall install and operate the 81 emergency generators, as listed in Attachment 1 of this AO, according to the information submitted in the Notice

4.2.4-559

of Intent dated April 1, 1993, and the Notices of Intent associated with the generator engines operating under current AOs.

4. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive instruction as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.
5. The approved installations shall consist of the 81 emergency generators as listed in Attachment 1 to this AO.
6. This AO shall replace all conditions regarding generators that are listed in Attachment 1 that have a valid AO. These AOs are dated January 4, 1993 (DAQE-1171-92), May 22, 1992 (DAQE-492-92), November 22, 1988 (BAQE-585-88), June 15, 1988 (BAQE-260-88), June 15, 1988 (BAQE-257-88), March 10, 1983, and March 20, 1980.

Limitations and Tests Procedures

7. Visible emissions from any emergency generator emission source associated with this AO shall not exceed 20% opacity after warm-up. Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.
8. All emergency generators listed in Attachment 1 shall be limited to 100 operating hours per 12-month period for each generator engine. This limit shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC.

Compliance with the annual limitations 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 data from the previous 12 months. Records of operating hours shall be kept for all periods when the generators are in operation. Records of operating hours 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. Operating hours shall be determined by engine operating hour meters. The records shall be kept on a monthly basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

9. Any or all of the diesel emergency power generator engines listed in Attachment 1 shall be stack tested for NO_x emissions if directed by the Executive Secretary. The emission rate/concentration shall not exceed 14 grams of NO_x per horsepower-hour. The test method used shall be 40 CFR 60, Appendix A, Method 7 (all Method 7 tests are acceptable test methods). 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 exhaust stack need not be designed to accommodate testing. However, if the Executive Secretary determines a stack test is necessary, whatever modifications needed to meet the requirements of 40 CFR 60, Appendix A, Method 1, and to provide Occupational Safety and Health Administration (OSHA) approvable access to the test location shall be retrofitted to the emission point.

The horsepower output during all compliance testing shall be no less than 90% of rated horsepower (KW) rating per engine.

Fuels

10. The sulfur content of any diesel fuel oil used in the emergency generator engines shall not exceed 0.50 percent by weight (0.05% when available). Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary.

Construction Limitations

11. Eighteen months from the date of this AO, the Executive Secretary shall be notified in writing of the status of this project. If installation of all generators are complete and operation has commenced a notice is not required.
12. All records referenced in this AO, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or his representative upon request.
13. All installations and facilities authorized by this AO shall be adequately and properly maintained. All pollution control vendor recommended equipment shall be installed, maintained, and operated. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All necessary equipment control and operating devices, such as pressure gauges, amp meters, volt meters, flow rate indicators, temperature gauges, continuous emission monitors (CEMs), etc., shall be installed and operated properly and easily accessible to compliance inspectors.
14. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements.
15. The owner/operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. The owner/operator shall calculate/estimate the excess emissions whenever a breakdown occurs. The total of excess emissions shall be reported to the Executive Secretary as directed for each calendar year.
16. The owner/operator has submitted to the Executive Secretary an emergency plan dated October 5, 1990. This plan should 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.

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

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 UACR.

Annual emissions for this source (all emergency generators located on the contiguous confines of Hill AFB) are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	Particulate	2.86
B.	PM ₁₀	2.86
C.	SO ₂	2.66
D.	NO _x	40.07
E.	CO	8.67
F.	VOC	3.21
G.	Aldehydes	0.60

These calculations are for the purposes of determining the applicability of the prevention of significant deterioration and nonattainment area major source requirements of the UACR.

In accordance with the requirements of Title V of the 1990 Clean Air Act, the following pollutants may be subject to an operating permit fee. Both the fees rate and the class of pollutants are subject to change by the state, the federal agencies, or both.

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	TSP	2.86 ton/yr
B.	SO _x	2.66 ton/yr
C.	NO _x	40.07 tons/yr

Sincerely,



Russell A. Roberts, Executive Secretary
Utah Air Quality Board

RAR:HGN:sbq

cc: Davis County Health Department