



DEPARTMENT OF HEALTH  
DIVISION OF ENVIRONMENTAL HEALTH

BAQE-039-91

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February 7, 1991

James R. Van Orman  
Director, Environmental Management  
Department of the Air Force  
Headquarters Ogden Air Logistics Center  
Hill Air Force Base, Utah 84056-5990

Re: Approval Order for Building 1701 - Dip Tank, Bake Oven, Paint Booths  
Davis County CDS Al

Dear Mr. Van Orman:

The above-referenced project has been evaluated and found to be consistent with the requirements of the Utah Air Conservation Regulations (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 reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality approval order 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, located in Davis County, shall make the following changes according to the information submitted in the notice of intent dated April 27, 1990, and a letter from Hill Air Force Base dated December 21, 1990:
  - A. The owner/operator shall install a dip tank, 370 gallon capacity cylindrical tank, with dimensions of 4 feet in diameter and 4 feet high. The tank shall be equipped with a sealed clam-type lid, an outside pump for agitation, an electric heater, and a cover with a vent.
  - B. The owner/operator shall remove paint booth #1 and replace it with a Devilbiss Model ASEY-914-34 paint spray booth or equivalent. Equivalency shall be determined by the Executive Secretary. The booth shall be equipped with dry paint arrestor filters.

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- C. The owner/operator shall remove paint booth #3 and replace it with two end-to-end paint spray booths. The booths shall be equipped with dry paint arrestor filters and High Volume Low Pressure (HVLP) type spray guns.
  - D. The owner/operator shall remove the electric powered bake oven and replace it with an oven fired by natural gas with a total heat input rate not to exceed two million BTU/hr.
2. Visible emissions from any point or fugitive emission source associated with the above emission points shall not exceed 10% opacity. Opacity observation of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.
3. The following operation limits for the bake oven shall not be exceeded without prior approval in accordance with Section 3.1, UACR:
- A. 2.2 million scf of natural gas per 12 month period
  - B. 2.0 million BTU/hr heat input
  - C. 8 hours per day
  - D. 1000 hours of operation per 12 month period

Compliance with the annual limitations shall be determined on a rolling monthly total. On the first day of each month a new 12-month total shall be calculated using the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Records of 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. Fuel consumption for the bake oven shall be determined by the use of records from a fuel meter. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

4. The total VOC emissions from sources listed in this approval order shall not exceed 4.70 tons per 12-month period without prior approval in accordance with Section 3.1, UACR. Compliance with the limitation shall be determined using a material balance procedure on a rolling monthly total. On the first day of each month a new 12-month total shall be calculated using the previous 12 months. The total VOC emissions shall be determined by maintaining a record of paints, varnishes, thinners, and solvents used, and of operation parameters from other affected VOC emissions sources. The record shall include the following data for each item used:

- A. Name of paint, varnish, thinner, or solvent
- B. Weight in pounds per gallon
- C. Percent VOC by weight
- D. Amount used on a daily basis

Records of consumption shall be kept for all periods when the plant is in operation. Records of consumption shall be made available to the Executive Secretary upon request, and shall include a period of two years ending with the date of the request. The VOC emissions from paints/thinners shall not exceed 4.69 tons per 12 month period. The VOC emissions from other processes shall not exceed 0.01 tons per 12 month period.

Voc emissions shall be determined by the following manner:

$$\text{VOC} = (\% \text{ Volatile by Weight} / 100) * (\text{Density lb/gal}) * (\text{Gallons Consumed}) / (2,000 \text{ lb/ton})$$

The VOC content in pounds for each individual item or surface coating used shall be calculated, and then the total of all items shall be summed, such that the cumulative total shall not exceed the 4.69 tons per 12 month period as specified.

5. All paint spray booths shall be equipped with a set of paint arrestor particulate filters or equivalent to control particulate emissions. All air exiting any booth shall pass through a paint arrestor control system before being vented to the atmosphere. Equivalency shall be determined by the Executive Secretary.
6. The owner/operator shall operate the dip tank in following manner:
  - A. The cover shall remain closed at all times except during actual loading, unloading, or transfer operations.
  - B. Parts shall be completely drained in the internal draining rack until all dripping ceases.
  - C. Waste or used varnish shall be stored in covered containers and disposed by a method which prevents VOC emissions to the atmosphere.
  - D. Tanks, containers, and all associated equipment shall be maintained in good operating condition, and leaks shall be repaired immediately.
  - E. Written procedures for the operation and maintenance of the dip tank shall be posted in an accessible and apparent location near the equipment.

7. Eighteen months from the date of this approval order the Executive Secretary shall be notified in writing of the status of construction of this project unless the construction is complete and operation has commenced.
8. A copy of this approval order 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 the appropriate and relevant conditions.
9. All installations and facilities authorized by this approval order shall be adequately and properly maintained.
10. The Executive Secretary shall be notified in writing upon start-up of the installation, as an initial compliance inspection is required.

Any future modifications to the equipment approved by this order must also be approved in accordance with Section 3.1.1, UACR.

This approval order 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 Regulations.

Annual emissions for sources listed in this approval order are calculated at 0.01 tons/yr for particulates, 0.01 tons/yr for PM<sub>10</sub>, 0.0006 tons/yr for SO<sub>2</sub>, 0.10 tons/yr for NO<sub>x</sub>, 0.02 tons/yr for CO, and 4.70 tons/yr for VOC. These calculations are for the purposes of determining the applicability of PSD and nonattainment area major source requirements of the UACR. Except for VOC, they are not to be used for purposes of determining compliance.

Sincerely,



F. Burnell Cordner, Executive Secretary  
Utah Air Conservation Committee

FBC:TB:jiw

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