



DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF AIR QUALITY

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DAQE-163-96

February 9, 1996

James R. Van Orman  
Hill Air Force Base  
Headquarters  
Ogden Logistics Center (AFMC)  
Hill Air Force Base, Utah 84056

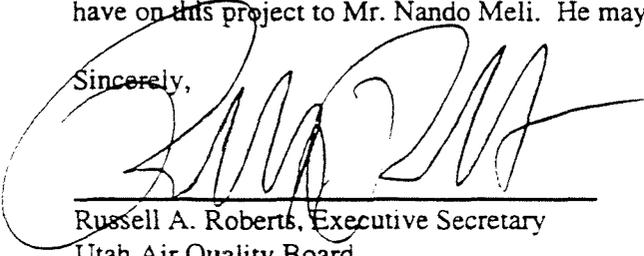
Dear Mr. Van Orman:

Re: Approval Order for Medium Pressure Water & Chemical Paint Stripping of Aircraft  
Davis County, CDS-A1, Non-Attainment, Title V

The attached document is an Approval Order for the above referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Nando Meli. He may be reached at (801) 536-4052.

Sincerely,



Russell A. Roberts, Executive Secretary  
Utah Air Quality Board

RAR:NM:aj

cc: Davis County Health Department  
28 East State Street  
POB 618  
Farmington, UT 84025-618



4.2.4-7

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**APPROVAL ORDER FOR MEDIUM PRESSURE WATER &  
CHEMICAL PAINT STRIPPING OF AIRCRAFT**

**Prepared By: Nando Meli, Engineer  
801-536-4052**

**APPROVAL NUMBER**

**DAQE-163-96**

**Date: February 9, 1996**

**Source**

**Hill Air Force Base**

**James R. Van Orman  
801-777-2050**

**Russell A. Roberts  
Executive Secretary  
Utah Air Quality Board**

*Abstract*

*Hill Air Force Base (HAFB) is requesting approval to use a Medium Pressure Water (MPW) stripping system to strip paint off of aircraft. In the past a chemical paint stripping method using methylene chloride was used to strip paint off an aircraft. The VOC and Hazardous Air Pollutants will be less when the MPW system is utilized. The VOC emissions in building 206 from the Medium Pressure Water and Chemical Paint Stripping operations shall be 5.41 tons per 12-month period.*

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 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 company:

Facility Location

Department of the Air Force  
Headquarters Ogden Logistics Center (AFMC)  
Hill Air Force Base, Utah

PHONE NUMBER (801) 777-0359  
FAX NUMBER (801) 777-6742

The equipment listed below in this AO shall be operated at the following location:

PLANT LOCATION:

East of Exit 336 on Interstate 15

Universal Transverse Mercator (UTM) Coordinate System:  
4,551 kilometers Northing; 418 kilometers Easting; Zone 12

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 (AFB) shall install and operate the Medium Pressure Water & Chemical Paint Stripping of Aircraft in Building 206 according to the terms and conditions of this AO as requested in the Notice of Intent dated November 27, 1995, and additional information submitted to the Executive Secretary dated December 7, 1995.

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 following equipment or equivalent:
  - A. Aqua Miser Medium Pressure Water Paint Strippers
  - B. Air Operated Drum Pumps and Spray Wands with non-atomizing tips

\* Equivalency shall be determined by the Executive Secretary.

#### Limitations and Tests Procedures

6. Visible emissions from any stationary point or fugitive emission source associated with the source or with the control facilities shall not exceed 10% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.
7. The following production limits shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC:
  - A. 3300 gallons of Paint Stripper per rolling 12-month period
  - B. 150,000 lbs of Sodium Bicarbonate per rolling 12-month period

Compliance with the annual limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total based on the first day of each month using data from the previous 12 months. This total shall be calculated by the tenth day of the following month. Records of consumption shall be kept for all periods when the plant is in operation. Records of consumption, including rolling 12-month totals 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. Consumption shall be determined by purchase records and operations log. The records shall be kept on a daily basis.

#### Fugitive Dust

8. The moisture content of the material used containing sodium bicarbonate shall be maintained at a minimum of 80.0% by weight as the material is blasted from the Aqua Miser. All of the sodium bicarbonate shall be periodically swept or sprayed clean from all surface areas as dry conditions warrant or as determined necessary by the Executive Secretary. The moisture content shall be tested if directed by the Executive Secretary using the appropriate American Society of Testing and Methods (ASTM) method.

Volatile Organic Compound (VOC) Limitations

9. The facility shall abide by all applicable requirements of UAC R307-14 for volatile organic compound (VOC) sources located in an ozone Nonattainment area. At a minimum, RACT control measures are required and BACT will be no less stringent than RACT. These requirements include but are not limited to:

"14-5.A.(5) Written procedures for the operation and maintenance of the degreasing or solvent cleaning equipment shall be permanently posted in an accessible and conspicuous location near the equipment."

The full text of UAC R307-14 is included as Appendix A. However, to be in compliance, this facility must operate in accordance with the most current version of R307-14 or the applicable section(s), if renumbered.

10. The emissions of VOCs in building 206 from the Medium Pressure Water and Chemical Paint Stripping operations, etc. and associated operations shall not exceed:

5.41 tons per rolling 12-month period for VOCs

This value shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC. Compliance with the 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 data from the previous 12 months.

The emissions of VOCs emitted to the atmosphere from Building 206 shall be determined by maintaining a record of volatile organic compound potential contained in materials used each month. The record shall include the following data for each item used:

- A. Name of the VOC emitting material, such as: paint, adhesive, solvent, thinner, reducers, chemical compounds, isocyanates, etc.
- B. The weight and use location of the volatile organic compound potential and hazardous air pollutant potential of the material(s) listed in A in pounds per gallon.
- C. Percent by weight of all volatile organic compound potential and hazardous air pollutant potential for each individual material listed in A. The percent by weight of the volatile and hazardous air pollutant potentials can be obtained from the manufacturers' MSDSs. The owner/operator can obtain MSDS data from the manufacturers of the materials and retain the information on-site.
- D. Amount and location of materials containing VOCs used on a monthly basis and summed for every location and for the entire plant each month.
- E. To calculate the above potentials contained in the material listed in D use the following procedure:

$$\text{VOC} = \frac{(\% \text{ Volatile by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times \frac{(\text{Gal Consumed})}{(2,000 \text{ lb})} \times (1 \text{ ton})$$

- F. The amount of volatile organic content potential (potential air emissions) and hazardous air pollutant potential (potential air emissions) in pounds contained in materials deposited as solid or hazardous waste for the month shall be quantified, and can be subtracted from the quantities calculated above. This is done to allow quantification by the source of the total VOCs emissions. (The assumption is that all the two above potentials of the materials applied to a product evaporate and are therefore considered emissions).
- G. Records of consumption of VOCs 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.
11. This source is a major Title V source needing an Operating Permit. It is required to pay an annual emission fee upon start-up, or if an existing facility, upon issuance of this AO. The fee will be based on calculated annual emissions listed at the end of this AO. This fee is valid until inventory data for one year are available for the source. The owner or operator of this source will be billed upon start-up for all emissions that are considered "chargeable" as of that date.

#### Records & Miscellaneous

12. 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, etc., shall be installed and operated properly and easily accessible to compliance inspectors. A copy of all manufacturers' operating instructions for pollution control equipment and pollution emitting equipment shall be kept on site. These instructions shall be available to all employees who operate the equipment and shall be made available to compliance inspectors upon their request.
13. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements.
14. 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. All excess emissions shall immediately be reported to the Executive Secretary. The total of excess emissions shall be reported to the executive secretary as directed for each calendar year.

15. 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 and shall include a period of two years ending with the date of the request. All records shall be kept for a period of two years. Examples of records to be kept at this source shall include the following as applicable:

- A. Production rate (Condition number 7)
- B. VOC consumption records (Condition number 10)
- C. Maintenance records (Condition number 12)
- D. Upset, breakdown episodes (Condition number 14)

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 from the Medium Pressure Water & Chemical Paint Stripping of Aircraft in Building 206 are currently calculated at the following values:

<u>Pollutant</u>	<u>Tons/yr</u>
PM <sub>10</sub> .....	0.65
VOC .....	5.41

These calculations are for the purposes of determining the applicability of Prevention of Significant Deterioration and nonattainment area major source requirements of the UACR. Except for VOC's they are not to be used for purposes of determining compliance.

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. Emissions of the following pollutants from all sources, including pre-November 19, 1969 sources, may be subject to the operating permit fee. Both the fees rate and the class of pollutants are subject to change by State, the federal agencies, or both.

<u>Pollutant</u>	<u>Tons/yr</u>
PM <sub>10</sub> .....	0.65
VOC .....	5.41

Approved By:

  
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Russell A. Roberts, Executive Secretary  
Utah Air Quality Board