



State of Utah

GARY R. HERBERT
Governor

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Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

DAQE-AN0125380004-09

November 2, 2009

Buddy O'Neal
Liberty Safe and Security Products, Inc.
1199 West Utah Ave
Payson, UT 84651

Dear Mr. O'Neal:

Re: Approval Order: Modification to DAQE-AN0125380003-07 by Increasing HAP Emissions
Utah County; CDS B; Nonattainment or Maintenance Area
Project Number: N012538-0004

The attached document is the 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. The project engineer for this action is Tim DeJulis, who may be reached at (801) 536-4012.

Sincerely,

M. Cheryl Heying, Executive Secretary
Utah Air Quality Board

MCH:TDJ:sa

cc: Utah County Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**APPROVAL ORDER: Modification to DAQE-AN0125380003-07
by Increasing HAP Emissions**

**Prepared By: Tim DeJulis, Engineer
Phone: (801) 536-4012
Email: tdejulis@utah.gov**

APPROVAL ORDER NUMBER

DAQE-AN0125380004-09

Date: November 2, 2009

**Liberty Safe and Security Products, Inc.
Payson Manufacturing Plant
Source Contact:
Mr. Buddy O'Neal, Director of Engineering
Phone: (801) 925-1000**

**M. Cheryl Heying
Executive Secretary
Utah Air Quality Board**

Abstract

Liberty Safe and Security Products, Incorporated (Liberty Safe), owner and operator of the Payson manufacturing plant has requested modifications to DAQE-AN0125380003-07 by increasing HAP emissions. The formulation of several coating products has changed resulting in an increase in potential styrene emissions. Liberty Safe is not increasing production levels or coating product consumption.

The emissions, in tons per year, will change as follows:
VOC (+ 0.12), HAPs (+ 0.12)

The changes in emissions will result in the following potential to emit totals, in tons per year:
PM₁₀ = 0.19, NO_x = 4.25, SO₂ = 0.02, CO = 0.60, VOC = 28.45, HAPs = 14.54

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. This AO is issued to, and applies to the following:

Name of Permittee:

Liberty Safe and Security Products, Inc.
1199 West Utah Ave
Payson, UT 84651

Permitted Location:

Payson Facility
1199 West Utah Ave
Payson, UT 84651

UTM coordinates: 435,790 m Easting, 4,432,190 m Northing
SIC code: 3499 (Fabricated Metal Products, NEC)

Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]

- I.6 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
- I.7 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

- II.A.1 **Manufacturing Plant**
Safe and Security Products
- II.A.2 **Comfort Heaters**
Various natural gas fueled comfort heating devices rated less than 5,000,000 Btu/hr - each

Listed for information purposes only.
- II.A.3 **Paint Booths**
Seven (7) Spray Booths
- II.A.4 **Powder Coating Booths**
Six (6) Powder Coating Booths

II.B Requirements and Limitations

- II.B.1.a Visible emissions from the following emission points shall not exceed the following values:

All spray booth exhaust stacks - 10% opacity
All powder coating booth exhaust stacks - 10% opacity
All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401-8, R307-309]
- II.B.1.b The following limit shall not be exceeded:

50,000 decatherms of natural gas consumed per rolling 12-month period

Based on the first day of each month, a new 12-month total shall be calculated using data from the previous 12 months. Monthly calculations shall be made no later than 20 days after the end of each calendar month. Records of fuel consumption shall be kept for all periods when the plant is in operation. Fuel consumption shall be determined by examination of fuel supplier billing records. The records of fuel consumption shall be kept on a monthly basis. [R307-401-8]

II.B.1.c The emissions from all plant-wide operations shall not exceed:

- 28.45 tons per rolling 12-month period for VOCs
- 4.06 tons per rolling 12-month period for Xylene
- 4.01 tons per rolling 12-month period for Methyl Isobutyl Ketone
- 3.47 tons per rolling 12-month period for Toluene
- 1.85 tons per rolling 12-month period for Naphthalene
- 0.96 tons per rolling 12-month period for Ethyl Benzene
- 0.12 tons per rolling 12-month period for Styrene
- 0.07 tons per rolling 12-month period for Methanol

Compliance with each 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. Monthly calculations shall be made no later than 20 days after the end of each calendar month.

The VOC or HAP emissions shall be determined by maintaining a record of VOC or HAP emitting materials used each month. The record shall include the following data for each material used:

- A. Name of the VOC, or HAPs emitting material, such as: paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
- B. Density of each material used (pounds per gallon)
- C. Percent by weight of all VOC, or HAP in each material used
- D. Gallons of each VOC, or HAP emitting material used
- E. The amount of VOC, or HAP emitted monthly by each material used shall be calculated by the following procedure:

$$\text{VOC} = \% \text{ VOC by Weight} / 100 \times [\text{Density (lb/gal)}] \times \text{Gal Consumed} \times 1 \text{ ton} / 2000 \text{ lb}$$

$$\text{HAP} = \% \text{ HAP by Weight} / 100 \times [\text{Density (lb/gal)}] \times \text{Gal Consumed} \times 1 \text{ ton} / 2000 \text{ lb}$$

- F. The amount of VOC, or HAP emitted monthly from all materials used
- G. The amount of VOCs, or HAPs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above to provide the monthly total VOC, or HAP emissions.
- H. VOC or HAP emissions from the fuel burning devices (products of incomplete combustion generated by the comfort heating devices) are NOT included in the above total. [R307-401-8]

II.B.1.d All exhaust air from all spray booths and powder coating booths shall pass through particulate filters, installed in each booth, prior to being discharged to the atmosphere. [R307-401-8]

PERMIT HISTORY

This AO is based on the following documents:

Is Derived From
Supersedes

NOI submitted dated June 8, 2009
DAQE-AN0125380003-07 dated November 30, 2007

ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO _x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM ₁₀	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO ₂	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds