

**TECHNICAL REVIEW AND EVALUATION**  
**OF**  
**AIR QUALITY PERMIT # 50304**

**U.S. Bureau of Customs and Border Protection**

**I. INTRODUCTION**

This air quality control renewal permit is for the continued operation of a contraband incinerator at the Port of San Luis, Highway 95 and the international border in San Luis, Yuma County, AZ 85439. This is a renewal of Air Quality Permit No. 30510.

**Company Information**

**A. Mailing Address:**

U.S. Bureau of Customs & Border Protection  
P.O. Box 7050  
San Luis, AZ 85349

**B. Facility Address:**

Port of San Luis  
Highway 95 and International Border  
San Luis, AZ 85439

**II. FACILITY DESCRIPTION**

**Equipment**

The U.S. Bureau of Customs and Border Protection, herein referred to as the Bureau, operates the following equipment:

Type: Multi-sate incinerator  
Use: Destruction of contraband seized by the Bureau  
Model: Incinerator International Inc., Model 300-CA  
Rating: 300 lbs/hr  
Fuel: Natural gas or propane

**Process Description**

Contraband, mostly biomaterial, is loaded into the two chambered batch incinerator, where it is reduced to ash at a temperature of 1800 degrees Fahrenheit. The ash is then collected, bagged and removed to a solid waste landfill.

### III. LEARNING SITES IN VICINITY

In accordance with ADEQ's Environmental Permits and Approvals Near Learning Sites Policy, the Department conducted an evaluation to determine if any nearby learning sites would be adversely impacted by the facility. Learning sites consist of all existing public schools, charter schools and private schools the K-12 level, and all planned sites for schools approved by the Arizona School Facilities Board. The learning sites policy was established to ensure that the protection of children at learning sites is considered before a permit approval is issued by ADEQ.

The Department identified 9 learning sites within a two mile radius of the U.S. Bureau of Customs & Border Protection, located at Highway 95 and International Border, San Luis, AZ 85439. The impacted schools are PPEP Tec-Cesar Chavez Learning Center, Rio Colorado Elementary School, San Luis Middle School, San Luis Pre-School, Arizona Desert Elementary School, Cesar Chavez Elementary, Southwest Junior High School, Ed Pastor Elementary 4 and San Luis High School.

The Department has reviewed the emission sources at the facility and has determined that the operation of the facility will not adversely affect the learning sites.

### IV. COMPLIANCE HISTORY

There have been no inspections, no Air Quality cases or violations for this facility.

### V. EMISSIONS

The emissions calculations for the permit review process relied upon emission factors drawn from the Environmental Protection Agency (EPA) Compilation of Air Pollution Emission Factors (AP-42) for modular, starved air combustor from Table 2.1-9. The potential to emit emissions are shown below:

<b>Pollutant</b>	<b>Uncontrolled Emissions (tpy)</b>
<b>PM</b>	2.25
<b>CO</b>	0.20
<b>SO<sub>2</sub></b>	2.12
<b>NO<sub>x</sub></b>	2.08
<b>HCl</b>	1.41

### VI. APPLICABLE REGULATIONS

The Permittee has identified the applicable regulations that apply to each unit in its permit application. The following table summarizes the findings of the Department with respect to the regulations that are applicable to each emissions unit. Previous permit conditions are discussed under Section VII of this technical review document.

## Applicable Regulations

Unit ID	Year of Manufacture	Control Equipment	Applicable Regulations	Verification
Incinerator	1994	N/A	<u>A.A.C.</u> R18-2-704.A R18-2-704.B.1 R18-2-704.D R18-2-704.E R18-2-704.F.1 R18-2-704.F.2	Standards of performance for incinerators. This section is applicable to incinerators.  According to Code of Federal Regulations Subpart FFFF Condition 60.2993(p), the incinerator is excluded from this subpart because it is owned and operated by a police entity and used to destroy contraband.
Fugitive Dust Sources	N/A	Water and other reasonable precautions	<u>A.A.C.</u> R18-2-2-702 Article 6	These standards are applicable to all fugitive dust sources.
Mobile Sources	N/A	Water Sprays/Water Truck for dust control	<u>A.A.C.</u> Article 8	This Article is applicable to off-road mobile sources, which either move while emitting air pollutants or are frequently moved during the course of their utilization.
Spray Painting Operations	N/A	N/A	<u>A.A.C.</u> R18-2-727	This standard is applicable to any spray-painting operation.
Demolition/Renovation Operations	N/A	N/A	<u>A.A.C.</u> R18-2-1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.
Abrasive Blasting	N/A	N/A	<u>A.A.C.</u> R18-2-726 R18-2-702.B	This standard is applicable to any activity related to abrasive blasting operations.

## VII. PREVIOUS PERMIT CONDITIONS

### A. Previous Permits

The following table lists the previous permits that have been issued to the U.S. Bureau of Customs & Border Protection.

**Previous Permits**

Date Permit Issued	Permit #	Application Basis
September 15, 2004	30510	Operating Permit

**B. Previous Permit Conditions**

The following are discussions on the previous permits that have been issued to the source.

**CLASS II, NON-TITLE V OPERATING PERMIT NO. 30510**

This operating permit was issued to U.S. Bureau of Customs & Border protection on September 15, 2004, to operate a contraband incinerator.

OP #30510, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. A.	X				General provisions - Revised to represent most recent language
Att B.I.			X		Relationship of permit to applicable state implementation plan-Deleted because this is a renewal permit.
Att B.II.A		X			Facility Wide Limitations-Operating Limitation-Revised to represent most recent language.
Att B.II.B		X			Facility Wide Limitations-Recordkeeping Requirements-Revised to represent most recent language.
Att B.II.C		X			Facility Wide Limitations-Reporting Requirements-Revised to represent most recent language.
Att B.III.A		X			Incinerator Requirements-Operating Limitation-Fuel limitation and recordkeeping for the type of fuel used to fire the incinerator. Language was retained.
Att B.III.B		X			Incinerator Requirements-Opacity & Particulate Matter-Emission limitations, monitoring requirements, recordkeeping requirements and testing requirements for the incinerator. Meets requirements in A.A.C. R18-2-704. Revised to represent most recent language.

OP #30510, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att B.IV	X				Conditions Specific to Non-Point Sources-Section has been renamed to Fugitive Dust Requirements. Revised to represent most recent language.
Att B.V	X				Conditions Specific to Mobile Sources-Revised to represent most recent language.
Att C	X				Equipment List-The equipment list was updated to be current.

**VIII. MONITORING AND TESTING REQUIREMENTS**

**A. Opacity Monitoring Requirements**

The Permittee is required to maintain records of the dates on which any reasonable precaution to prevent excessive amounts of particulate matter from becoming airborne is taken.

In addition, a certified EPA Reference Method 9 observer is required to conduct a quarterly survey of visible emissions from the incinerator. If the observer sees a plume that on an instantaneous basis appears to exceed 20%, then the observer is required to take an EPA Reference Method 9 observation of the plume. If the opacity of the plume is less than 20%, then the observer is required to make a record of the location, date and time of the observation and the results of the EPA Reference Method 9 observation. If the opacity of the plume exceeds 20%, then the Permittee is required to adjust or repair the controls or equipment to reduce opacity to below 20% and report it as an excess emission.

**B. Particulate Matter Testing Requirements**

The Permittee is required to conduct a performance test to demonstrate compliance with the 0.1 grains per cubic foot particulate matter limit in the first year of the permit term.

**IX. AMBIENT AIR QUALITY IMPACT ANALYSIS**

ADEQ performed an in-house air quality impact analysis in September of 2004. The result of this NAAQS analysis demonstrated compliance with the standards. The emissions and location of the incinerator has not changed since the modeling analysis conducted in September 2004. Therefore a modeling analysis is not being conducted for this permit renewal.

**X. LIST OF ABBREVIATIONS**

- A.A.C.....Arizona Administrative Code
- ADEQ..... Arizona Department of Environmental Quality
- AP-42.....EPA’s Compilation of Air Pollution Emission Factors
- CO .....Carbon Monoxide
- EPA ..... Environmental Protection Agency
- ft.....Feet

hr..... Hour  
 lb..... Pound  
 MCR..... Maricopa County Rule  
 MMBtu/hr..... Million British Thermal Units per Hour  
 NAAQS..... National Ambient Air Quality Standards  
 NO<sub>x</sub>..... Nitrogen Oxide  
 P.C.C..... Pima County Code  
 PM..... Particulate Matter  
 PM<sub>10</sub>..... Particulate Matter Nominally less than 10 Micrometers  
 PTE..... Potential-to-Emit  
 SO<sub>2</sub>..... Sulfur Dioxide  
 TPY..... Tons per Year  
 VOC..... Volatile Organic Compound  
 yr..... Year

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