San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

February 7, 2022

Ms. Donna Ogilvie
NAS Lemoore
750 Enterprise Ave
Lemoore, CA 93245

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
Facility Number: C-2106
Project Number: C-1212200

Dear Ms. Ogilvie:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. Installation of a new squadron aircraft corrosion control and maintenance coating operation at Hangar 6.

The notice of preliminary decision for this project has been posted on the District's website (www.valleyair.org). After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authorities to Construct with Certificates of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

Leonard Scandura

Brian Clements
Director of Permit Services

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email
cc: Laura Yannayon, EPA (w/enclosure) via EPS

Samir Sheikh
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: (661) 392-5500 FAX: (661) 392-5585

www.valleyair.org www.healthyairliving.com

San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Aircraft Corrosion Control and Maintenance Coating Operation

Facility Name:	NAS Lemoore	Date:	February 3, 2022
Mailing Address:	750 Enterprise Ave, Lemoore, CA 93245	Engineer:	Silvana Procopio
		Lead Engineer:	Steven Davidson
Contact Person:	Donna Ogilvie and John Gilliland		SDD 2/3/22
Telephone:	559.998.4078		
E-Mail:	Donna.ogilvie@navy.com, john.gilliland@mshatch.com		
Application #(s):	C-2106-195-0, '-197-0, '-198-0, & '-199-0		
Project #:	C-1212200		
Deemed Complete:	August 12, 2021		

I. Proposal

NAS Lemoore has requested an Authority to Construct (ATC) permit for the installation of a new corrosion control and maintenance coating operation that will primarily be performed on F-35 joint strike fighter aircraft.

Additionally, the applicant is proposing the following:

- Coating of metal and wood parts and products that are not attached to the aircraft, such as chocks, wood benches, lockers, and chains;
- Maintenance work involving coating of doors and curbs. Coating of these items are exempt from permit per Rule 2020 Section 6.8.1. Additionally, these coatings will be applied using solely aerosol cans, and as such are exempt from the requirements of Rule 4601 per section 4.1.2. See Discussion under Rules 2020 and 4601 in the Compliance Section of this evaluation.

These operations will take place at the new hangar 6, which will be divided in four modules. As each module works independently, and consistent with previously permitted hangar operations, each of them will be assigned its own permit to operate.

NAS Lemoore received their Title V Permit on August 31, 2004. This modification can be classified as a Title V significant modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. NAS Lemoore must then apply to administratively amend their Title V permit. The following conditions will be added to the ATCs to ensure compliance:

- *{1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201]*

- *{1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520]*

II. Applicable Rules

Rule 2020	Exemptions (12/18/14)
Rule 2201	New and Modified Stationary Source Review Rule (8/15/19)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (8/15/19)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4601	Architectural Coatings (4/16/20) – *Not Applicable (See Compliance Section)*
Rule 4603	Surface Coating of Metal Parts and Products, Plastic Parts and Products, and Pleasure Crafts (9/17/09)
Rule 4605	Aerospace Assembly and Component Coating Operations (6/16/11)
Rule 4606	Wood Products and Flat Wood Paneling Products Coating Operations (10/16/08)
Rule 4653	Adhesives and Sealants (9/16/10)
Rule 4661	Organic Solvents (9/20/07)
Rule 4663	Organic Solvent Cleaning, Storage, and Disposal (9/20/07)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The project is located at the Hangar 6 of the Naval Air Station at 700 Avenger Ave, in Lemoore, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

A location map can be found in Appendix A.

IV. Process Description

NAS Lemoore is proposing construction of Hangar 6, which is located on the Operations side of NAS Lemoore, just north of Hangar 4. The purpose of this new hangar is to support the F-35 joint strike fighter aircraft. Hangar 6 will be divided administratively into four modules similar to the existing hangars, where a single aircraft squadron occupies a single module.

Within Hangar 6, personnel would perform corrosion control maintenance on aircraft and other equipment such as chocks, chains, etc. The corrosion control operations are similar to those performed in other NAS Lemoore hangars and include use of coatings applied to aerospace, metal, and wood substrates, as well as solvents used for surface preparation and cleanup purposes. Sealants and adhesives will be used as well.

HVLP spray equipment, brushes, rollers, and aerosol cans will be used as application methods. The coating of aircraft performed at NAS Lemoore is considered corrosion control or intermediate maintenance, which is defined as maintenance, repair, and coating needed during an aircraft's useful life.

Typically, the aircraft are washed and inspected. Any damaged areas (punctures, peeling and cracking) are sanded, epoxied, re-patched with "skin", and then coated. The areas of the aircraft most often repaired include: external struts, engines, landing gear, and fuel tanks.

Occasionally, the paint spray operations are used to coat objects other than aircraft such as mechanical equipment, wooden benches and metal lockers. Architectural coating of the hangars is also performed using aerosols.

Proposed coatings and VOC content are included in Appendix B.

V. Equipment Listing

C-2106-195-0: SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS INCLUDING METAL AND WOOD PARTS AND PRODUCTS; WITH HVLP SPRAY GUN(S) AND OTHER APPROVED APPLICATION METHODS, AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 1)

C-2106-197-0: SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS INCLUDING METAL AND WOOD PARTS AND PRODUCTS; WITH HVLP SPRAY GUN(S) AND OTHER APPROVED APPLICATION METHODS, AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 2)

C-2106-198-0: SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS INCLUDING METAL AND WOOD PARTS AND PRODUCTS; WITH HVLP SPRAY GUN(S) AND OTHER APPROVED

APPLICATION METHODS, AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 3)

C-2106-199-0: SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS INCLUDING METAL AND WOOD PARTS AND PRODUCTS; WITH HVLP SPRAY GUN(S) AND OTHER APPROVED APPLICATION METHODS, AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 4)

VI. Emission Control Technology Evaluation

Since the coating of aircraft is applied by HVLP guns, brushes, rollers, and aerosol cans, PM10 and VOCs are emitted from this operation.

For the wood and metal parts and products, the applicant is proposing to use only brushes and rollers, which will only emit VOCs.

The proposed coatings have VOC content in compliance with District Rules, which will be addressed in the Compliance section below. The proposed solvents have either low VOC content or low vapor pressure, also in compliance with applicable District Rules.

An approved enclosed gun cleaner will be used for VOC control during paint spray gun clean-up.

VII. General Calculations

A. Assumptions

- VOC and PM10 are the only pollutants associated with this project.
- To streamline emission calculations, PM2.5 emissions are assumed to be equal to PM10 emissions.
- Adhesive application is performed using non-spray application techniques; therefore, the application of adhesives will only emit VOCs.
- All painting and adhesive operations for the aircraft will take place without the use of a paint booth. Therefore, calculations will be based on an outdoor operation (most conservative).
- The proposed spray gun equipment meets HVLP requirements; therefore, transfer efficiency is assumed to be 75% (per STAPPA/ALAPCO Vol. 2, pg. 14-7, 5/30/91).

- Permitted VOC emissions limits: 32 lb/day per module and 1,400 lb/yr total for all combined coating operations (the four modules) within the hangar (per applicant's request)

- Permitted PM10 emissions limits: 9.5 lb/day per module and 578 lb/yr total for all combined coating operations (the four modules) within the hangar (per applicant's request)

- All wood and metal parts coating will be performed using brush, dip, roll coating application equipment; therefore, they have no associated PM_{10} emissions.

B. Emission Factors

Applicant is proposing to use aircraft, wood and metal parts, and architectural coatings. Emission factors for the different type of coatings are stated in the different District Rules applicable to this operation:

- Rule 4601: Architectural Coatings (exempt from Rule requirements – See discussion in Compliance Section below)
- Rule 4603: Surface Coating of Metal Parts and Products, Plastic Parts and Products, and Pleasure Crafts
- Rule 4605: Aerospace Assembly and Component Coating Operations
- Rule 4606: Wood Products and Flat Wood Paneling Products Coating Operations

As the applicant has proposed to limit VOC emissions both daily and annually, rather than limiting coating usage, calculations are not necessary to determine potential emissions.

Conditions specifying the different VOC limits included in the applicable District rules will be added to the ATCs. See discussion and specific conditions associated with each rule in the Compliance Section below.

The applicant is proposing daily and annual PE limits for these operations. Therefore, these specific emission factors will not be used for calculations and ATC conditions will be added limiting the VOC content for the different types of coatings applied. See discussions under the specific rules in the Compliance section below.

Calculations of PM10 emissions will be required under ATC conditions.

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Since these are new emissions units, PE1 = 0 for all pollutants.

2. Post-Project Potential to Emit (PE2)

For VOC emissions, the applicant proposed a limit of 32 lb/day per module and 1,400 lb/year for the entire hangar.

For PM10 emissions, the proposed limits are 9.5 lb/day per module and 578 lb/year for the entire hangar.

Since the primary purpose of this coating operation is the maintenance of aircraft, it will be assumed that emissions associated with the coating of wood and metal parts and products will remain minimal and under 2 lb/day. Therefore, PE emissions stated in the tables below will be associated with aircraft coating.

For PM10 emissions, as stated by the applicant, *spray* coating of wood and metal parts will be performed inside the paint booths permitted under C-2106-39 and '-149. The following conditions will be added to the ATCs to ensure compliance:

- *Coating of aerospace parts not attached to the aircraft, metal or wood parts and products, shall be done using brush, dip, roll coating application equipment in this module. If spray coating equipment is used for these operations, coating shall be done in the paint spray booths listed on permit units C-2106-39 or '-149. [District Rule 2201]*

- *Permittee shall keep daily and annual records of total PM10 emissions (lb/day and lb/yr) only for coatings that used an HVLP gun as the application method. [District Rule 2201]*

- *Daily PM10 emissions of each coating and/or primer applied shall be calculated as follows: Daily PM10 emissions of each coating and/or primer applied = Coating and/or primer density (lb/gal) x Coating and/or primer solids content (% by weight) x Usage (gal/day) x 0.25. Total daily PM10 emissions is the sum of PM10 emissions from all coating and/or primers applied. [District Rule 2201]*

PE2 – VOC Emissions		
Pollutant	**Daily Emissions (lb/day)**	**Annual Emissions (lb/year)**
C-2106-195-0	32	1,400
C-2106-197-0	32	
C-2106-198-0	32	
C-2106-199-0	32	
Total	**128**	**1,400**

PE2 – PM10 Emissions		
Pollutant	**Daily Emissions (lb/day)**	**Annual Emissions (lb/year)**
C-2106-195-0	9.5	578
C-2106-197-0	9.5	
C-2106-198-0	9.5	
C-2106-199-0	9.5	
Total	**38**	**578**

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

The SSPE was calculated in the most recent project C-1211083 and presented in the following table.

SSPE1 (lb/year)					
	NO_X	**SO_X**	**PM_{10}**	**CO**	**VOC**
SSPE1	957,474	196,132	238,378	3,118,760	546,687

4. Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since

September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

SSPE2 (lb/year)					
	NO_X	**SO_X**	**PM_{10}**	**CO**	**VOC**
SSPE1	957,474	196,132	238,378	3,118,760	546,687
C-2106-195-0	0	0	578	0	1,400
C-2106-197-0	0	0		0	
C-2106-198-0	0	0		0	
C-2106-199-0	0	0		0	
SSPE2	**957,474**	**196,132**	**238,956**	**3,118,760**	**548,087**

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months), pursuant to the Clean Air Act, Title 3, Section 302, US Codes 7602(j) and (z)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 70.2

Rule 2201 Major Source Determination (lb/year)						
	NO_X	**SO_X**	**PM_{10}**	**$PM_{2.5}$**	**CO**	**VOC**
SSPE1	957,474	196,132	238,378	238,378	3,118,760	546,687
SSPE2	957,474	196,132	238,956	238,956	3,118,760	548,087
Major Source Threshold	20,000	140,000	140,000	140,000	200,000	20,000
Major Source?	Yes	Yes	Yes	Yes	Yes	Yes

Note: PM2.5 assumed to be equal to PM10

This source is an existing Major Source for all criteria pollutants and will remain a Major Source for these pollutants. No change in other pollutants are proposed or expected as a result of this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore, the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
	NO_2	VOC	SO_2	CO	PM	PM_{10}
Estimated Facility PE before Project Increase	479	273	98	1,559	119	119
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source?	Yes	Yes	No	Yes	No	No

As shown above, the facility is an existing PSD major source for at least one pollutant.

6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

Since these are all new emissions units, BE = PE1 = 0 for all pollutants.

7. SB 288 Major Modification

40 CFR Part 51.165 defines a SB 288 Major Modification as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

Since this facility is a major source for all criteria pollutants, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if further SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	**Project PE2 (lb/year)**	**Threshold (lb/year)**	**SB 288 Major Modification Calculation Required?**
NO_x	0	50,000	No
SO_x	0	80,000	No
PM_{10}	578	30,000	No
VOC	1,400	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification and no further discussion is required.

8. Federal Major Modification / New Major Source

Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

As defined in 40 CFR 51.165, Section (a)(1)(v) and part D of Title I of the CAA, a Federal Major Modification is any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act. The significant net emission increase threshold for each criteria pollutant is included in Rule 2201.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. In step 1, emission decreases cannot cancel out the increases. Step 2 allows consideration of the project's net emissions increase as described in 40 CFR 51.165 and the Federal Clean Air Act Section 182 (e), as applicable.

Step 1: Project Emissions Increase

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project:

Emission Increase = PE2

The project's combined total emission increases are compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	**Total Emissions Increases (lb/yr)**	**Thresholds (lb/yr)**	**Federal Major Modification?**
NO_x*	0	0	No
VOC*	1,400	0	Yes
PM_{10}	578	30,000	No
$PM_{2.5}$	578	20,000	No
SO_x	0	80,000	No

*If there is any emission increases in NO_x or VOC, this project is a Federal Major Modification and no further analysis is required.

Since there is an increase in VOC emissions, this project constitutes a Federal Major Modification. Consequently, as discussed below in the offset section of this evaluation, pursuant to Section 7.4.2.1 of District Rule 2201, VOC Emission Reduction Credits (ERCs) used to satisfy the offset quantity required under District Rule 2201 must be surplus at the time of use (ATC issuance).

Separately, Federal Offset Quantity is calculated below.

Federal Offset Quantity Calculation

The Federal Offset Quantity (FOQ) is only calculated for the pollutants for which a project is a Federal Major Modification or a New Major Source as determined above.

Pursuant to 40 CFR 51.165(a)(3)(ii)(J), the federal offset quantity is the sum of the annual emission changes for all new and modified emission units in a project calculated as the potential to emit after the modification (PE2) minus the actual emissions (AE) for each emission unit times the applicable federal offset ratio.

FOQ = ∑(PE2 – AE) x Federal offset ratio

Actual Emissions

As described in 40 CFR 51.165(a)(1)(xii), actual emissions (AE), as of a particular date, shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

Since these are new units, AE = 0

Federal Offset Ratio

According the CAA 182(e), the federal offset ratio for VOC and NOx is 1.5 to 1 (due to the District extreme non-attainment status for ozone). Otherwise, the federal offset ratio for PM2.5, PM10, and SOx is 1.0 to 1.

Since this project is a federal major modification for VOC emissions, the federal offset ratio will be 1.5 to 1.

Federal Offset Quantity (FOQ)

Since this project only include new units,

FOQ = PE2 x Federal offset ratio = PE2 x 1.5

VOC **Federal Offset Ratio** **1.5**

Permit No.	Post-Project Potential to Emit (PE2) (lb/year)	Actual Emissions (lb/year)	Emissions Change (lb/yr)
C-2106-195-0	1,400	0	1,400
C-2106-197-0		0	
C-2106-198-0		0	
C-2106-199-0		0	
		∑(PE2 – AE) (lb/year):	**1,400**
		Federal Offset Quantity (lb/year): ∑(PE2 – AE) x 1.5	**2,100**
		Federal Offset Quantity (tons/year): ∑(PE2 – AE) x 1.5 ÷ 2,000	**1.1**

New Major Source

As demonstrated above, this facility is not becoming a Major Source as a result of this project, therefore, this facility is not a New Major Source pursuant to 40 CFR 51.165 a(1)(iv)(A)(3).

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are emitted in this project are: (See 52.21 (b) (23) definition of significant)

- PM
- PM10

I. Project Location Relative to Class 1 Area

As demonstrated in the "PSD Major Source Determination" Section above, the facility was determined to be an existing PSD Major Source. Because the project is not located within 10 km (6.2 miles) of a Class 1 area – modeling of the emission increase is not required to determine if the project is subject to the requirements of Rule 2410.

II. Project Emission Increase – Significance Determination

a. Evaluation of Calculated Post-project Potential to Emit for New or Modified Emissions Units vs PSD Significant Emission Increase Thresholds

As a screening tool, the post-project potential to emit from all new and modified units is compared to the PSD significant emission increase thresholds, and if the total potentials to emit from all new and modified units are below the applicable thresholds, no futher PSD analysis is needed.

PSD Significant Emission Increase Determination: Potential to Emit (tons/year)					
	NO_2	SO_2	CO	PM	PM_{10}
Total PE from New and Modified Units	0	0	0	0.3	0.3
PSD Significant Emission Increase Thresholds	40	40	100	25	15
PSD Significant Emission Increase?	No	No	No	No	No

As demonstrated above, because the post-project total potentials to emit from all new and modified emission units are below the PSD significant emission increase thresholds, this project is not subject to the requirements of Rule 2410 and no further discussion is required.

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix C.

VIII. Compliance Determination

Rule 2020 Exemptions Rule

This rule specifies emissions units that are not required to obtain an Authority to Construct or Permit to Operate. This rule also specifies the recordkeeping requirements to verify the exemption and outlines the compliance schedule for emissions units that lose the exemption after installation.

Section 6.8 exempts from permitting requirements the application equipment for architectural surface coatings used for commercial or residential applications. Architectural surface coating is defined as any coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs. The applicant states that they will be painting curbs, lockers, doors, and other appurtenances. Therefore, the coating of these structures is exempt from permitting requirements.

Furthermore, architectural coating operations that are determined to be exempt from permitting requirements are still subject to the VOC limits specified under this rule. See further discussion under Rule 4601 – *Architectural Coatings*.

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

Pursuant to District Rule 2201, Section 4.1, BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an Adjusted Increase in Permitted Emissions (AIPE) exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

As seen in Section VII.C.2 above, the applicant is proposing to install a new hangar with 4 modules, each being an emissions unit with a PE greater than 2 lb/day for VOC and PM10. Therefore, BACT is triggered for VOC and PM_{10} for the aircraft coating operation. For the wood, metal parts, and adhesive operations, potential emissions could exceed 2 lb/day and, based on the application methods proposed, BACT will be triggered only for VOC emissions.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore, BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

As discussed in Section I above, there are no modified emissions units associated with this project. Therefore, BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does constitute a Federal Major Modification for VOC emissions. Therefore, BACT is triggered for VOC for all emissions units in the project for which there is an emission increase.

2. BACT Guideline

As stated in the Calculations section above, potential emissions will be primarily associated with the coating of aircraft. The coating of metal and wood parts and products will not trigger BACT. Therefore, the following BACT Guidelines apply to this operation:

4.2.5: Limited Aircraft Coating Operation

4.2.6: Aerospace Parts Coating Operation

4.2.7: Solid Dry Film Based Lubricant Coating Operations for Metal Parts and Products and Aerospace Assembly and Components

4.4.1: Wood Products Coating Operation – Non-Continuous Batch Coating

4.3.1: Metal Parts and Products Coating Operation

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see Appendix D), BACT has been satisfied with the following:

4.2.5 - Limited Aircraft Coating (and Adhesive[1]) Operation:

VOC:

- Use of an enclosed gun cleaner or equivalent
- Coating with a VOC content compliant with Rule 4605 except for the following coatings:
    - Antichafe coatings: ≤ 420 g/l
    - High temperature coatings: ≤ 420 g/l
    - Radiation effect coatings: ≤ 600 g/l

[1] BACT Guideline 4.2.5 establishes AIP as VOC content compliant with Rule 4605, which includes in Table 1 limits for coatings as well as adhesives. Therefore, this Guideline will meet the limit requirements of emissions associated with adhesives.

- Metalized epoxy coatings: ≤ 700 g/l

- HVLP application method or equivalent

PM10:
- HVLP application method or equivalent

4.2.6 - Aerospace Parts Coating Operation:

VOC:
- Use of an enclosed gun cleaner
- Coating with a VOC content (less water and exempt compounds) lower than the following[2]:
  - Primers < 6.4 lb-VOC/gal
  - Topcoats < 5.2 lb-VOC/gal

PM10:
- Use of HVLP gun

4.2.7 - Solid Dry Film Based Lubricant Coating Operations:

VOC:
- Solvent-based solid film lubricant coatings with a VOC content (less water and exempt compounds) ≤ 6.4 lb-VOC/gal

PM10:
- Use of HVLP gun or equivalent application equipment

The following conditions will be added to the ATCs to ensure compliance with BACT requirements:

- *{edited 4237} For coating of aircraft, HVLP, electrostatic, electrodeposition, flow, roll, dip, or brush coating application equipment shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201 and 4605]*

- *Solvent-based solid film lubricant coatings shall have a VOC content, as applied, equal to or less than 6.4 lb/gal (767 g/l), excluding water and exempt solvents. [District Rules 2201 and 4605]*

[2] VOC emissions limits under Rule 4605 for primers and topcoats are lower than the ones achieved in practice under BACT Guideline 4.2.6. Therefore, no condition will be added to meet this BACT requirement.

- *Permittee shall not use VOC-containing materials to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing and draining procedures, and it must be used according to the manufacturer's recommendations and must be closed when not in use. [District Rules 2201 and 4605]*

- *VOC content of coatings as applied, excluding water and exempt compounds, for maintenance and refinishing of metal parts on aircraft shall not exceed any of the following limits: antichafe coatings 420 g/l (3.5 lb/gal), high temperature coatings 420 g/l (2.5 lb/gal), radiation effect coatings 600 g/l (5.0 lb/gal), metalized epoxy coatings 700 g/l (5.8 lb/gal). [District Rules 2201 and 4605]*

4.4.1 – Wood Parts and Products Coating Operations:

1) HVLP application equipment or equivalent

2) Coatings compliant with District Rule 4606

3) Coating with a VOC content (less water and exempt compounds) lower than the following[3]:

    a. Clear topcoats: 4.6 lb/gal

    b. High-solids coating: 3.2 lb/gal

    c. Sanding sealers: 4.6 lb/gal

    d. Water-based pigmented primers: 0.68 lb/gal

    e. Water-based pigmented topcoats: 1.62 lb/gal

The following conditions will be added to the ATCs to ensure compliance with BACT requirements:

- *For wood products, VOC content of coatings as applied, excluding water and exempt compounds, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), low-solids stain 120 g/l (1.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275*

[3] VOC emissions limits under Rule 4606 for clear topcoat, high-solids coating, and sanding sealers are more stringent than the technologically feasible under BACT Guideline 4.4.1. Therefore, no condition will be added to meet this BACT requirement.

g/l (2.3 lb/gallon), water-based pigmented primers 0.68 lb/gal, water-based pigmented topcoats 1.62 lb/gal, sanding sealer 275 g/l (2.3 lb/gallon), and stripper 350 g/l (2.9 lb/gallon). [District Rules 2201 and 4606]

- *For the coating of metal and wood parts and products, only dip, roller, or brush shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201, 4603, and 4606]*

4.3.1 – Metal Parts and Products Coating Operations:

1) HVLP application equipment or equivalent

2) Coating with a VOC content of 2.8 lb/gal or less

The following conditions will be added to the ATCs to ensure compliance with BACT requirements:

- *For the coating of metal and wood parts and products, only dip, roller, or brush shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201, 4603, and 4606]*

- *For metal parts and products, VOC content of air-dried coatings as applied, excluding water and exempt compounds, shall not exceed 2.8 lb/gal (340 g/l). For specialty coatings, the VOC content shall not exceed the following limits: camouflage 420 g/l (3.5 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 420 g/l (3.5 lb/gal), high gloss: 420 g/l (3.5 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic coating: 420 g/l (3.5 lb/gal), pretreatment coating: 420 g/l (3.5 lb/gal), touch up and repair coating: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), and solar absorbent: 420 g/l (3.5 lb/gal). [District Rules 2201 and 4603]*

B. Offsets

1. Offset Applicability

Pursuant to District Rule 2201, Section 4.5, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	957,474	196,132	238,956	3,118,760	548,087
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets Triggered?	Yes	Yes	Yes	Yes	Yes

2. Quantity of District Offsets Required

As demonstrated above, the SSPE2 is greater than the offset thresholds for all criteria pollutants; therefore, offset calculations will be required for this project and District offset calculations are necessary. However, the only pollutants of concern in this project are VOC and PM10.

Surplus at the Time Of Use Emission Reduction Credits

As demonstrated above, this project does trigger Federal Major Modification requirements for VOC emissions and federal offset quantities are required for this project for VOC. Pursuant to Section 7.4.2.1 of District Rule 2201, emission reduction credits used to satisfy federal offset quantities for VOC must be creditable and surplus at the time of use (ATC issuance).

The applicant has stated that the facility plans to use ERC certificate C-1046-1 to satisfy the federal offset quantities for VOC required for this project. Pursuant to the ERC Surplus Analysis in Appendix E, the District has verified that the credits from the ERC certificate provided by the applicant are sufficient to satisfy the federal offset quantities for VOC required for this project.

2.1 VOC

District Offset Quantities Calculation

As demonstrated above, the facility has an SSPE1 for VOC greater than the offset thresholds. Therefore, offset calculations will be required for this project.

The quantity of offsets in pounds per year for VOC is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = (Σ[PE2 – BE] + ICCE) x DOR, for all new or modified emissions units in the project,

Where,
PE2 = Post-Project Potential to Emit, (lb/year)
BE = Baseline Emissions, (lb/year)
ICCE = Increase in Cargo Carrier Emissions, (lb/year)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise,

BE = HAE

As calculated in Section VII.C.6 above, the BE from these units are equal to the PE1 since the units are Clean Emissions Units.

Pursuant to Section 4.8, for VOC offsets for new major sources and federal major modifications, the distance offset ratio (DOR) shall be 1.5.

Also, there is no increase in cargo carrier emissions. Therefore, offsets can be determined as follows:

Offsets Required (lb/year) = ([PE2 – BE] + ICCE) x DOR

PE2 (VOC) = 1,400 lb/year
BE (VOC) = 0 lb/year
ICCE = 0 lb/year

Offsets Required (lb/year) = ([1,400 – 0] + 0) x 1.5
= 2,100 lb-VOC/year

Calculating the appropriate quarterly emissions to be offset is as follows:

Quarterly offsets required (lb/qtr) = (2,100 lb-VOC/year) ÷ (4 quarters/year)
= 525 b-VOC/qtr

District and Federal Offset Quantities

As discussed above, District offsets are triggered and required for VOC under NSR. In addition, as demonstrated above, this project does trigger Federal Major Modification requirements for VOC emissions.

Since District offsets and federal offsets are required, the facility must provide offset amounts equal to the greatest value between the District offset quantity and the federal offset quantity.

Comparison of District vs Federal VOC Offset Quantity			
	DOQ	**FOQ**	**FOQ ≥ DOQ**
VOC	2,100	2,100	**Yes**

As demonstrated above, the federal offset quantity required is equal to the District offset quantity. Therefore, pursuant to Section 7.4.1.2 of District Rule 2201, the facility must comply with either required federal or district offset quantities. In addition, emission reduction credits used to satisfy federal offset quantities for VOC must be creditable and surplus at the time of use (ATC issuance).

Surplus at the Time Of Use Emission Reduction Credits

The applicant has stated that the facility plans to use ERC certificate C-1046-1 to satisfy the federal offset quantities for VOC required for this project. Pursuant to the ERC surplus analysis in Appendix E, the District has verified that the credits from the ERC certificate provided by the applicant are sufficient to satisfy the federal offset quantities for VOC required for this project.

Required District and Federal Offset Quantities Summary

The applicant has proposed to use the following emission reduction certificates:

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
ERC #C-1046-1	1,607	453	1,066	59

As per Rule 2201, Section 4.13.8, Actual Emissions Reductions (AER) for VOC emissions that occurred from April through November may be used to offset increases in VOC during any period of the year. Therefore, VOC credits from Q3 will be used for Q2 and Q4. The facility has sufficient credits to fully offset the quarterly VOC emissions increases associated with this project. Therefore, the applicant proposes to surrender the following amount of credits in each quarter:

VOC Offsets Surrendered				
	Q1 (lb/qtr)	**Q2** (lb/qtr)	**Q3** (lb/qtr)	**Q4** (lb/qtr)
Total Offsets Required	525	525	525	525
ERC C-1046-1	1607	453	1066	59
Offsets surrendered	525	453	525	59
Offsets still required after surrender	--	72	--	-466
Total unused offsets remaining from certificate C-1046-1	1082	0	541	0
Offsets transferred from 3rd qtr	--	72	-538	466
Total remained of offsets to be reissued	**1082**	**0**	**3**	**0**

Proposed Rule 2201 Offset Permit Conditions

The following permit conditions will be added to the Authorities to Construct:

- *{GC# 4447 - edited} Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender surplus VOC emission reduction credits for the following quantity of emissions: 1st quarter - 525 lb, 2nd quarter – 453 lb, 3rd quarter – 1,063 lb, and fourth quarter – 59 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below. [District Rule 2201]*

- *{GC# 1983} ERC Certificate Number C-1046-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]*

2.2 PM10

District Offset Quantities Calculation

As demonstrated above, the facility has an SSPE1 for PM10 greater than the offset thresholds. Therefore, offset calculations will be required for this project.

The quantity of offsets in pounds per year for PM10 is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = (Σ[PE2 – BE] + ICCE) x DOR, for all new or modified emissions units in the project,

Where,
PE2 = Post-Project Potential to Emit, (lb/year)
BE = Baseline Emissions, (lb/year)
ICCE = Increase in Cargo Carrier Emissions, (lb/year)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise,

BE = HAE

As calculated in Section VII.C.6 above, the BE is equal to the PE1 since the units are Clean Emissions Units.

Pursuant to Section 4.8, for PM10 offsets when the original location of the emission offsets is at the same stationary source as the new or modified emissions unit, the distance offset ratio (DOR) shall be 1.0. ERC certificate C-1050-4 was originally generated for the shutdown of a JP-5 fueled fire training facility at the same stationary source (C-2106) where the new emissions units in this project will be located. Therefore, the offset ratio is 1:1 and, therefore, DOR will be 1.0.

Also, there are no increases in cargo carrier emissions. Therefore, offsets can be determined as follows:

Offsets Required (lb/year) = ([PE2 – BE] + ICCE) x DOR

PE2 (PM10) = 578 lb/year
BE (PM10) = 0 lb/year
ICCE = 0 lb/year

Offsets Required (lb/year) = ([578 – 0] + 0) x 1.0
= 578 lb-PM10/year

Calculating the appropriate quarterly emissions to be offset is as follows:

Quarterly offsets required (lb/qtr) = (578 lb-PM10/year) ÷ (4 quarters/year)
= 144.5 lb-PM10/qtr

As demonstrated in the calculation above, the quarterly amount of offsets required for this project, when evenly distributed to each quarter, results in fractional pounds of offsets being required each quarter. Since offsets are required to be withdrawn as whole pounds, the quarterly amounts of offsets need to be adjusted to ensure the quarterly values sum to the total annual amount of offsets required.

To adjust the quarterly amount of offsets required, the fractional amount of offsets required in each quarter will be summed and redistributed to each quarter based on the number of days in each quarter. The redistribution is based on the Quarter 1 having the fewest days and the Quarters 3 and 4 having the most days. The redistribution method is summarized in the following table:

Redistribution of Required Quarterly Offsets (where X is the annual amount of offsets, and X ÷ 4 = Y.z)				
Value of z	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
0.0	Y	Y	Y	Y
0.25	Y	Y	Y	Y+1
0.5	Y	Y	Y+1	Y+1
0.75	Y	Y+1	Y+1	Y+1

Therefore the appropriate quarterly emissions to be offset are as follows:

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	**Total Annual**
144	144	145	145	**578**

District Offset Quantities

As discussed above, District offsets are triggered and required for PM10 under NSR.

The applicant has stated that the facility plans to use ERC certificate C-1050-4 to offset the increases in PM10 emissions associated with this project.

Required District Offset Quantities Summary

The applicant has proposed to use the following emission reduction certificates:

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
ERC # C-1050-4	7,799	3,198	5,638	1,626

As discussed above, the facility has sufficient credits to fully offset the quarterly PM10 emissions increases associated with this project.

Proposed Rule 2201 Offset Permit Conditions

The following permit conditions will be added to the Authorities to Construct:

C-2106-195, '-197, '-198, and '-199:

- *{GC# 4447 - edited} Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender PM10 emission reduction credits for the following quantity of emissions: 1st quarter - 144 lb, 2nd quarter - 144 lb, 3rd quarter - 145 lb, and fourth quarter - 145 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below. [District Rule 2201]*

- *{GC# 1983} ERC Certificate Number C-1050-4 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]*

3. ERC Withdrawal Calculations

The applicant must identify the ERC Certificates to be used to offset the increase of VOC and PM10 emissions for the project. As indicated in previous section, the applicant is proposing to use ERC certificates # C-1046-1 and C-1050-4 to mitigate the increases of VOC and PM10 emissions associated with this project. See Appendix F for detailed ERC Withdrawal Calculations.

C. Public Notification

1. Applicability

Pursuant to District Rule 2201, Section 5.4, public noticing is required for:

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
c. Any project which results in the offset thresholds being surpassed,
d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant, and/or
e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

As demonstrated in Section VII.C.7 of this evaluation, this project is a Federal Major Modification. Therefore, public noticing is required for this project for Federal Major Modification purposes.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include new emissions units which have daily emissions greater than 100 lb/day for any pollutant; therefore, public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

Public notification is required if the pre-project Stationary Source Potential to Emit (SSPE1) is increased to a level exceeding the offset threshold levels. The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

Offset Thresholds				
Pollutant	**SSPE1 (lb/year)**	**SSPE2 (lb/year)**	**Offset Threshold**	**Public Notice Required?**
NO_X	957,474	957,474	20,000 lb/year	No
SO_X	196,132	196,132	54,750 lb/year	No
PM_{10}	238,378	238,956	29,200 lb/year	No
CO	3,118,760	3,118,760	200,000 lb/year	No
VOC	546,687	548,087	20,000 lb/year	No

As demonstrated above, there were no thresholds surpassed with this project; therefore, public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	**SSPE2 (lb/year)**	**SSPE1 (lb/year)**	**SSIPE (lb/year)**	**SSIPE Public Notice Threshold**	**Public Notice Required?**
NO_x	957,474	957,474	0	20,000 lb/year	No
SO_x	196,132	196,132	0	20,000 lb/year	No
PM_{10}	238,956	238,378	578	20,000 lb/year	No
CO	3,118,760	3,118,760	0	20,000 lb/year	No
VOC	548,087	546,687	1,400	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore, public noticing for SSIPE purposes is not required.

e. Title V Significant Permit Modification

As shown in the Discussion of Rule 2520 below, this project constitutes a Title V significant modification. Therefore, public noticing for Title V significant modifications is required for this project.

2. Public Notice Action

As discussed above, public noticing is required for this project as it constitutes a Title V significant modification. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be electronically published on the District's website prior to the issuance of the ATCs for this equipment.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions:

- *Total PM10 emissions shall not exceed 9.5 lb/day. [District Rule 2201]*
- *Total VOC emissions shall not exceed 32.0 lb/day. [District Rule 2201]*
- *Total annual PM10 emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 578 lb/yr. [District Rules 2201 and 4102]*
- *Total annual VOC emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 1,400 lb/yr. [District Rules 2201 and 4102]*

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following conditions are listed on the permits to operate:

- *{4693} Each container or accompanying data sheet of any coating shall display: 1) a statement of the manufacturer's recommendation regarding thinning of the coating, excluding the thinning of coatings with water, and 2) the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). [District Rules 2201, 4603, 4605, and 4606]*

- *Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606]*

- *Permittee shall keep daily and annual records of total VOC emissions in lb/day and lb/year. [District Rule 2201]*

- *Permittee shall keep daily and annual records of total PM10 emissions (lb/day and lb/year) only for coatings that used an HVLP gun as the application method. [District Rule 2201]*

- *{4940} Daily PM10 emissions of each coating and/or primer applied shall be calculated as follows: Daily PM10 emissions of each coating and/or primer applied = Coating and/or primer density (lb/gal) x Coating and/or primer solids content (% by weight) x Usage (gal/day) x 0.25. Total daily PM10 emissions is the sum of PM10 emissions from all coating and/or primers applied. [District Rule 2201]*

- *{4926} Daily VOC emissions of each coating and/or solvent shall be calculated as follows: Daily VOC emissions = VOC content (lb/gallon) as applied x usage (gallon/day). Total daily VOC emissions is the sum of VOC emissions from all coatings and/or solvents used. [District Rule 2201]*

- *Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rules 2201, 4603, 4605, and 4606]*

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

Section 4.14 of District Rule 2201 requires that an AAQA be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District's Technical Services Division conducted the required analysis. Refer to Appendix G of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO_X, CO, and SO_X. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO_X, CO, or SO_X.

The proposed location is in a non-attainment area for the state's PM_{10} as well as federal and state $PM_{2.5}$ thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM_{10} and $PM_{2.5}$.

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a New Major Source or a source undergoing a Federal Major Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Section VIII above, this facility is a major source and this project does constitute a Federal Major Modification; therefore, this requirement is applicable. NAS Lemoore has submitted a compliance certification and is included in Appendix H.

H. Alternate Siting Analysis

The current project occurs at an existing facility. The applicant proposes to install a corrosion control operation that includes coating operation of F-35 aircraft.

Since the project will use existing structure to perform some of the coating operation at the same location, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII.C.9 above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. A significant permit modification is defined as a "permit amendment that does not qualify as a minor permit modification or administrative amendment."

Minor permit modifications are not Title I modifications as defined in section 111 or 112 of the Federal Clean Air Act, where the term modification means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted. The emissions units associated with this project are new sources of emissions. Therefore, the project constitutes a significant modification to the Title V Permit.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility shall not implement the changes requested until the final permits are issued. The following conditions, previously stated in this evaluation, will be added to the ATCs to ensure compliance:

- *{1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201]*

- *{1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520]*

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. However, no subparts of 40 CFR Part 60 apply to coating operations of aircraft.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63.

40 CFR 63 Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

According to Section §63.3881 Paragraph (c)(4), this subpart does not apply to surface coating of metal parts and products performed on-site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or the National Aeronautics and Space Administration, or the surface coating of military munitions manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State). NAS Lemoore is a naval station government facility and is, therefore, exempt from this subpart.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). The following condition will be added to the ATCs to ensure compliance:

- *{15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]*

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

The following condition will be added to the ATCs to ensure compliance:

- *{98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]*

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or

modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification of an existing source shall not result in an increase in cancer risk greater than the District's significance level (20 in a million) and shall not result in acute and/or chronic risk indices greater than 1.

According to the Technical Services Memo for this project, the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The resulting prioritization score, acute hazard index, chronic hazard index, and cancer risk for this project is shown below.

Health Risk Assessment Summary	
	Worst Case Potential
Prioritization Score	8.22
Cancer Risk	2.12E-06
Acute Hazard Index	0.29
Chronic Hazard Index	0.00
T-BACT Required?	No

Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District's thresholds for triggering T-BACT requirements; therefore, compliance with the District's Risk Management Policy is expected.

In accordance with District policy APR 1905, no further analysis is required, and compliance with District Rule 4102 requirements is expected.

See Appendix G: HRA Results

The following permit conditions are required to ensure compliance with the assumptions made for the risk management review:

- *Total annual PM10 emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 578 lb/yr. [District Rules 2201 and 4102]*

- *Total annual VOC emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 1,400 lb/yr. [District Rules 2201 and 4102]*

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

There is no exhaust stack associated with these coating operations. Therefore, the requirements of this rule are not applicable to this project.

Rule 4601 Architectural Coatings

The purpose of this rule is to limit VOC emissions from architectural coatings, as defined in Section 3.7 as coating applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings that are applied to non-stationary structures such as airplanes are not considered architectural coatings for the purposes of this rule.

This rule specifies storage, cleanup and labeling requirements for architectural coatings.

Architectural coating operations that are determined to be exempt from permitting requirements are still subject to the VOC limits specified under this rule. However, Section 4.1.2 exempts from the requirements of this rule any aerosol coating product. The applicant states that the only application method associated with these structures is enamel aerosols. Therefore, this rule does not apply and no further discussion is required.

The following condition will be added to the ATCs to comply with the exemption to this rule:

- *Architectural coating shall be performed using only aerosol coating products. [District Rule 4601]*

Rule 4603 Surface Coating of Metal Parts and Products, Plastic Parts and Products, and Pleasure Crafts

The purpose of this rule is to limit the emissions of volatile organic compounds (VOCs) from the coating of metal parts and products, large appliances parts or products, metal furniture, plastic parts and products, automotive/transportation and business machine plastic parts and products, pleasure crafts, and from the organic solvent cleaning and storage and disposal of solvents and waste solvent materials associated with such coating. This rule also specifies the administrative and recordkeeping requirements and the test methods for determining the VOC content, the VOC emissions, the VOC capture efficiency, the acid content, the metallic or iridescent quality of coatings, and the VOC emissions from spray gun cleaning systems.

Section 5.0 Requirements

Section 5.1 states that, except as otherwise provided by this rule, no operator shall apply to any metal part or product any coating with a VOC content in excess of the limits specified in this section, expressed as grams of VOC per liter (or pounds per gallon) of coating, less water and exempt compounds, as applied.

Section 5.2 states an operator shall not apply to any metal part or product any specialty coating with a VOC content in excess of the limits in the referenced table. The applicant has not proposed the use of specialty coating. The applicant proposes to use some specialty coating such as solid film lubricant.

Therefore, the following condition will be included to meet Sections 5.1 and 5.2 requirements:

- *For metal parts and products, VOC content of air-dried coatings as applied, excluding water and exempt compounds, shall not exceed 2.8 lb/gal (340 g/l). For specialty coatings, the VOC content shall not exceed the following limits: camouflage 420 g/l (3.5 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 420 g/l (3.5 lb/gal), high gloss: 420 g/l (3.5 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic coating: 420 g/l (3.5 lb/gal), pretreatment coating: 420 g/l (3.5 lb/gal), touch up and repair coating: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), and solar absorbent: 420 g/l (3.5 lb/gal). [District Rules 2201 and 4603]*

Section 5.3 states that in lieu of complying with the applicable VOC content limits of Sections 5.1 of 5.2, an operator may control emissions from coating operations with an APCO-approved VOC emission control system that meets the requirements of Section 5.8. The applicant has proposed to use VOC compliant coatings, and has not proposed the use of VOC emission control system. Therefore, this section does not apply.

Sections 5.4 applies to operations involving the coating of large appliance parts or products, or metal furniture coating operations. The proposed operation involves the painting of small metal parts such as chains. Therefore, this section does not apply to these operations.

Sections 5.5 through 5.7 apply to plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure craft. Per the definitions in Section 3.0 of Rule 4603, the proposed operation does not involve the coating of any of the above listed plastic parts or products. Therefore, these sections do not apply.

Section 5.8 applies to operators that use a VOC emission control system that shall be operated with an overall capture and control efficiency. As previously stated, a VOC emission control system is not proposed. Therefore, this section does not apply.

Section 5.9 states an operator shall minimize VOC emissions by complying with the following work practice standards:

- Store all VOC-containing coatings, thinners, cleaning materials, and waste materials in closed non-absorbent and non-leaking containers. The containers shall remain closed at all times, except when specifically in use.
- Close mixing vessels that contain VOC coatings and other materials, except when specifically in use.
- Minimize spills of any VOC-containing materials and clean up spills immediately.
- Convey VOC-containing materials in closed containers or pipes.

Therefore, the following condition will be added to the permits to ensure compliance:

- *{4690} The operator shall comply with the following work practice standards: 1) store all VOC-containing coatings, thinners, cleaning materials, and waste materials in closed non-absorbent and non-leaking containers, keeping the containers closed at all times except when specifically in use; 2) close mixing vessels that contain VOC coatings and other materials, except when specifically in use; 3) minimize spills of any VOC-containing materials and clean up spills immediately; and 4) convey VOC-containing materials in closed containers or pipes. [District Rules 4603 and 4606]*

Section 5.10.1 states that an operator shall not use organic solvents for cleaning operations that exceed the VOC content limits specified in the following table.

Rule 4603 Solvent VOC Limits	
Cleaning Solvent Use	Allowable VOC content less water and exempt compounds g/l (lb/gal)
Product Cleaning During Manufacturing Process or Surface Preparation for Coating Application	25 (0.21)
Repair and Maintenance Cleaning	25 (0.21)
Cleaning of Coating Application Equipment	25 (0.21)

Section 5.10.2 requires an operator to perform all solvent cleaning operations with cleaning material having VOC content of 25 g/l or less, unless such operations are performed within the control of an APCO-approved VOC emission control system that meets the requirements of Section 5.8.

A VOC emission control system has not been proposed. Furthermore, the requirements of this rule do not apply to the coating of aircraft; therefore, the following condition will specify that it pertains to the coating of metal parts and products will be listed on the permits to ensure compliance:

- *{edited 4704} For solvent cleaning operations of metal and wood parts and products, VOC content of solvents shall not exceed 25 g/l (0.21 lb/gal). [District Rules 4603 and 4606]*

Section 5.11 states an operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. Therefore, the following condition will be listed on the permit to ensure compliance:

- *An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, sealants, catalysts, thinners, or any unused VOC-containing materials in closed, non-absorbent, and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The containers shall be self-closing. [District Rules 4603, 4605, 4606, and 4653]*

Section 5.12 states that an operator shall not use or operate any coating application equipment on any metal parts and products, large appliances parts and products, metal furniture, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure crafts subject to the provisions of this rule unless one of the following methods is used:

- Electrostatic application;
- Electrodeposition;
- High-Volume, Low-Pressure (HVLP) spray;
- Flow coating;
- Roll coating;
- Dip coating;
- Brush coating;
- Continuous coating; or
- Any other coating application method which is demonstrated to the APCO to be capable of achieving at least 65% transfer efficiency.

The applicant has proposed the use of brush, dip, and roll coating application equipment; therefore, the following condition will be listed on the ATCs to ensure compliance with Section 5.12:

- *{edited 4237} For the coating of metal and wood parts and products, only dip, roller, or brush shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201, 4603, and 4606]*

Section 6.1.1 requires that each container or accompanying data sheet of any coating shall display the maximum VOC content of the coating, as applied, and after any thinning recommended by the manufacturer. The VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds).

Section 6.1.2 requires that each container or accompanying data sheet of any coating display a statement of the manufacturer's recommendation regarding thinning of the coating.

The following condition will be added to the permits to ensure compliance with Sections 6.1.1 and 6.1.2:

- *{4693} Each container or accompanying data sheet of any coating shall display: 1) a statement of the manufacturer's recommendation regarding thinning of the coating, excluding the thinning of coatings with water, and 2) the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). [District Rules 2201, 4603, 4605, and 4606]*

Section 6.1.3 states manufacturers of any solvents subject to this rule shall indicate on the solvent container, or on a separate product data sheet or material safety data sheet, the name of the solvent, manufacturer's name, the VOC content, and density of the solvent, as supplied. The VOC content shall be expressed in units of g/l or lb/gal. Therefore, the following condition will be added to the permits:

- *{4694} All solvents shall indicate on the solvent container, or on a separate product data sheet or material safety data sheet, the name of the solvent, manufacturer's name, the VOC content (in g/l or lb/gal), and density of the solvent, as supplied. [District Rules 4603, 4605, and 4606]*

Section 6.2.1 states that an operator subject to Section 5.0 or exempt by Sections 4.1, 4.8.5, 4.8.9, and 4.9 shall comply with the following requirement: maintain a current list of coatings and solvents in use which contains all of the coating data necessary to evaluate compliance, including the following information, as applicable:

- mix ratio of components used,
- VOC content and specific chemical constituents of coatings as applied, and
- VOC content and specific chemical constituents of solvents used for surface preparation and cleanup.

Therefore, the following condition will be added to the permits:

- *Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606]*

Section 6.2.2 requires the permittee to maintain daily records which include the following information:

- volume coating/solvent mix ratio,
- VOC content (lb/gal) and, for dip coating operations, viscosity (cSt) of coating,
- volume of each coating used (gallons), and
- quantity of cleanup solvent used (gallons).

Therefore, the following conditions will be added to the permits:

- *{4693} Each container or accompanying data sheet of any coating shall display: 1) a statement of the manufacturer's recommendation regarding thinning of the coating, excluding the thinning of coatings with water, and 2) the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). [District Rules 2201, 4603, 4605, and 4606]*

- *Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606]*

Section 6.2.3 applies only to operators using a VOC emission control system and it states that an operator shall maintain records of key system operating parameters which will demonstrate continuous operation and compliance of the emission control system during periods of emission producing activities. The applicant has not proposed a VOC emission control system. Therefore, this section does not apply.

Section 6.2.5 requires that the operator retain the records specified in Sections 6.2.1 through 6.2.4, as applicable, on site for a period of five years, make the records available on site during normal business hours to the APCO, ARB, or EPA and submit records to the APCO, ARB, or EPA upon request. The following condition will be listed on the permits to ensure compliance:

- *Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rules 2201, 4603, 4605, and 4606]*

Section 6.3 states the test methods that shall be used to determine compliance with the requirements of this rule. The following conditions will be added to the ATCs to ensure compliance:

- *VOC content of coatings and solvents shall be analyzed by EPA Method 24 and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603]*
- *Emissions of VOC shall be measured by EPA Method 25, 25A or 25B, as applicable, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603]*
- *The viscosity of coatings used for dip coating of steel joists shall be determined by using ASTM D5478-98 or ASTM D5125-97. [District Rule 4603]*
- *The quantification of coating as a metallic/iridescent topcoat shall be determined by SCAQMD Method 318 (Determination of Weight Percent of Elemental Metal in Coatings by X-ray Diffraction Method), July 1996. [District Rule 4603]*
- *Measurement of acid content of pre-treatment wash primers shall be conducted and reported in accordance with ASTM D1613-06, Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish Lacquer and Related products. [District Rules 4603 and 4606]*

Rule 4605 Aerospace Assembly and Component Coating Operations

The purpose of this rule is to limit the emissions of volatile organic compounds (VOCs) from aerospace coatings and adhesives, from the organic solvent cleaning, and the storage and disposal of solvents and waste solvent materials associated with the use of aerospace coatings and adhesives and to provide the administrative requirements for recording and measuring the emissions.

Section 4.2 exempts coating operations that use less than 4.0 gal/day of coatings. The facility is not limited to this amount; therefore, this exemption does not apply and this operation is subject to this rule.

Section 5.1 Requirements

Section 5.1 specifies VOC content limits for different types of VOC-containing materials. The facility states that all aerospace coatings and adhesives used on aircraft will meet the requirements of this section. The following condition will be added to the ATCs to ensure compliance with this section:

- *VOC content of aerospace coatings as applied, excluding water and exempt compounds, used for aerospace components shall not exceed any of the limits listed in section 5.1,*

Table 1 of Rule 4605 (6/16/2011), unless otherwise stated in this permit. [District Rule 4605]

Section 5.2 Evaporative Loss Minimization

Section 5.2.1 states that no operator shall use a solvent for surface cleaning, clean-up, or jet engine or rocket engine gas path cleaning or flushing, not exempt under Section 4.0 of this rule, excluding stripping coatings or cleaning coating application equipment, unless:

- The solvent contains less than 200 grams of VOC per liter (1.67 lb/gal) of material, as applied; or
- The VOC composite vapor pressure of the solvent is less than or equal to 45 mmHg (0.87 psia) at a temperature of 68 F.

The applicant proposes the use of isopropyl alcohol, which has a vapor pressure of 33 mmHg at 68F (20℃) and meets the requirements of this section.

- *For aerospace surface cleaning, cleanup, or jet engine or rocket engine gas path cleaning or flushing, excluding stripping coatings or cleaning coating application equipment permittee shall not use solvents with a VOC content greater than or equal to 200 g/l (1.67 lb/gal) as applied or with a VOC composite vapor pressure greater than 45 mmHg (0.87 psia) at 68 F. [District Rule 4605]*

Section 5.2.2 refers to the coating application equipment cleaning. The following condition, previously mentioned under BACT discussion, will be included to the ATCs to ensure compliance:

- *Permittee shall not use VOC-containing materials to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing and draining procedures, and it must be used according to the manufacturer's recommendations and must be closed when not in use. [District Rules 2201 and 4605]*

Section 5.2.3 states that, in lieu of compliance with Sections 5.2.1 or 5.2.2, an operator may control VOC emissions from surface cleaning operations or from cleaning coating application equipment with a VOC emission control system. The applicant has not proposed a VOC emission control system for these purposes. Therefore, this part of the section does not apply.

Section 5.3 Coating Strippers

This section requires operators that they shall not use or specify for use within the District a coating stripper unless it contains less than 300 grams of VOC per liter (2.5 lb/gal), as applied, or unless it has a VOC composite vapor pressure of 9.5 mmHg (0.18 psia) or less at 68 F. The following condition will be added to the ATCs to ensure compliance with this section:

- *Permittee shall not use or specify for use within the District an aerospace coating stripper with a VOC content greater than or equal to 300 g/l (2.5 lb/gal) as applied or with a VOC composite vapor pressure of greater than 9.5 mmHg (0.18 psia) at 68 F. [District Rule 4605]*

Section 5.3.2 states that, in lieu of compliance with Sections 5.3.1, an operator may control VOC emissions from coating stripper operations with a VOC emission control system. The applicant has not proposed a VOC emission control system for these purposes. Therefore, this part of the section does not apply.

Section 5.4 Storage and Disposal of VOC Containing Materials

This section addresses how to store or dispose of fresh or spent solvents, waste solvent cleaning materials, and other VOC-containing materials. The following condition, previously suggested in this evaluation, will be included in the ATCs to ensure compliance:

- *An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, sealants, catalysts, thinners, or any unused VOC-containing materials in closed, non-absorbent, and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The containers shall be self-closing. [District Rules 4603, 4605, 4606, and 4653]*

Section 5.5 Application Equipment Requirements

Section 5.5 states that an operator shall not use coatings subject to the provisions of this rule unless one of the following methods is used:

- Electrostatic application;
- Electrodeposition;
- High-Volume, Low-Pressure (HVLP) spray;
- Flow coating;
- Roll coating;
- Dip coating;
- Brush coating

The applicant has proposed the use of brush, HVLP spray guns, and roll coating application equipment; therefore, the following condition will be listed on the ATCs to ensure compliance with Section 5.12:

- *{edited 4237} For coating of aircraft, HVLP, electrostatic, electrodeposition, flow, roll, dip, or brush coating application equipment shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201 and 4605]*

Section 5.6 VOC Emission Control System

This section provides an alternative to meeting the requirements on Section 5.1, 5.2, 5.3, or 5.5, by installing a VOC emission control system. The applicant has not proposed such system; therefore, this section does not apply.

Section 5.7 Prohibition of Solicitation

This section prohibits any person to solicit, specify, or require an operator to use any coating, solvent, spray equipment, or VOC emission control system that does not meet the limits of this rule. Conditions previously proposed on VOC emissions standards and application methods will satisfy this section.

Section 6.0 Administrative Requirements

Section 6.1 Recordkeeping

Section 6.1 addresses the recordkeeping requirements of this rule. The following conditions will be added to the ATCs to ensure compliance:

- *Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606]*

- *Permittee shall maintain records to support that the following aerospace coatings have been specified for their intended application: adhesion promoter, antichafe coating, electric/radiation effect, fuel tank adhesive, high temperature coating, impact resistant coating, optical anti-reflective coating, rain erosion resistant wing coating. [District Rule 4605]*

- *Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rules 2201, 4603, 4605, and 4606]*

Section 6.2 Test Methods

This section specifies the different test methods that determine VOC content of coatings, solid content of pretreatment coatings, fire resistance of interior coatings, among others. The following conditions will be added to the ATC to ensure compliance with this section:

- *VOC content of coatings and solvents shall be analyzed by EPA Method 24 or its constituents methods; and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432 or SCAQMD Method 303 (Determination of Exempt Compounds). [District Rule 4605]*

- *The solid content of pretreatment coatings shall be determined by EPA Method 24. Measurement of acid content of pre-treatment coatings shall be determined using ASTM Method D1613-06, Standard Test for Acidity of Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related products. [District Rules 4603 and 4605]*

- *The fire resistance of an interior coating shall be determined by the Federal Aviation Administration-required Ohio State University Heat Release, Fire, and Burn Tests. [District Rule 4605]*

- *The VOC composite vapor pressure of a blended solvent shall be determined by quantifying the amount of each organic compound using gas chromatographic analysis SCAQMD Test Method 308. [District Rule 4605]*

- *VOC emissions from enclosed systems used to clean coating application equipment shall be determined by the manufacturer using the SCAQMD General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems. [District Rule 4605]*

All other test methods mentioned in this section do not apply to this operation and, therefore, will not be added as permit conditions.

Rule 4606 - Wood Products and Flat Wood Paneling Products Coating Operations

The provisions of this rule apply to the application of coatings to wood products, including furniture, cabinets, flat wood paneling, and custom replica furniture. The rule shall also apply to the organic solvent cleaning, and the storage and disposal of all solvents and waste solvent materials associated with such coating operations.

Section 5.1 states that an operator shall not apply any coating to a wood product that has a VOC content, as applied, that exceeds the applicable limits specified in Tables 1 or 2.

Table 1 VOC Content Limits for Wood Product Coating Operation		
Coating Category	grams of VOC/liter of coating, excluding water and exempt compounds, as applied	pounds of VOC/gallon of coating, excluding water and exempt compounds, as applied
Clear Topcoat	275	2.3
Filler	275	2.3
High-Solids Stain	240	2.0
Ink	500	4.2
Mold-Seal Coating	750	6.3
Multi-Colored Coating	275	2.3
Pigmented Coating	275	2.3
Sanding Sealer	275	2.3

Table 2 VOC Content Limits for Wood Product Coating Operation		
Coating Category	grams of VOC/liter of material, as applied	pounds of VOC/gallon of material, as applied
Low-Solids Stain	120	1.0
Stripper	350	2.9

The applicant has proposed the use of coatings with a VOC content that meet the requirements of this rule; therefore, compliance with these requirements will be assured by the following condition:

- *For wood products, VOC content of coatings as applied, excluding water and exempt compounds, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), low-solids stain 120 g/l (1.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), sanding sealer 275 g/l (2.3 lb/gallon), and stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]*

Section 5.5 states that an operator shall not apply coatings to wood products subject to the provisions of this rule unless the coating is applied with properly operating equipment, according to proper operating procedures, and by the use of the following methods:

1. Electrostatic Application;
2. High-Volume, Low Pressure (HVLP) Spray;
3. Hand Roller
4. Flow Coat
5. Roll Coater
6. Dip Brush
7. Paint Brush
8. Detailing or Touch-up guns

The applicant will utilize dip, rollers and brushes as application methods. Therefore, the following condition, already proposed in this evaluation, will be placed on the permit to ensure compliance:

- *{edited 4237} For the coating of metal and wood parts and products, only dip, roller, or brush shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201, 4603, and 4606]*

Section 5.5.2.1 states that High-Volume, Low-Pressure (HVLP) spray equipment shall be operated in accordance with manufacturer's recommendations.

Section 5.5.2.2 states that for HVLP spray guns manufactured prior to January 1, 1996, the end user shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns.

The applicant is proposing the use of HVLP guns as an application method. The following conditions will be placed on the permits to ensure compliance:

- *{4238} If an HVLP spray gun is used, the operator must demonstrate that the spray gun operates between 0.1 and 10 pounds per square inch, gauge, (psig) air atomizing pressure, measured dynamically at the center of the air cap and at the air horns. For a gun permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall either be in the form of manufacturer's published technical information or by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. For a gun not permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall be based on manufacturer's published technical material and by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. [District Rules 2201, 4603, 4605, and 4606]*

- *{1909} Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rules 4603, 4605, and 4606]*

Section 5. states an operator shall minimize VOC emissions by complying with the following work practice standards:

- Store all VOC-containing coatings, thinners, cleaning materials, and waste materials in closed non-absorbent and non-leaking containers. The containers shall remain closed at all times, except when specifically in use.
- Close mixing vessels that contain VOC coatings and other materials, except when specifically in use.
- Minimize spills of any VOC-containing materials and clean up spills immediately.
- Convey VOC-containing materials in closed containers or pipes.

Therefore, the following condition will be added to the permits to ensure compliance:

- *{4690} The operator shall comply with the following work practice standards: 1) store all VOC-containing coatings, thinners, cleaning materials, and waste materials in closed non-absorbent and non-leaking containers, keeping the containers closed at all times except when specifically in use; 2) close mixing vessels that contain VOC coatings and other materials, except when specifically in use; 3) minimize spills of any VOC-containing materials and clean up spills immediately; and 4) convey VOC-containing materials in closed containers or pipes. [District Rules 4603 and 4606]*

Section 5.7.1 states that an operator shall not use organic solvents for cleaning operations that exceed the content limits specified in Table 4:

Table 4 – VOC Limits for Organic Solvents Used in Cleaning Operations		
Type of Solvent Cleaning Operation	Effective November 15, 2003 through September 20, 2008	Effective on and after September 21, 2008
	VOC Content Limit Grams of VOC/liter of material (lb/gal)	VOC Content Limit Grams of VOC/liter of material (lb/gal)
A. Product Cleaning During Manufacturing Process or Surface Preparation for Coating Application	50 (0.42)	25 (0.21)
B. Repair and Maintenance Cleaning	50 (0.42)	25 (0.21)
C. Cleaning of Coating Application Equipment	550 (4.6)	25 (0.21)

The following conditions will be placed on the permits to ensure compliance:

- *{edited 4704} For solvent cleaning operations of metal and wood parts and products, VOC content of solvents shall not exceed 25 g/l (0.21 lb/gal). [District Rules 4603 and 4606]*

    - *Cleaning activities that use solvents shall be performed by one or more of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4606]*

Section 5.8 requires an operator to store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in

closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty.

The following condition, already proposed in this evaluation, will be included on the permits to enforce this requirement:

- *An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, sealants, catalysts, thinners, or any unused VOC-containing materials in closed, non-absorbent, and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The containers shall be self-closing. [District Rules 4603, 4605, 4606, and 4653]*

Section 6.0 Administrative Requirements

Section 6.1 states that the records specified in Sections 6.1 through 6.4 must be kept on site for a period of five years, and made available on-site during normal business hours to the APCO, ARB, or EPA, or must be submitted to the APCO, ARB, or EPA upon request.

The following condition will be included on the permit:

- *Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rules 2201, 4603, 4605, and 4606]*

Section 6.2.1 states that the operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable:

1. Identify coatings, catalysts, reducers, inks, adhesives, and solvents.
2. Manufacturer's recommended mix ratio of components.
3. VOC content of coatings, as applied.
4. VOC content of solvents.
5. VOC content of inks, as applied.
6. VOC content of adhesives, as applied.

Section 6.2.2 requires the operator to maintain records on a daily basis that provide the following information, as applicable:

1. Coating and mix ratio of components in the coating used.
2. Quantity of each coating applied.
3. Identification of coating category.
4. Identification and quantity of each ink used.
5. Identification and quantity of each adhesive used.
6. Type and amount of solvent used for cleanup and surface preparation.

The following conditions will be included on the permits to address the recordkeeping requirements for coatings, inks, and solvents in Section 6.2.1 and Section 6.2.2:

- *{4693} Each container or accompanying data sheet of any coating shall display: 1) a statement of the manufacturer's recommendation regarding thinning of the coating, excluding the thinning of coatings with water, and 2) the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). [District Rules 2201, 4603, and 4606]*

- *Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606]*

Section 6.4 states that an operator who uses solvents subject to Section 5.7 of this rule shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable:

1. Keep a copy of the manufacturer's product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities.
2. Maintain a current list of solvents that are being used for organic solvent cleaning activities. The list shall include the following information:
   A. The name of the solvent and its manufacturer's name.
   B. The VOC content of the solvent expressed in grams/liter or lb/gal.
   C. When the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded in order to determine compliance with the specified limits of VOC content, as applied.
   D. The type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of this rule.

The following condition will be included on the permits to address the solvents recordkeeping requirements:

- *Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent*

used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606]

Rule 4653 Adhesive and Sealants

The purpose of this rule is to reduce emissions of volatile organic compounds (VOCs) from the application of adhesive products, the organic solvent cleaning, and the storage and disposal of solvents and waste solvent materials associated with such applications.

Section 4.1.8 states that the provisions of this rule shall not apply to adhesive products subject to the VOC limit requirements of Rules 4605, 4607, and 4681. This operation is subject to District Rule 4605 so the emissions limits of this rule do not apply.

Furthermore, this section states that, effective on and after January 2011, adhesive products that are subject to the VOC limit requirements of Rule 4605 will be subject to work practices required pursuant to Section 5.3.

Section 5.3 Work Practices for Adhesive Products and Sealant Products

This section requires the operator to implement the following work practices when participating in adhesive-related activities:

- An operator shall store or dispose of adhesive products, sealant products, catalysts, thinners, fresh or spent solvents, and waste solvent materials such as cloth, paper, etc., in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The containers used for disposal of adhesive materials, solvents, or any unused VOC containing materials shall be self-closing.

- Ensure that mixing containers for used VOC-containing adhesive products and sealant products and process-related waste materials are kept closed at all times except when depositing or removing these materials.

- Minimize spills of VOC-containing adhesive products, and sealant products, and process-related waste materials.

- Convey VOC-containing adhesive products, sealant products, and process-related waste materials from one location to another in closed containers or pipes.

The following conditions will be included on the ATCs to ensure compliance:

- *An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, sealants, catalysts, thinners, or any unused VOC-containing materials in closed, non-absorbent, and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The containers shall be self-closing. [District Rules 4603, 4605, 4606, and 4653]*

- *The permittee shall minimize spills of VOC-containing adhesive products, cleaning products, and process-related waste materials. [District Rule 4653]*

- *The permittee shall convey VOC-containing adhesive products, cleaning materials, and process-related waste materials from one location to another in closed containers or pipes. [District Rule 4653]*

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas (GHG) Significance Determination

District is a Lead Agency and Project not Covered Under Cap-and-Trade

It is determined that no other agency has or will prepare an environmental review document for the project. Thus, the District is the Lead Agency for this project.

The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing or former use. Furthermore, the District determined that the activity will not have a significant effect on the environment. Therefore, the District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15301 (Existing Facilities), and finds that the project is exempt per the common sense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

Indemnification Agreement/Letter of Credit Determination

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project's potential for litigation risk, which in turn may be based on a project's potential to generate public concern, its potential for significant impacts, and the project proponent's ability to pay for the costs of litigation without a letter of credit, among other factors.

The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATCs C-2106-195-0, '-197-0, '-198-0, and '-199-0, subject to the permit conditions on the attached draft ATCs in Appendix I.

X. Billing Information

Annual Permit Fees			
Permit Number	**Fee Schedule**	**Fee Description**	**Annual Fee**
C-2106-195-0	3020-06	Miscellaneous – Coating Op	$128
C-2106-197-0	3020-06	Miscellaneous – Coating Op	$128
C-2106-198-0	3020-06	Miscellaneous – Coating Op	$128
C-2106-199-0	3020-06	Miscellaneous – Coating Op	$128

Appendices

A. Location Map
B. Proposed Coatings
C. Quarterly Net Emissions Change
D. BACT Guideline & Top-Down Analysis
E. ERC Surplus Analysis
F. ERC Withdrawal Calculations
G. HRA & AAQA Summary
H. Compliance Certification
I. Draft ATCs

Appendix A:
Location Map

APPENDIX B

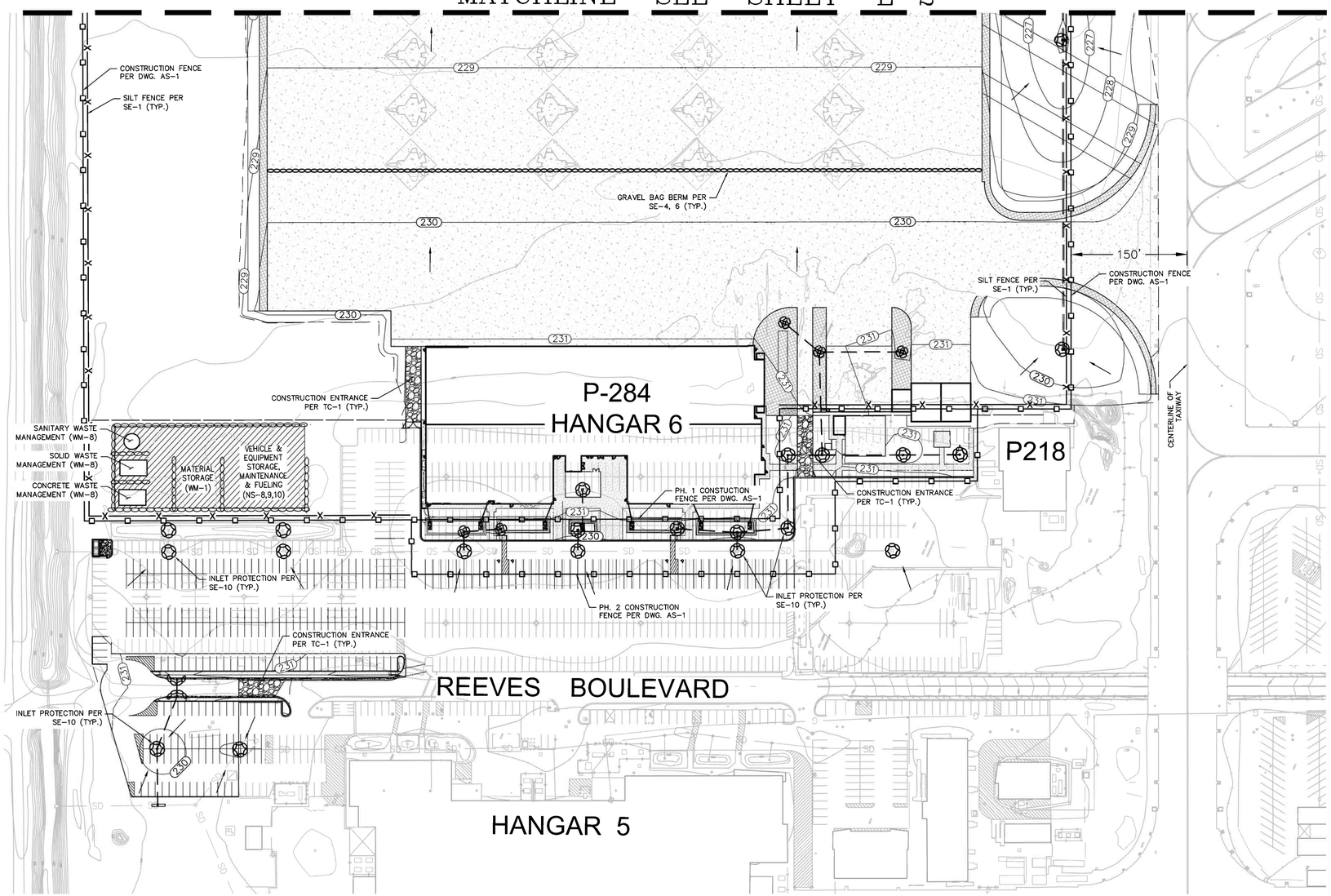
NOT TO SCALE

N

NOT TO SCALE

HALE ENGINEERING
7910 CONVOY COURT
SAN DIEGO, CA 92111
PH:858-715-1420

SWPPP SITE MAP
FOR
NAVAL AIR STATION,
LEMOORE, CA



LEGEND

DESCRIPTION	SYMBOL
PROPOSED SITE FENCE	
PROPOSED GRAVEL BAG BERM SE-4, SE-6	
PROPOSED INLET PROTECTION SE-10	
PROPOSED SILT FENCE SE-1	
PROPOSED CONSTRUCTION ENTRANCE TC-1	
PROPOSED CONTOUR	200
DIRECTION OF DRAINAGE	

SCALE 1" = 80'

80 0 80 160

SCALE 1" = 80'

CONTRACTOR NOTE:

THE EROSION CONTROL CONTRACTOR SHALL PROVIDE ALL NECESSARY EROSION PERIMETER CONTROLS (SILT FENCE) AROUND THE BATCH PLANT AND BATTERY SHOP / TOOL STORAGE SITES WHERE SOIL IS BEING DISTURBED PRIOR TO SOIL DISTRUBANCE. THE QSD (QUALIFIED SWPPP DEVELOPER) SHOULD BE NOTIFIED IF ADDITIONAL BMPS OR SITE SPECIFIC EROSION CONTROL PLANS ARE NECESSARY ONCE THE BATCH PLANT LAYOUT AND/OR BATTERY SHOP LAYDOWN AREA IS DETERMINED.

HARPER CONSTRUCTION COMPANY, INC

REVISIONS

NO.	DESCRIPTION	DATE

NAVFAC

REGISTERED PROFESSIONAL ENGINEER MARY LOUIS HERRING No. 54007 Exp. 6/30/20 CIVIL STATE OF CALIFORNIA

HALE ENGINEERING

7910 CONVOY COURT
SAN DIEGO, CA 92111
PH:858-715-1420
HE JOB NO. 19004
A/E INFO

APPROVED

FOR COMMANDER NAVFAC DATE

ACTIVITY

SATISFACTORY TO DATE

DES	MLH	DRW	JLG	CHK	MLH

PM/DM

BRANCH MANAGER

CHIEF ENG/ARCH

FIRE PROTECTION

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND-SOUTHWEST DIVISION
NAVAL AIR STATION LEMOORE, CA

P-284 F-35C MAINTENANCE HANGAR

SCALE:

EPROJECT NO.:

CONSTR. CONTR. NO.
N62473-19-2455

NAVFAC DRAWING NO.

SHEET OF

SHEET E-1

100% PRE-FINAL - 27 NOVEMBER 2019

H:\Project\19036\DOCS\SWPPP Appendix B - Site Map\EROSION CONTROL PLAN.dwg, 12/10/2019 12:05:18 PM

Appendix B:
Proposed Coatings

Hangar 5 Actual Usage for Calendar Year 2020

NSN	Coating Name	Application	Totals (gal/yr)	VOC (lb/gal)	VOC Totals (lb/yr)	PM Totals (lb/yr)
8010-01-331-6108	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, FLAT BLACK, 0674-390	Aerosol	6.30	4.32	27.20	9.45
xxxx-xx-xxx-0012	EPOXY ADHESIVE, SCOTCHWELD EC-3501, GRAY | LMAML078F1	Adhesive	0.10	0.09	0.01	0.00
xxxx-xx-xxx-0072	POLYURETHANE TOPCOAT, LMAR 027 GRAY,18GY029 | LMAMR027T5-4	HVLP	4.74	3.40	16.15	4.98
xxxx-xx-xxx-0063	EPOXY PRIMER, 44GN098 | LMAMR003C2T2GA	HVLP	18.36	1.11	20.36	19.27
xxxx-xx-xxx-0068	POLYURETHANE TOPCOAT, CAMOUFLAGE GRAY #36375, 03GY292 (2-PART KIT) | 45084041	HVLP	1.96	3.50	6.87	2.06
xxxx-xx-xxx-0015	ABRASION RESISTANT/ANTICHAFE COATING, CTG 23T3-10 WHITE #37925, 23T3-10/PC-216 | LMAMR008T1-9/KT	HVLP	2.21	3.50	7.73	2.32
6810-00-286-5435	SOLVENT, ISOPROPYL ALCOHOL	Solvent	105.27	6.55	689.16	0.00
xxxx-xx-xxx-0080	SEALANT, PR-2001 LW B-2 | AMS3277B2	Sealant	12.53	0.18	2.30	0.00
xxxx-xx-xxx-0020	CAAPCOAT FLUOROELASTOMER COATING, FE-AS TOPCOAT, LUSTERLESS, TYPE IV, TYPE V | A3720017/00082087	HVLP	1.42	6.63	9.44	1.49
xxxx-xx-xxx-0033	SOLVENT, DS-104 | LMAMN040T1/BG	Solvent	1.16	7.42	8.63	0.00
xxxx-xx-xxx-0053	EPOXY ADHESIVE, LORD 309-1D/309-2D | LMAML069F1	Adhesive	2.41	0.04	0.10	0.00
8030-01-290-5134	ADHESION PROMOTER, PR-1826	HVLP	0.05	6.54	0.35	0.06
xxxx-xx-xxx-0042	EPOXY ADHESIVE, LOCTITE EA 9377 | LMAMK003F1	Adhesive	0.02	0.08	0.00	0.00
xxxx-xx-xxx-0083	SEALANT, RW-3880-71 GAP FILLER	Sealant	1.42	0.23	0.32	0.00
xxxx-xx-xxx-0058	SEALANT, FRV1106 | LMAML017T2	Sealant	0.32	0.08	0.02	0.00
xxxx-xx-xxx-0064	POLYURETHANE PRIMER, 09Y010 | LMAMR035CNT2	HVLP	7.12	2.84	20.18	7.47
9150-01-260-2534	AEROSOL, 28A SOLID FILM LUBRICANT	Aerosol	1.82	5.25	9.57	2.73
8030-01-093-5383	ADHESION PROMOTER, AC-160	HVLP	0.39	7.31	2.82	0.40
xxxx-xx-xxx-0009	SEALANT, AC-380 B-2 | AMS3281T2B2	Sealant	0.14	0.02	0.00	0.00
xxxx-xx-xxx-0069	POLYURETHANE TOPCOAT, CLEAR GLOSS, 03X085 (2-PART KIT) | 45000791	HVLP	0.63	3.42	2.15	0.66
xxxx-xx-xxx-0065	POLYURETHANE TOPCOAT, CAMOUFLAGE GRAY #36170, 03GY523 (2-PART KIT) | 45001576	HVLP	3.04	3.38	10.28	3.20
8040-00-092-2816	DOUBLE BUBBLE EPOXY PACKET - HYSOL 608 RESIN	Resin	0.45	0.04	0.02	0.00
8030-01-158-6070	THREADLOCKER, NUTS N' BOLTS 427	Adhesive	0.10	0.04	0.00	0.00
xxxx-xx-xxx-0061	POLYURETHANE TOPCOAT, CAMOUFLAGE BLACK #37038, 03BK099(2-PART KIT)	HVLP	0.02	3.41	0.06	0.02
8040-00-118-2695	ADHESIVE-SEALANT, RTV 162	Sealant	0.93	0.37	0.34	0.00
xxxx-xx-xxx-0050	HIGH TEMPERATURE COATING, C561 | LMAMR024-4/QT	HVLP	2.64	5.84	15.39	2.77
8010-00-721-9743	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL - GLOSS RED, 0674-110	Aerosol	0.00	4.52	0.02	0.01
xxxx-xx-xxx-0008	SEALANT, AC-380 B-1/2 | AMS3281T2B1/2	Sealant	0.71	0.02	0.01	0.00
8040-00-117-8510	ADHESIVE-SEALANT, 3145 RTV MIL-A-46146 - CLEAR	Sealant	1.85	0.50	0.93	0.00
8040-01-042-1422	BONDING PRIMER, PR-1204 RTV PRIME COAT CLEAR	HVLP	0.73	6.15	4.49	0.77
xxxx-xx-xxx-0007	SEALANT, AC-370 B-2 | AMS3281B2	Sealant	0.26	0.02	0.00	0.00
8040-00-539-7798	EPOXY ADHESIVE, LOCTITE EA 608	Adhesive	0.11	0.04	0.00	0.00
xxxx-xx-xxx-0045	MOLD RELEASE AGENT, LOCTITE FREKOTE 700-NC, PINT | LMAMM176C2/PT	HVLP	0.51	6.29	3.20	0.53
xxxx-xx-xxx-0071	POLYURETHANE TOPCOAT, GLOSS WHITE #17925, 03W127BF | 45981112	HVLP	0.47	3.39	1.59	0.49
xxxx-xx-xxx-0024	RAIN EROSION COATING, CAAPCOAT FP-500 HIGH SOLIDS TOUCH-UP, BLACK GLOSS | A3720019/00082653	HVLP	0.28	0.58	0.17	0.30
8040-00-111-2682	BONDING PRIMER, PR-1200 RTV PRIME COAT CLEAR	HVLP	3.82	6.03	23.06	4.02
8030-01-498-2521	ADHESION PROMOTER, PR-187	HVLP	38.85	4.78	185.68	40.80
6850-01-474-2317	MIL-PD-680-TYPE II SOLVENT	Solvent	9.25	6.67	61.72	0.00
xxxx-xx-xxx-0060	STRUCTURAL ADHESIVE, PERMABOND TA4246/INITIATOR 46 | LMAML075F1/00063864	Adhesive	0.20	0.24	0.05	0.00
8040-01-168-0077	ADHESIVE-SEALANT, RTV 133	Adhesive	0.17	0.50	0.08	0.00
8010-01-336-3980	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, GLOSS GREEN, 0674-140	Aerosol	0.24	4.68	1.12	0.36
8010-01-540-8618	POLYURETHANE TOPCOAT, SEMI-GLOSS WHITE #27925 (2-PART KIT), 18W004	HVLP	1.27	3.50	4.45	1.33
xxxx-xx-xxx-0026	PRESATURATED WIPE, DS-104, SW42095	Solvent	2.33	7.46	17.41	0.00
xxxx-xx-xxx-0010	SEALANT, AC-730 B-2 | AMS3281B2	Sealant	1.25	0.03	0.04	0.00
8030-00-008-7198	SEALANT, CS-3213 B-1/2 (2-PART KIT)	Sealant	0.02	0.09	0.00	0.00
8010-01-332-3744	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, FLAT GREEN, 0674-345	Aerosol	0.30	4.53	1.36	0.45
8010-01-495-3946	POLYURETHANE TOPCOAT, GUNSHIP BLACK #37038 (2-PART KIT), 03BK074	HVLP	0.02	3.39	0.05	0.02
8040-00-145-0020	ADHESIVE-SEALANT, AS3145P GRAY SILICONE RTV	Sealant	0.15	0.34	0.05	0.00
xxxx-xx-xxx-0030	SEALANT, DAPCO 2100 FIREWALL SEALANT | AMS3374T1	Sealant	0.17	0.34	0.06	0.00
xxxx-xx-xxx-0006	SEALANT, AC-370 B-1/2 | AMS3281B1/2	Sealant	1.12	0.02	0.02	0.00
8040-00-902-3871	SEALANT, PROSEAL RED HI-TEMP RTV SILICONE	Sealant	0.23	0.26	0.06	0.00
8030-00-598-5915	LUBRICANT CORROSION, TECTYL 437D	HVLP	1.87	0.00	0.00	1.96
8010-01-285-3035	POLYURETHANE TOPCOAT, GLOSS WHITE (2-PART KIT), 03W127A	HVLP	0.14	3.44	0.49	0.15
6810-00-286-5435	SOLVENT, ISOPROPYL ALCOHOL	Solvent	83.33	6.55	545.56	0.00
8030-00-243-3285	ANTI-SEIZE TUBE / Lubricant	Sealant	3.47	0.00	0.00	0.00
8030-00-938-1947	CORROSION PREVENTATIVE COMPOUND, AEROSOL	Aerosol	6.36	3.68	23.39	9.54
8030-01-044-5034	ANTI-SEIZE CAN / Lubicant	HVLP	1.00	0.01	0.01	1.05
xxxx-xx-xxx-0043	EPOXY ADHESIVE, LOCTITE EA 9396 AERO | LMAML004F2/QT	Adhesive	0.68	0.08	0.06	0.00

Hangar 5 Actual Usage for Calendar Year 2020

NSN	Coating Name	Application	Totals (gal/yr)	VOC (lb/gal)	VOC Totals (lb/yr)	PM Totals (lb/yr)
8010-01-265-9145	URETHANE TOPCOAT, GRAY FLAT #36375, 04712APX/04700CMU	HVLP	2.77	3.37	9.34	2.91
xxxx-xx-xxx-0011	SEALANT, AC-730 B-6	Sealant	0.03	0.03	0.00	0.00
8030-01-438-8388	SEALANT, PR-1824 B-1	Sealant	0.15	0.32	0.05	0.00
8040-00-209-1286	EPOXY PASTE ADHESIVE - LOCTITE EA 9396 AERO (2-PART KIT)	Adhesive	0.13	0.08	0.01	0.00
xxxx-xx-xxx-0073	ADHESION PROMOTER, PR-187 | LMAMU002F1	HVLP	2.32	4.78	11.11	2.44
xxxx-xx-xxx-0055	EPOXY ADHESIVE, MAGNOBOND 6398 | LMAML111T1	Adhesive	1.39	0.17	0.23	0.00
xxxx-xx-xxx-0044	MOLD RELEASE AGENT, LOCTITE FREKOTE 700-NC, GALLON | LMAMM176C2	HVLP	0.73	6.29	4.58	0.77
xxxx-xx-xxx-0001	ELASTOMERIC COATING, SCOTCH-WELD EC-5816 | A3720011/00088372	HVLP	0.06	6.16	0.38	0.07
8040-01-452-5539	EPOXY ADHESIVE, LOCTITE EA 9395 AERO	Adhesive	0.15	0.08	0.01	0.00
6850-01-474-2319	SOLVENT, ARPOSOLVE 680	Solvent	4.27	6.38	27.22	0.00
8010-01-331-6107	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, GLOSS BLACK, 0674-190	Aerosol	0.23	4.61	1.05	0.34
8010-01-331-6105	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, GLOSS WHITE, 0674-170	Aerosol	1.03	4.73	4.85	1.54
xxxx-xx-xxx-0019	THREADLOCKER, TORQUE 41TL, TORQUE 42TL, TORQUE 43 TL	Adhesive	0.08	1.22	0.10	0.00
xxxx-xx-xxx-0074	CLEANER, ELDORADO ASTROSOL 37 | 45098394	Solvent	1.48	0.21	0.31	0.00
xxxx-xx-xxx-0057	AIRCRAFT CLEANER, CEE-BEE A-882	Solvent	0.01	0.02	0.00	0.00
8030-01-511-1245	SEALANT, PR-2201 B-1	Sealant	0.04	0.58	0.02	0.00
xxxx-xx-xxx-0075	FLUID RESISTANT PRIMER, SUPER KOROPON 515X408, 515X408/910X937 | LMAMR058F1	HVLP	1.37	5.46	7.46	1.43
8010-01-368-7879	URETHANE TOPCOAT, WHITE GLOSS #17875, 32236WPX-T2/06480CMU	HVLP	0.04	2.70	0.10	0.04
8040-00-165-8614	ADHESIVE, E 1293 MMM-A-121	Adhesive	0.25	5.20	1.32	0.00
xxxx-xx-xxx-0003	PRETREATMENT COATING, AC-131 BB | AC131BB/KT1.7	HVLP	0.44	4.28	1.87	0.46
xxxx-xx-xxx-0013	URETHANE ADHESIVE, EC-3549 | A3010023/00083953	Adhesive	0.00	0.03	0.00	0.00
xxxx-xx-xxx-0014	ABRASION RESISTANT/ANTICHAFE COATING, CTG 23T3-125 GRAY #36251, 23T3-125/PC-216 | A37200140001	HVLP	0.03	3.50	0.10	0.03
xxxx-xx-xxx-0077	SEALANT, CA 1000 (CARTRIDGE) | A4050019/00087911	Sealant	0.10	1.27	0.13	0.00
8030-00-546-8637	AEROSOL, CPC TYPE III GRADE	Aerosol	3.00	5.51	16.56	4.51
6505-00-068-4243	Mineral Oil / Coating	HVLP	0.07	0.00	0.00	0.08
xxxx-xx-xxx-0051	MARKING PAINT, C538 | LMAMR024-6/KT	Sealant	0.20	4.57	0.91	0.00
8030-01-014-5869	LOCTITE 242	Adhesive	0.87	0.05	0.04	0.00
8030-00-408-1137	TORQUE MARK, CROSS CHECK, GREEN	Sealant	0.12	3.14	0.39	0.00
8030-00-111-6404	ADHESIVE, LOCTITE 640 RETAINING COMPOUND	Adhesive	0.29	0.24	0.07	0.00
xxxx-xx-xxx-0081	SEALANT, PR-2007 B-1/2 | 8030-MC-001-0300	Sealant	1.04	0.28	0.29	0.00
8010-01-285-2495	POLYURETHANE TOPCOAT, CAMOUFLAGE BLUE (2-PART KIT), 03BL159	HVLP	0.12	3.50	0.43	0.13
6850-LL-N00-6083	PENAIR C5572	Solvent	7.59	0.00	0.00	0.00
xxxx-xx-xxx-0040	EPOXY ADHESIVE, LOCTITE EA 9360 AERO | LMAML111T4/SSK	Adhesive	0.54	0.08	0.05	0.00
8030-00-145-0300	Putty / Putty	Sealant	4.37	0.00	0.00	0.00
8010-01-441-6029	AROPEN, GLOSS TOPCOAT, 17925 WHITE, 2485113P, F94W4030 / CM0844H01	HVLP	0.06	2.63	0.17	0.00
8010-01-492-6895	RAIN EROSION RESISTANT TOPCOAT, CAAPCOAT FP-050	HVLP	1.06	5.30	5.61	1.11
8030-01-131-3228	ADHESION PROMOTER, PR 182 PINK	HVLP	0.02	0.25	0.01	0.02
8030-01-221-9101	TORQUE SEAL, F-900, PINK	Sealant	0.03	3.99	0.12	0.00
8030-00-067-6744	THREADLOCKER, NUTS N' BOLTS 227	Adhesive	0.03	0.25	0.01	0.00
4920-01-500-4186	COMPOSITE REPAIR, PR2414T / Top Coat	HVLP	0.41	0.10	0.04	0.43
xxxx-xx-xxx-0052	ADHESION PROMOTER, LORD 7701 | A3110006/00070219	HVLP	0.18	7.36	1.34	0.19
8030-00-903-0931	SCOTCH-GRIP 1357 CONT	Adhesive	7.65	4.84	37.02	0.00
xxxx-xx-xxx-0035	BONDING PRIMER, LOCTITE 7471 PRIMER | LMAML082C22GT/BT	HVLP	0.36	0.88	0.32	0.38
6810-00-286-3785	SOLVENT, METHYL ISOBUTYL KETONE, ASTM-D1153	Solvent	1.83	6.61	12.10	0.00
8030-01-036-6936	AC-350 A-1/2	Sealant	0.32	1.17	0.37	0.00
xxxx-xx-xxx-0079	SEALANT, PR-2001 B-2 | A4030002/00086980	Sealant	0.08	0.24	0.02	0.00
6850-01-170-8823	PRESATURATED WIPE, 100% ISOPROPYL ALCOHOL, SW420211	Solvent	0.16	6.55	1.07	0.00
xxxx-xx-xxx-0027	PRESATURATED WIPE, DS-108, SW420063 | 45861107	Solvent	0.05	7.92	0.38	0.00
xxxx-xx-xxx-0067	POLYURETHANE TOPCOAT, CAMOUFLAGE GRAY #36251, 03GY310 (2-PART KIT) | 45001866	HVLP	0.04	3.46	0.15	0.05
8010-01-265-9144	POLYURETHANE TOPCOAT, CAMOUFLAGE GRAY (2-PART KIT), 03GY287	HVLP	3.52	3.46	12.18	3.69
8030-00-209-8005	SEALANT, HERCULES PRO DOPE	Sealant	0.16	0.09	0.02	0.00
8030-01-163-3483	PRO-SEAL 870 B-2	Sealant	0.02	0.62	0.01	0.00
7930-01-367-0995	SOLVENT, DS-108	Solvent	0.04	7.92	0.32	0.00
xxxx-xx-xxx-0047	THREADLOCKER, NUTS N' BOLTS 423	Adhesive	0.01	0.09	0.00	0.00
8030-01-551-9719	SEALANT, PR-2202 B-1 (CARTRIDGE)	Sealant	1.39	0.38	0.52	0.00
8030-00-080-1549	SEALANT, WS-8020 RC B-1/2 (2-PART KIT)	Sealant	0.56	0.07	0.04	0.00
8030-00-837-6557	EPOXY PASTE ADHESIVE -LOCTITE EA 956 AERO	Adhesive	0.99	0.08	0.08	0.00
8010-01-441-6025	AROPEN, FLAT TOPCOAT, 36375 GRAY, 2485109P, F93A2029 / V93V26	HVLP	0.07	3.40	0.24	0.00

Hangar 5 Actual Usage for Calendar Year 2020

NSN	Coating Name	Application	Totals (gal/yr)	VOC (lb/gal)	VOC Totals (lb/yr)	PM Totals (lb/yr)
8010-01-416-6556	EPOXY PRIMER YELLOW, 02Y040A (2-PART KIT)	HVLP	0.26	2.75	0.72	0.28
8010-01-441-6030	SEMPEN, EPOXY POLYAMIDE PRIMER YELLOW, E90G203/V93V230	Sealant	0.07	2.65	0.18	0.00
8030-00-348-7888	SEALANT, PR-1750 B-1/2 (2-PART KIT)	Sealant	0.05	0.39	0.02	0.00
8010-01-528-4866	AEROSOL, SPRAY2FIX POLY TOPCOAT, FLAT BLACK #37038, 666-58-7038SC	Aerosol	0.14	4.90	0.71	0.22
8010-01-218-0858	EPOXY PRIMER - DARK GREEN (2-PART KIT), 44GN008A	HVLP	0.04	2.84	0.11	0.04
8010-01-528-4860	AEROSOL, SPRAY2FIX POLY TOPCOAT, FLAT GRAY #36375, 666-58-6375SC	Aerosol	1.44	4.85	6.99	2.16
8010-01-528-4850	AEROSOL, SPRAY2FIX POLY TOPCOAT, FLAT GRAY/BLUE #35237, 666-58-5237SC	Aerosol	0.99	4.90	4.83	1.48
8010-01-528-4858	AEROSOL, SPRAY2FIX POLY TOPCOAT, FLAT GRAY #36320, 666-58-6320SC	Aerosol	0.75	4.90	3.66	1.12
8030-00-602-0045	SEALANT, PR-1750 B-1/2 (CARTRIDGE)	Sealant	0.28	0.39	0.11	0.00
8010-01-265-9154	POLYURETHANE TOPCOAT, GLOSS RED #11136, 03R064 (2-PART KIT)	HVLP	0.11	3.34	0.36	0.11
8030-00-485-3237	SEALANT, PR-1750 B-2 (2-PART KIT)	Sealant	0.25	0.39	0.10	0.00
8010-01-292-8893	COATING, IN EPOXY PRIMER COATING	HVLP	0.06	2.84	0.16	0.06
6850-01-458-8018	SOLVENT CLEANER, 020X413	Solvent	2.38	6.56	15.61	0.00
8010-01-285-3048	POLYURETHANE TOPCOAT, GLOSS BLACK (2-PART KIT), 03BK071	HVLP	0.61	3.49	2.12	0.64
8010-01-329-6304	EPOXY PRIMER YELLOW, 02Y040A (2-PART KIT)	HVLP	0.04	2.75	0.12	0.05
8010-01-331-6110	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, GLOSS RED, 0674-110	Aerosol	0.11	4.52	0.50	0.17
8010-01-441-6024	AROPEN, FLAT TOPCOAT, 36320 GRAY, 2485108P, F93A2032 / V93V26	HVLP	0.00	3.42	0.01	0.00
6810-01-459-1994	CLEANER, MPK / Solvent	Solvent	0.12	6.76	0.80	0.00
8010-01-331-6115	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, GLOSS YELLOW, 0674-130	Aerosol	0.09	4.67	0.42	0.14
8010-01-331-6109	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, GLOSS RED, 0674-111	Aerosol	0.00	4.51	0.02	0.01
xxxx-xx-xxx-0031	ANTI-FRICTION COATING, MOLYKOTE D-321R	HVLP	0.00	6.34	0.01	0.00
8010-01-331-6118	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, GLOSS BLUE, 0674-150	Aerosol	0.06	4.78	0.29	0.09
8010-01-331-6114	AEROSOL, ECO-SURE INDUSTRIAL ENAMEL, GLOSS YELLOW, 0674-133	Aerosol	0.34	4.68	1.60	0.51
8030-01-043-2295	SEALANT, Q4-2805	Sealant	0.01	0.08	0.00	0.00
		Totals	**399.33**		**1925.12**	**146.34**

	Totals (gal/yr)	VOC Totals (lb/yr)	PM Totals (lb/yr)
Solvent	219.28	1380.27	0.00
Aerosol	23.21	104.14	34.81
Adhesive	16.17	39.25	0.00
HVLP	106.35	394.00	111.52
Sealant	33.86	7.46	0.00
Resin	0.45	0.02	0.00
Totals	399.33	1925.12	146.34

Appendix C:
Quarterly Net Emissions Change

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post-Project Potential to Emit for each emissions unit, lb/qtr.
PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.1 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

The four modules that make the hangar 6 are identical; therefore, the annual emissions limits set for the hangar will be divided by four to equally distribute emissions in each of the ATCs.

VOC:
Total PE = 1,400 lb/yr ÷ 4 modules = 350 lb-VOC/module.year

PM10:
Total PE = 578 lb/yr ÷ 4 modules = 145 lb-PM10/module.year

$PE_{quarterly}$ = PE_{annual} ÷ 4 quarters/year

Quarterly NEC [QNEC] For Each ATC			
Pollutant	**PE2 (lb/qtr)**	**PE1 (lb/qtr)**	**QNEC (lb/qtr)**
NO_X	0	0	0
SO_X	0	0	0
PM_{10}	36.25	0	36.25
CO	0	0	0
VOC	87.5	0	87.5

Appendix D:
BACT Guidelines
& Top-Down BACT Analysis

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.2.6*

Last Update: 1/16/1997

Aerospace Parts Coating Operation

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	The use of an enclosed gun cleaner and coatings with a VOC content (less water and exempt compounds) lower than the following: Primers < 6.4 lb VOC/gal Topcoats < 5.2 lb VOC/gal	1. Thermal Oxidation 2. Catalytic Oxidation 3. Carbon Adsorption	
PM10	Enclosed paint booth with dry filters and use of HVLP gun		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.2.5*

Last Update: 04/23/2002

Limited Aircraft Coating Operation - Maintenance and Refinishing of Metal Parts on Aircraft, < 20 Gallons/day.

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of Coating compliant with Rule 4605, HVLP application equipment, and an enclosed gun cleaner, or equal.	1. 98% control (Capture and control with thermal or catalytic oxidizer, or equal). 2. 95% control (Capture and control with carbon adsorption, or equal).	
PM10	HVLP application equipment.	Enclosed spray booth with dry filters and the use of HVLP application equipment.	

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in s a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.3.1*

Last Update: 3/18/1999

Metal Parts and Products Coating - Air Dried (excluding specialty coating as defined in Rule 4603)

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Coatings with a VOC content of 2.8 lb/gal or less; HVLP (or equivalent) spray equipment; and an enclosed spray gun cleaning system	1. Thermal/catalytic incineration 2. Carbon adsorption	
PM10	Enclosed paint spray booth with particulate filters and HVLP application equipment (or other application methods listed in Rule 4603)		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.2.7*

Last Update: 11/12/1996

Aerospace and Metal Parts Coating Operating - Solid Film
Lubricant for computer, medical specialty, and aerospace metal parts and products

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Solvent-based solid film lubricant coating with a VOC content of 6.44 lb/gal (less water and exempt compounds), or lower.	1) VOC capture and thermal incineration system. 2) VOC capture and catalytic incineration system. 3) VOC capture and carbon adsorption system.	
PM10	Enclosed paint spray booth with dry filters and use of HVLP spray gun or equivalent application method.		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.4.1*

Last Update: 10/16/1996

Wood Products Coating Operation - Non-Continuous Batch Coating

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Utilizing HVLP or equivalent application equipment and using coatings compliant with District Rule 4606	1. 100% capture efficiency (closed-face booth) with thermal/catalytic incineration, and using coatings with a VOC content (less water and exempt compounds) of 4.6 lb/gal for clear topcoats, 5.0 lb/gal for high-solids coatings, 4.6 lb/gal for sanding sealers, 2.2 lb/gal for water based pigmented primers and 2.4 lb/gal for water based pigmented topcoats 2. 100% capture efficiency (closed-face booth) with carbon adsorption, and using coatings with a VOC content (less water and exempt compounds) of 4.6 lb/gal for clear topcoats, 5.0 lb/gal for high-solids coatings, 4.6 lb/gal for sanding sealers, 2.2 lb/gal for water based pigmented primers and 2.4 lb/gal for water based pigmented topcoats 3. Utilizing HVLP or equivalent application equipment and coatings with a VOC content (less water and exempt compounds) of 4.6 lb/gal for clear topcoats, 3.2 lb/gal for high-solids coatings, 4.6 lb/gal for sanding sealers, 0.68 lb/gal for water based pigmented primers, and 1.62 lb/gal for water based pigmented topcoats	
PM10	Enclosed spray booth with exhaust filters and HVLP or equivalent application equipment		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

Top-Down BACT Analysis

BACT Analysis for VOC Emissions for Aircraft Coating and Adhesives[4]:

a. Step 1 - Identify All Possible Control Technologies

The SJVAPCD BACT Clearinghouse Guidelines 4.2.5[5], 4.2.6, and 4.2.7 identify achieved in practice and technologically feasible BACT control technologies for aerospace parts coating operations as follows:

Achieved in Practice:

1) HVLP application equipment

2) Compliance with District Rule 4605

3) Use of an enclosed gun cleaner or equivalent

4) Coating with a VOC content (less water and exempt compounds) lower than the following[6]:
    - Primers < 6.4 lb-VOC/gal
    - Topcoats < 5.2 lb-VOC/gal

5) Solvent-based solid film lubricant coatings with a VOC content (less water and exempt compounds) ≤ 6.44 lb-VOC/gal

Technologically Feasible:

1) VOC capture and control system (thermal or catalytic incineration, or carbon adsorption)

b. Step 2 - Eliminate Technologically Infeasible Options

The applicant has stated the hangars and buildings the coating operations reside in are very large structures. The dimensions of a typical hangar is 620' L x 100' W x 38' H. The existing hangars do not have any sort of stack or ventilation method to capture all the

[4] BACT Guideline 4.2.5 establishes AIP as VOC content compliant with Rule 4605, which includes in Table 1 limits for coatings as well as adhesives. Therefore, this Guideline will meet the limit requirements of emissions associated with adhesives.

[5] BACT Guidelines 4.2.5 and 4.2.7 were recently updated in September 2021. However, this project was deemed complete prior to this update in August 2021. Therefore, the BACT Guidelines versions that were current by the time the project was deemed complete will be used.

[6] VOC emissions limits under Rule 4605 for primers and topcoats are lower than the ones achieved in practice under BACT Guideline 4.2.6. Therefore, no condition will be added to meet this BACT requirement.

emitted VOC emissions in the building.

Each of the above technologically feasible options (incineration or carbon adsorption) would require a totally enclosed structure and a ventilation system to vent the exhaust through a stack. For such a large building, total enclosure and ventilation system vented to an exhaust stack is not technologically feasible. Therefore, all of the above technologically feasible options will be removed from consideration and no cost effectiveness analysis will be needed.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1) HVLP application equipment

2) Coatings compliant with District Rule 4605

3) Use of an enclosed gun cleaner or equivalent

4) Coating with a VOC content (less water and exempt compounds) lower than the following[7]:
    - Primers < 6.4 lb-VOC/gal
    - Topcoats < 5.2 lb-VOC/gal

5) Solvent-based solid film lubricant coatings with a VOC content (less water and exempt compounds) ≤ 6.44 lb-VOC/gal

d. Step 4 - Select BACT

HVLP spray guns, enclosed gun cleaner, and low VOC coatings and solvents in compliance with District Rule 4605 are selected as BACT for this category and class of source. The applicant has proposed to use HVLP spray guns, enclosed gun cleaner, and coatings in compliance with District Rule 4605; therefore, BACT for VOC is satisfied.

[7] VOC emissions limits under Rule 4605 for primers and topcoats are lower than the ones achieved in practice under BACT Guideline 4.2.6. Therefore, no condition will be added to meet this BACT requirement.

BACT Analysis for PM10 Emissions for Aircraft Coating:

a. Step 1 - Identify all control technologies

The SJVAPCD BACT Clearinghouse Guidelines 4.2.5[8], 4.2.6, and 4.2.7 identify achieved in practice and technologically feasible BACT control technologies for aerospace parts coating operations as follows:

Achieved in Practice:

1) HVLP application equipment
2) Enclosed paint booth with dry filters

Technologically Feasible:

Guideline 4.2.5 includes the same options that appear as Achieved in Practice in the other guidelines. Therefore, no technologically feasible options are included.

b. Step 2 - Eliminate Technologically Infeasible Options

The applicant has stated the hangars and buildings the coating operations reside in are very large structures. The dimensions of a typical hangar is 620' L x 100' W x 38' H.

A paint spray booth with dimensions to contain an entire aircraft designed for Hangar is not an option for these types of touch-up and repair coating operations. These are large fighter aircraft with dimensions that will not allow them to fit into a standard sized paint spray booth. Therefore, the enclosed paint booth option will be eliminated.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

The only remaining option is HVLP application equipment.

d. Step 4 - Select BACT

HVLP spray guns is selected as BACT for this category and class of source. The applicant has proposed to use HVLP spray guns; therefore, BACT for PM10 is satisfied.

BACT Analysis for VOC Emissions for Wood Parts Coating:

a. Step 1 - Identify All Possible Control Technologies

[8] BACT Guidelines 4.2.5 and 4.2.7 were recently updated in September 2021. However, this project was deemed complete prior to this update in August 2021. Therefore, the BACT Guidelines versions that were current by the time the project was deemed complete will be used.

The SJVAPCD BACT Clearinghouse Guideline 4.4.1 identifies achieved in practice and technologically feasible BACT control technologies for wood products coating as follows:

Achieved in Practice:

1. HVLP application equipment or equivalent
2. Coatings compliant with District Rule 4606

Technologically Feasible:

1) VOC capture and control system: closed-faced booth with thermal or catalytic incineration or carbon adsorption, and VOC content of:

   a. Clear topcoats: 4.6 lb/gal

   b. High-solids coating: 5.0 lb/gal

   c. Sanding sealers: 4.6 lb/gal

   d. Water-based pigmented primers: 2.2 lb/gal

   e. Water-based pigmented topcoats: 2.4 lb/gal

2) HVLP application equipment or equivalent and VOC content of:

   a. Clear topcoats: 4.6 lb/gal

   b. High-solids coating: 3.2 lb/gal

   c. Sanding sealers: 4.6 lb/gal

   d. Water-based pigmented primers: 0.68 lb/gal

   e. Water-based pigmented topcoats: 1.62 lb/gal

b. Step 2 - Eliminate Technologically Infeasible Options

The applicant has stated the hangars and buildings the coating operations reside in are very large structures. The dimensions of a typical hangar is 620' L x 100' W x 38' H. The existing hangars do not have any sort of stack or ventilation method to capture all the emitted VOC emissions in the building.

Each of the above technologically feasible options (incineration or carbon adsorption)

would require a totally enclosed structure and a ventilation system to vent the exhaust through a stack. For such a large building, total enclosure and ventilation system vented to an exhaust stack is not technologically feasible. Therefore, these technologically feasible options will be removed from consideration and no cost effectiveness analysis will be needed.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1) HVLP application equipment

2) Coatings compliant with District Rule 4606

3) Coating with a VOC content (less water and exempt compounds) lower than the following[9]:

   a. Clear topcoats: 4.6 lb/gal

   b. High-solids coating: 3.2 lb/gal

   c. Sanding sealers: 4.6 lb/gal

   d. Water-based pigmented primers: 0.68 lb/gal

   e. Water-based pigmented topcoats: 1.62 lb/gal

d. Step 4 - Select BACT

HVLP spray guns, and low VOC coatings in compliance with District Rule 4606 are selected as BACT for this category and class of source. The applicant has proposed to use HVLP spray guns and coatings in compliance with District Rule 4606; therefore, BACT for VOCs is satisfied.

[9] VOC emissions limits under Rule 4606 for clear topcoat, high-solids coating, and sanding sealers are more stringent than the technologically feasible under BACT Guideline 4.4.1. Therefore, no condition will be added to meet this BACT requirement.

BACT Analysis for VOC Emissions for Metal Parts and Products Coating:

a. Step 1 - Identify All Possible Control Technologies

The SJVAPCD BACT Clearinghouse Guideline 4.3.1 identifies achieved in practice and technologically feasible BACT control technologies for metal parts and products coating as follows:

Achieved in Practice:

1. HVLP application equipment or equivalent
2. Coatings with a VOC content of 2.8 lb/gal or less
3. Enclosed spray gun cleaning system

Technologically Feasible:

1. VOC capture and control system: thermal or catalytic incineration
2. VOC capture and control system: carbon adsorption

b. Step 2 - Eliminate Technologically Infeasible Options

The applicant has stated the hangars and buildings the coating operations reside in are very large structures. The dimensions of a typical hangar is 620' L x 100' W x 38' H. The existing hangars do not have any sort of stack or ventilation method to capture all the emitted VOC emissions in the building.

Each of the above technologically feasible options (incineration or carbon adsorption) would require a totally enclosed structure and a ventilation system to vent the exhaust through a stack. For such a large building, total enclosure and ventilation system vented to an exhaust stack is not technologically feasible. Therefore, these technologically feasible options will be removed from consideration and no cost effectiveness analysis will be needed.

c. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

3) HVLP application equipment or equivalent

4) Coating with a VOC content of 2.8 lb/gal or less

5) Enclosed spray gun cleaning system

d. Step 4 - Select BACT

HVLP spray guns or equivalent, and coatings with VOC content of 2.8 lb/gal or less and enclosed spray gun cleaning system. The applicant has proposed to use only dip, roller, or brush as application methods and meet the 2.8 lb/gal limit for air dried coatings, which also satisfies Rule 4603 limits. Therefore, an enclosed spray gun cleaning system is not applicable and BACT for VOCs is satisfied.

Appendix E:
ERC Surplus Analysis

San Joaquin Valley Air Pollution Control District

Surplus ERC Analysis

Facility Name:	NAS Lemoore	**Date:**	December 2, 2021
Mailing Address:	750 Enterprise Ave., Lemoore, CA 93245	**Engineer:**	Silvana Procopio
		Lead Engineer:	Steven Davidson
Contact Person:	John Gilliland		
Telephone:	559.998.4078		
ERC Certificate(s) #:	C-1046-1		
ERC Surplus Project #:	N/A		
ATC Project #:	C-1212200		

I. Proposal

NAS Lemoore is proposing the use of the following Emission Reduction Credit (ERC) certificate to meet the federal offset requirements of District project C-1212200.

Proposed ERC Certificate(s)	
Certificate #	**Criteria Pollutant**
C-1046-1	VOC

The purpose of this analysis is to ensure that the emission reductions on this ERC certificate are surplus of all applicable Federal requirements; therefore, this analysis establishes the surplus value of the ERC certificate as of the date of this analysis. The current face value and surplus value of the ERC certificate evaluated in this analysis are summarized in the following table:

Criteria Pollutant: VOC

ERC Certificate C-1046-1				
Pollutant	1st Qtr. (lb/qtr)	2nd Qtr. (lb/qtr)	3rd Qtr. (lb/qtr)	4th Qtr. (lb/qtr)
Current Value	1,607	453	1,066	59
Surplus Value	1,607	453	1,066	59

II. Individual ERC Certificate Analysis

ERC Certificate C-1046-1

A. ERC Background

Criteria Pollutant: VOC

ERC Certificate C-1046-1 is a certificate that was split out from parent ERC Certificate C-138-1. Original ERC Certificate C-138-1 was issued to NAS Lemoore on 10/15/1997 under project C-960506. The ERCs were generated from the shutdown of a JP-5-fueled fire training facility, facility ID C-2106, under permit C-2106-130, which included the burning of JP-5 jet fuel, and its replacement with a propane-fueled fire training facility.

The following table summarizes the values of the original parent certificate and the current value of the subject certificate proposed to be utilized as a part of the current District analysis:

ERC Certificate C-1046-1				
Pollutant	1st Qtr. (lb/qtr)	2nd Qtr. (lb/qtr)	3rd Qtr. (lb/qtr)	4th Qtr. (lb/qtr)
Original Value of Parent Certificate C-138-1	1,868	712	1,325	317
Current Value of ERC Certificate C-1046-1	1,607	453	1,066	59

B. Applicable Rules and Regulations at Time of Original Banking Project

Based on the application review for the original ERC banking project, the following rules and regulations were evaluated to determine the surplus value of actual emission reductions of VOCs generated by the reduction project.

1. District Rules

The application review for the original ERC banking project did not address any District Rules because there were no applicable rules for a fuel-fired training facility at the time of this original ERC action. Therefore, no further discussion is required.

2. Federal Rules and Regulations

There were no applicable federal rules or regulations identified that applied at the time of this original ERC banking action; therefore, no further discussion is required.

C. New or Modified Rule and Regulations Applicable to the Original Banking Project

There are no applicable District or federal rules or regulations that have been adopted or amended since the date the original banking project was finalized and that would apply to JP-fueled fire training operations. Therefore, the original VOC emission reductions continue to be surplus of District and Federal rule requirements.

D. Surplus at Time of Use Adjustments to ERC Quantities

As demonstrated in the section above, the emissions reductions from permit units in the original banking project continue to be surplus of all applicable District and Federal Rules and Regulations. Therefore, no discounting to the ERC values are necessary for surplus at time of use considerations.

E. Surplus Value of ERC Certificate

The emissions continue to be Surplus of all District and Federal Rules and Regulations; therefore, no adjustments to the ERC values are necessary.

ERC Certificate C-1046-1 – Criteria Pollutant VOC					
		1st Qtr. (lb/qtr)	2nd Qtr. (lb/qtr)	3rd Qtr. (lb/qtr)	4th Qtr. (lb/qtr)
(A)	Current ERC Quantity	1,607	453	1,066	59
(B)	Percent Discount	**0%**	**0%**	**0%**	**0%**
(C) = (A) x [1 – (B)]	**Surplus Value**	**1,607**	**453**	**1,066**	**59**

Attachment

1. Summary of Equipment Shut Down in Original ERC Banking Project

Summary of Equipment Shut Down in Original ERC Banking Project

District Permit	Equipment Summary
C-2106-130-0	JP-5 FUELED FIRE TRAINING FACILITY

Appendix F:
ERC Withdrawal Calculations

ERC Withdrawal Calculations

VOC	1st Quarter (lb)	2nd Quarter (lb)	3rd Quarter (lb)	4th Quarter (lb)
ERC C-1046-1	1,607	453	1,066	59
Offsets Required (Includes distance offset ratio)	525	525	525	525
Amount Remaining	1,082	-72	541	-466
Transfer 72 lb from Q3 to Q2	1,082	0	469	-466
Transfer 466 lb from Q3 to Q4	1,082	0	3	0
Credits reissued under ERC C-YYYY-1	**1,082**	**0**	**3**	**0**

PM_{10}	1st Quarter (lb)	2nd Quarter (lb)	3rd Quarter (lb)	4th Quarter (lb)
ERC C-1050-4	7,799	3,198	5,638	1,626
Offsets Required (Includes distance offset ratio)	144	144	145	145
Amount Remaining	7,655	3,054	5,493	1,481
Credits reissued under ERC C-YYYY-4	**7,655**	**3,054**	**5,493**	**1,481**

Appendix G:
HRA & AAQA Summary

San Joaquin Valley Air Pollution Control District
Risk Management Review and Ambient Air Quality Analysis

To:	Silvana Procopio – Permit Services
From:	Will Worthley – Technical Services
Date:	December 23, 2021
Facility Name:	NAS LEMOORE
Location:	NAVAL AIR STATION LEMOORE, 750 ENTERPRISE AVE , LEMOORE
Application #(s):	C-2106-195-0, -197-0, -198-0, -199-0
Project #:	C-1212200

1. Summary

1.1 RMR

Units	Prioritization Score	Acute Hazard Index	Chronic Hazard Index	Maximum Individual Cancer Risk	T-BACT Required	Special Permit Requirements
195-0	2.055	0.07	0.00	5.30E-07	No	Yes
197-0	2.055	0.07	0.00	5.30E-07	No	Yes
198-0	2.055	0.07	0.00	5.30E-07	No	Yes
199-0	2.055	0.07	0.00	5.30E-07	No	Yes
Project Totals	8.22	0.29	0.00	2.12E-06		
Facility Totals	>1	0.30	0.00	9.11E-06		

1.2 AAQA

Pollutant	Air Quality Standard (State/Federal)				
	1 Hour	3 Hours	8 Hours	24 Hours	Annual
PM10				Pass[1]	Pass[1]
PM2.5				Pass[2]	Pass[2]

Notes:
1. Modeled PM10 concentrations were below the District SIL for non-fugitive sources of 5 µg/m^3 for the 24-hour average concentration and 1 µg/m^3 for the annual concentration.
2. Modeled PM2.5 concentrations were below the District SIL for non-fugitive sources of 1.2 µg/m^3 for the 24-hour average concentration and 0.2 µg/m^3 for the annual concentration.

To ensure that human health risks will not exceed District allowable levels; the following shall be included as requirements for:

Unit # 195-0, 197-0, 198-0, & 199-0

1. Annual VOC emissions for Hanger 6 shall not exceed 1,925 pounds.
2. Annual PM emissions for Hanger 6 shall not exceed 578 pounds.

2. Project Description

Technical Services received a request on August 11, 2021 to perform a Risk Management Review (RMR) and Ambient Air Quality Analysis (AAQA) for the following:

- Unit -195-0: SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS WITH HVLP SPRAY GUN(S) AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 1)
- Unit -197-0: SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS WITH HVLP SPRAY GUN(S) AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 2)
- Unit -198-0: SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS WITH HVLP SPRAY GUN(S) AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 3)
- Unit -199-0: SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS WITH HVLP SPRAY GUN(S) AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 4)

3. RMR Report

3.1 Analysis

The District performed an analysis pursuant to the District's Risk Management Policy for Permitting New and Modified Sources (APR 1905, May 28, 2015) to determine the possible cancer and non-cancer health impact to the nearest resident or worksite. This policy requires that an assessment be performed on a unit by unit basis, project basis, and on a facility-wide basis. If a preliminary prioritization analysis demonstrates that:

- A unit's prioritization score is less than the District's significance threshold and;
- The project's prioritization score is less than the District's significance threshold and;
- The facility's total prioritization score is less than the District's significance threshold

Then, generally no further analysis is required.

The District's significant prioritization score threshold is defined as being equal to or greater than 1.0. If a preliminary analysis demonstrates that either the unit's or the project's or the facility's total prioritization score is greater than the District threshold, a screening or a refined assessment is required

If a refined assessment is greater than one in a million but less than 20 in one million for carcinogenic impacts (Cancer Risk) and less than 1.0 for the Acute and Chronic hazard indices(Non-Carcinogenic) on a unit by unit basis, project basis and on a facility-wide basis the proposed application is considered less than significant. For unit's that exceed a cancer risk of 1 in one million, Toxic Best Available Control Technology (TBACT) must be implemented.

Toxic emissions for this project were calculated using the following methods:

- The SDS sheets for the coatings used in the operation were reviewed by CAS# for Toxic Air Contaminants (TACs). The values were entered into the coating spreadsheet to calculate the TAC's emissions.

These emissions were input into the San Joaquin Valley APCD's Hazard Assessment and Reporting Program (SHARP). In accordance with the District's Risk Management Policy, risks

from the proposed unit's toxic emissions were prioritized using the procedure in the 2016 CAPCOA Facility Prioritization Guidelines. The prioritization score for this proposed facility was greater than 1.0 (see RMR Summary Table). Therefore, a refined health risk assessment was required.

The AERMOD model was used, with the parameters outlined below and meteorological data for 2012-2016 from Lemoore (rural dispersion coefficient selected) to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the SHARP Program, which then used the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Source Process Rates					
Unit ID	**Process ID**	**Process Material**	**Process Units**	**Hourly Process Rate**	**Annual Process Rate**
195	1	VOC	LBS	1.33	1925[1]
195	1	PM10	LBS	0.39	578[1]
197	1	VOC	LBS	1.33	1925[1]
197	1	PM10	LBS	0.39	578[1]
198	1	VOC	LBS	1.33	1925[1]
198	1	PM10	LBS	0.39	578[1]
199	1	VOC	LBS	1.33	1925[1]
199	1	PM10	LBS	0.39	578[1]

1. Annual rate is shared for all units.

Polygon Area Source Parameters				
Unit ID	**Unit Description**	**Release Height (m)**	**No. Vertices**	**Area (m^2)**
195	Coating Op	6.10	4	9095

4. AAQA Report

The District modeled the impact of the proposed project on the National Ambient Air Quality Standard (NAAQS) and/or California Ambient Air Quality Standard (CAAQS) in accordance with District Policy APR-1925 (Policy for District Rule 2201 AAQA Modeling) and EPA's Guideline for Air Quality Modeling (Appendix W of 40 CFR Part 51). The District uses a progressive three level approach to perform AAQAs. The first level (Level 1) uses a very conservative approach. If this analysis indicates a likely exceedance of an AAQS or Significant Impact Level (SIL), the analysis proceeds to the second level (Level 2) which implements a more refined approach. For the 1-hour NO_2 standard, there is also a third level that can be implemented if the Level 2 analysis indicates a likely exceedance of an AAQS or SIL.

The modeling analyses predicts the maximum air quality impacts using the appropriate emissions for each standard's averaging period. Required model inputs for a refined AAQA include background ambient air quality data, land characteristics, meteorological inputs, a receptor grid, and source parameters including emissions. These inputs are described in the sections that follow.

Technical Services performed modeling for directly emitted criteria pollutants with the emission rates below:

Emission Rates (lbs/hour)			
Unit ID	**Process**	**PM10**	**PM2.5**
195, 197, 198, & 199	1	1.575	1.575

Emission Rates (lbs/year)			
Unit ID	**Process**	**PM10**	**PM2.5**
195, 197, 198, & 199	1	578	578

The AERMOD model was used to determine if emissions from the project would cause or contribute to an exceedance of any state of federal air quality standard. The parameters outlined below and meteorological data for 2012-2016 from Lemoore (rural dispersion coefficient selected) were used for the analysis:

The following parameters were used for the review:

Polygon Area Source Parameters				
Unit ID	**Unit Description**	**Release Height (m)**	**No. Vertices**	**Area (m^2)**
195	Coating Op	6.10	4	9095

5. Conclusion

5.1 RMR

The cumulative acute and chronic indices for this facility, including this project, are below 1.0; and the cumulative cancer risk for this facility, including this project, is less than 20 in a million. In addition, the cancer risk for each unit in this project is less than 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

To ensure that human health risks will not exceed District allowable levels; the permit requirements listed on page 1 of this report must be included for this proposed unit.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

5.2 AAQA

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

6. Attachments

A. Modeling request from the project engineer

B. Additional information from the applicant/project engineer

C. Prioritization score w/ toxic emissions summary

D. Facility Summary

E. AAQA results

Appendix H:
Compliance Certification

DEPARTMENT OF THE NAVY
NAVAL AIR STATION LEMOORE
700 AVENGER AVENUE
LEMOORE, CA 93246-5001

IN REPLY REFER TO
11000
Ser PWDL/032
September 20, 2021

Mr. Errol Villegas
Manager, Central Region
San Joaquin Valley
Air Pollution Control District
1990 E. Gettysburg Ave.
Fresno, CA 93726

Subj: COMPLIANCE CERTIFICATION NAVAL AIR STATION LEMOORE, 750 ENTERPRISE AVE, LEMOORE, CA 93246, SJVAPCD FACILITY ID C-2106

Dear Mr. Villegas,

In accordance with Rule 2201, 4.15, "Additional Requirements for the New Major Sources and Federal Major Modifications," Naval Air Station (NAS) Lemoore is providing this compliance statement related to the following two proposed projects at the above referenced facility:

1. Permit two new emergency standby generators (SJVAPCD Project #1211083); and
2. Permit a new coating operation (SJVAPCD Project #1212200).

The NAS Lemoore major stationary source is owned and operated by NAS Lemoore that is subject to emissions limitations and are in compliance or on a schedule for compliance with all applicable emission limitations and standards.

Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

If you have any questions, please contact Donna Ogilvie, Installation Environmental Program Director at (559) 998-4078 or by email: donna.ogilvie@navy.mil.

Sincerely,

GREGORY J. WOODS
Commander, Civil Engineer Corps
U.S. Navy
Public Works Officer
By direction of the Commanding Officer

Copy to:
Donna Ogilvie, NAS Lemoore
Mungi Hong, SJVAPCD Air Quality Engineer

Appendix I:
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-2106-195-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: NAS LEMOORE
MAILING ADDRESS: 750 ENTERPRISE AVE. RM 107
LEMOORE, CA 93246-5001

LOCATION: NAVAL AIR STATION LEMOORE
750 ENTERPRISE AVE
LEMOORE, CA 93246-5001

EQUIPMENT DESCRIPTION:
SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS INCLUDING METAL AND WOOD PARTS AND PRODUCTS; WITH HVLP SPRAY GUN(S) AND OTHER APPROVED APPLICATION METHODS, AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 1)

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender surplus VOC emission reduction credits for the following quantity of emissions: 1st quarter - 525 lb, 2nd quarter - 453 lb, 3rd quarter - 1,063 lb, and fourth quarter - 59 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Number C-1046-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services
C-2106-195-0 : Feb 3 2022 11:25AM -- PROCOPIS : Joint Inspection NOT Required

5. Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender surplus PM10 emission reduction credits for the following quantity of emissions: 1st quarter - 144 lb, 2nd quarter - 144 lb, 3rd quarter - 145 lb, and fourth quarter - 145 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
6. ERC Certificate Number C-1050-4 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]
7. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
8. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
9. Coating of aerospace parts not attached to the aircraft, metal or wood parts and products shall be done using brush, dip, roll coating application equipment in this module. If spray coating equipment is used for these operations, coating shall be done in the paint spray booths listed on permit units C-2106-39 or '-149. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Solvent-based solid film lubricant coatings shall have a VOC content, as applied, equal to or less than 6.4 lb/gal (767 g/l), excluding water and exempt solvents. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit
11. VOC content of coatings as applied, excluding water and exempt compounds, for maintenance and refinishing of metal parts on aircraft shall not exceed any of the following limits: antichafe coatings 420 g/l (3.5 lb/gal), high temperature coatings 420 g/l (2.5 lb/gal), radiation effect coatings 600 g/l (5.0 lb/gal), metalized epoxy coatings 700 g/l (5.8 lb/gal). [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit
12. Total PM10 emissions shall not exceed 9.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Total VOC emissions shall not exceed 32.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Total annual PM10 emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 578 lb/yr. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
15. Total annual VOC emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 1,400 lb/yr. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
16. Permittee shall keep daily and annual records of total VOC emissions in lb/day and lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall keep daily and annual records of total PM10 emissions (lb/day and lb/year) only for coatings that used an HVLP gun as the application method. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Daily PM10 emissions of each coating and/or primer applied shall be calculated as follows: daily PM10 emissions of each coating and/or primer applied = coating and/or primer density (lb/gallon) x coating and/or primer solids content (% by weight) x usage (gallons/day) x control efficiency factor. Control efficiency factor is 0.25 for primers applied outside the booth, and 0.0125 for coating and/or primers applied inside the booth. Total daily PM10 emissions is the sum of PM10 emissions from all coating and/or primers applied. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Daily VOC emissions of each coating and/or solvent shall be calculated as follows: daily VOC emissions = VOC content (lb/gallon) as applied x usage (gallon/day). Total daily VOC emissions is the sum of VOC emissions from all coatings and/or solvents used. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Architectural coating shall be performed using only aerosol coating products. [District Rule 4601] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. For metal parts and products, VOC content of air-dried coatings as applied, excluding water and exempt compounds, shall not exceed 2.8 lb/gal (340 g/l). For specialty coatings, the VOC content shall not exceed the following limits: camouflage 420 g/l (3.5 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 420 g/l (3.5 lb/gal), high gloss: 420 g/l (3.5 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic coating: 420 g/l (3.5 lb/gal), pretreatment coating: 420 g/l (3.5 lb/gal), touch up and repair coating: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), and solar absorbent: 420 g/l (3.5 lb/gal). [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit

22. For wood products, VOC content of coatings as applied, excluding water and exempt compounds, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), low-solids stain 120 g/l (1.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), water-based pigmented primers 0.68 lb/gal, water-based pigmented topcoats 1.62 lb/gal, sanding sealer 275 g/l (2.3 lb/gallon), and stripper 350 g/l (2.9 lb/gallon). [District Rules 2201 and 4606] Federally Enforceable Through Title V Permit

23. The operator shall comply with the following work practice standards: 1) store all VOC-containing coatings, thinners, cleaning materials, and waste materials in closed non-absorbent and non-leaking containers, keeping the containers closed at all times except when specifically in use; 2) close mixing vessels that contain VOC coatings and other materials, except when specifically in use; 3) minimize spills of any VOC-containing materials and clean up spills immediately; and 4) convey VOC-containing materials in closed containers or pipes. [District Rules 4603 and 4606] Federally Enforceable Through Title V Permit

24. VOC content of aerospace coatings as applied, excluding water and exempt compounds, used for aerospace components shall not exceed any of the limits listed in section 5.1, Table 1 of Rule 4605 (6/16/2011), unless otherwise allowed in this permit. [District Rule 4605] Federally Enforceable Through Title V Permit

25. For solvent cleaning operations of metal and wood parts and products, VOC content of solvents shall not exceed 25 g/l (0.21 lb/gal). [District Rules 4603 and 4606] Federally Enforceable Through Title V Permit

26. For aerospace surface cleaning, cleanup, or jet engine or rocket engine gas path cleaning or flushing, excluding stripping coatings or cleaning coating application equipment, permittee shall not use solvents with a VOC content greater than or equal to 200 g/l (1.67 lb/gal) as applied or with a VOC composite vapor pressure greater than 45 mmHg (0.87 psia) at 68 F. [District Rule 4605] Federally Enforceable Through Title V Permit

27. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, sealants, catalysts, thinners, or any unused VOC-containing materials in closed, non-absorbent, and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The containers shall be self-closing. [District Rules 4603, 4605, 4606, and 4653] Federally Enforceable Through Title V Permit

28. For the coating of metal and wood parts and products, only dip, roller, or brush shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201, 4603, and 4606] Federally Enforceable Through Title V Permit

29. For coating of aircraft, HVLP, electrostatic, electrodeposition, flow, roll, dip, or brush coating application equipment shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit

30. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

31. If an HVLP spray gun is used, the operator must demonstrate that the spray gun operates between 0.1 and 10 pounds per square inch, gauge, (psig) air atomizing pressure, measured dynamically at the center of the air cap and at the air horns. For a gun permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall either be in the form of manufacturer's published technical information or by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. For a gun not permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall be based on manufacturer's published technical material and by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

32. Each container or accompanying data sheet of any coating shall display; 1) a statement of the manufacturer's recommendation regarding thinning of the coating excluding the thinning of coatings with water, and 2) the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). VOC content displayed may be calculated using product formulation data, or may be determined using approved test methods. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

33. All solvents shall indicate on the solvent container, or on a separate product data sheet or material safety data sheet, the name of the solvent, manufacturer's name, the VOC content (in gm/liter or lb/gallon), and density of the solvent, as supplied. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

34. Permittee shall not use or specify for use within the District an aerospace coating stripper with a VOC content greater than or equal to 300 g/l (2.5 lb/gal) as applied or with a VOC composite vapor pressure of greater than 9.5 mmHg (0.18 psia) at 68 F. [District Rule 4605] Federally Enforceable Through Title V Permit

35. VOC content of coatings and solvents shall be analyzed by EPA Method 24 or its constituents methods; and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432 or SCAQMD Method 303 (Determination of Exempt Compounds). [District Rule 4605] Federally Enforceable Through Title V Permit

36. The solid content of pretreatment coatings shall be determined by EPA Method 24. Measurement of acid content of pre-treatment coatings shall be determined using ASTM Method D1613-06, Standard Test for Acidity of Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related products. [District Rules 4603 and 4605] Federally Enforceable Through Title V Permit

37. The fire resistance of an interior coating shall be determined by the Federal Aviation Administration-required Ohio State University Heat Release, Fire, and Burn Tests. [District Rule 4605] Federally Enforceable Through Title V Permit

38. The VOC composite vapor pressure of a blended solvent shall be determined by quantifying the amount of each organic compound using gas chromatographic analysis SCAQMD Test Method 308. [District Rule 4605] Federally Enforceable Through Title V Permit

39. VOC content of coatings and solvents shall be analyzed by EPA Method 24 and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603] Federally Enforceable Through Title V Permit

40. Emissions of VOC shall be measured by EPA Method 25, 25A or 25B, as applicable, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603] Federally Enforceable Through Title V Permit

41. The viscosity of coatings used for dip coating of steel joists shall be determined by using ASTM D5478-98 or ASTM D5125-97. [District Rule 4603] Federally Enforceable Through Title V Permit

42. The quantification of coating as a metallic/iridescent topcoat shall be determined by SCAQMD Method 318 (Determination of Weight Percent of Elemental Metal in Coatings by X-ray Diffraction Method), July 1996. [District Rule 4603] Federally Enforceable Through Title V Permit

43. VOC emissions from enclosed systems used to clean coating application equipment shall be determined by the manufacturer using the SCAQMD General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems. [District Rule 4605] Federally Enforceable Through Title V Permit

44. Cleaning activities that use solvents shall be performed by one or more of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4606] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

45. Permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit

46. The permittee shall minimize spills of VOC-containing adhesive products, cleaning products, and process-related waste materials. [District Rule 4653] Federally Enforceable Through Title V Permit

47. The permittee shall convey VOC-containing adhesive products, cleaning materials, and process-related waste materials from one location to another in closed containers or pipes. [District Rule 4653] Federally Enforceable Through Title V Permit

48. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

49. Permittee shall maintain records to support that the following aerospace coatings have been specified for their intended application: adhesion promoter, antichafe coating, electric/radiation effect, fuel tank adhesive, high temperature coating, impact resistant coating, optical anti-reflective coating, rain erosion resistant wing coating. [District Rule 4605] Federally Enforceable Through Title V Permit

50. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-2106-197-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: NAS LEMOORE
MAILING ADDRESS: 750 ENTERPRISE AVE. RM 107
LEMOORE, CA 93246-5001

LOCATION: NAVAL AIR STATION LEMOORE
750 ENTERPRISE AVE
LEMOORE, CA 93246-5001

EQUIPMENT DESCRIPTION:
SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS INCLUDING METAL AND WOOD PARTS AND PRODUCTS; WITH HVLP SPRAY GUN(S) AND OTHER APPROVED APPLICATION METHODS, AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 2)

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender surplus VOC emission reduction credits for the following quantity of emissions: 1st quarter - 525 lb, 2nd quarter - 453 lb, 3rd quarter - 1,063 lb, and fourth quarter - 59 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Number C-1046-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services
C-2106-197-0 : Feb 3 2022 1:41PM -- PROCOPIS : Joint Inspection NOT Required

5. Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender surplus PM10 emission reduction credits for the following quantity of emissions: 1st quarter - 144 lb, 2nd quarter - 144 lb, 3rd quarter - 145 lb, and fourth quarter - 145 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
6. ERC Certificate Number C-1050-4 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]
7. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
8. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
9. Coating of aerospace parts not attached to the aircraft, metal or wood parts and products shall be done using brush, dip, roll coating application equipment in this module. If spray coating equipment is used for these operations, coating shall be done in the paint spray booths listed on permit units C-2106-39 or '-149. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Solvent-based solid film lubricant coatings shall have a VOC content, as applied, equal to or less than 6.4 lb/gal (767 g/l), excluding water and exempt solvents. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit
11. VOC content of coatings as applied, excluding water and exempt compounds, for maintenance and refinishing of metal parts on aircraft shall not exceed any of the following limits: antichafe coatings 420 g/l (3.5 lb/gal), high temperature coatings 420 g/l (2.5 lb/gal), radiation effect coatings 600 g/l (5.0 lb/gal), metalized epoxy coatings 700 g/l (5.8 lb/gal). [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit
12. Total PM10 emissions shall not exceed 9.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Total VOC emissions shall not exceed 32.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Total annual PM10 emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 578 lb/yr. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
15. Total annual VOC emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 1,400 lb/yr. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
16. Permittee shall keep daily and annual records of total VOC emissions in lb/day and lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall keep daily and annual records of total PM10 emissions (lb/day and lb/year) only for coatings that used an HVLP gun as the application method. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Daily PM10 emissions of each coating and/or primer applied shall be calculated as follows: daily PM10 emissions of each coating and/or primer applied = coating and/or primer density (lb/gallon) x coating and/or primer solids content (% by weight) x usage (gallons/day) x control efficiency factor. Control efficiency factor is 0.25 for primers applied outside the booth, and 0.0125 for coating and/or primers applied inside the booth. Total daily PM10 emissions is the sum of PM10 emissions from all coating and/or primers applied. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Daily VOC emissions of each coating and/or solvent shall be calculated as follows: daily VOC emissions = VOC content (lb/gallon) as applied x usage (gallon/day). Total daily VOC emissions is the sum of VOC emissions from all coatings and/or solvents used. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Architectural coating shall be performed using only aerosol coating products. [District Rule 4601] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. For metal parts and products, VOC content of air-dried coatings as applied, excluding water and exempt compounds, shall not exceed 2.8 lb/gal (340 g/l). For specialty coatings, the VOC content shall not exceed the following limits: camouflage 420 g/l (3.5 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 420 g/l (3.5 lb/gal), high gloss: 420 g/l (3.5 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic coating: 420 g/l (3.5 lb/gal), pretreatment coating: 420 g/l (3.5 lb/gal), touch up and repair coating: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), and solar absorbent: 420 g/l (3.5 lb/gal). [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit

22. For wood products, VOC content of coatings as applied, excluding water and exempt compounds, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), low-solids stain 120 g/l (1.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), water-based pigmented primers 0.68 lb/gal, water-based pigmented topcoats 1.62 lb/gal, sanding sealer 275 g/l (2.3 lb/gallon), and stripper 350 g/l (2.9 lb/gallon). [District Rules 2201 and 4606] Federally Enforceable Through Title V Permit

23. The operator shall comply with the following work practice standards: 1) store all VOC-containing coatings, thinners, cleaning materials, and waste materials in closed non-absorbent and non-leaking containers, keeping the containers closed at all times except when specifically in use; 2) close mixing vessels that contain VOC coatings and other materials, except when specifically in use; 3) minimize spills of any VOC-containing materials and clean up spills immediately; and 4) convey VOC-containing materials in closed containers or pipes. [District Rules 4603 and 4606] Federally Enforceable Through Title V Permit

24. VOC content of aerospace coatings as applied, excluding water and exempt compounds, used for aerospace components shall not exceed any of the limits listed in section 5.1, Table 1 of Rule 4605 (6/16/2011), unless otherwise allowed in this permit. [District Rule 4605] Federally Enforceable Through Title V Permit

25. For solvent cleaning operations of metal and wood parts and products, VOC content of solvents shall not exceed 25 g/l (0.21 lb/gal). [District Rules 4603 and 4606] Federally Enforceable Through Title V Permit

26. For aerospace surface cleaning, cleanup, or jet engine or rocket engine gas path cleaning or flushing, excluding stripping coatings or cleaning coating application equipment, permittee shall not use solvents with a VOC content greater than or equal to 200 g/l (1.67 lb/gal) as applied or with a VOC composite vapor pressure greater than 45 mmHg (0.87 psia) at 68 F. [District Rule 4605] Federally Enforceable Through Title V Permit

27. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, sealants, catalysts, thinners, or any unused VOC-containing materials in closed, non-absorbent, and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The containers shall be self-closing. [District Rules 4603, 4605, 4606, and 4653] Federally Enforceable Through Title V Permit

28. For the coating of metal and wood parts and products, only dip, roller, or brush shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201, 4603, and 4606] Federally Enforceable Through Title V Permit

29. For coating of aircraft, HVLP, electrostatic, electrodeposition, flow, roll, dip, or brush coating application equipment shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit

30. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

31. If an HVLP spray gun is used, the operator must demonstrate that the spray gun operates between 0.1 and 10 pounds per square inch, gauge, (psig) air atomizing pressure, measured dynamically at the center of the air cap and at the air horns. For a gun permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall either be in the form of manufacturer's published technical information or by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. For a gun not permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall be based on manufacturer's published technical material and by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

32. Each container or accompanying data sheet of any coating shall display; 1) a statement of the manufacturer's recommendation regarding thinning of the coating excluding the thinning of coatings with water, and 2) the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). VOC content displayed may be calculated using product formulation data, or may be determined using approved test methods. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

33. All solvents shall indicate on the solvent container, or on a separate product data sheet or material safety data sheet, the name of the solvent, manufacturer's name, the VOC content (in gm/liter or lb/gallon), and density of the solvent, as supplied. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

34. Permittee shall not use or specify for use within the District an aerospace coating stripper with a VOC content greater than or equal to 300 g/l (2.5 lb/gal) as applied or with a VOC composite vapor pressure of greater than 9.5 mmHg (0.18 psia) at 68 F. [District Rule 4605] Federally Enforceable Through Title V Permit

35. VOC content of coatings and solvents shall be analyzed by EPA Method 24 or its constituents methods; and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432 or SCAQMD Method 303 (Determination of Exempt Compounds). [District Rule 4605] Federally Enforceable Through Title V Permit

36. The solid content of pretreatment coatings shall be determined by EPA Method 24. Measurement of acid content of pre-treatment coatings shall be determined using ASTM Method D1613-06, Standard Test for Acidity of Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related products. [District Rules 4603 and 4605] Federally Enforceable Through Title V Permit

37. The fire resistance of an interior coating shall be determined by the Federal Aviation Administration-required Ohio State University Heat Release, Fire, and Burn Tests. [District Rule 4605] Federally Enforceable Through Title V Permit

38. The VOC composite vapor pressure of a blended solvent shall be determined by quantifying the amount of each organic compound using gas chromatographic analysis SCAQMD Test Method 308. [District Rule 4605] Federally Enforceable Through Title V Permit

39. VOC content of coatings and solvents shall be analyzed by EPA Method 24 and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603] Federally Enforceable Through Title V Permit

40. Emissions of VOC shall be measured by EPA Method 25, 25A or 25B, as applicable, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603] Federally Enforceable Through Title V Permit

41. The viscosity of coatings used for dip coating of steel joists shall be determined by using ASTM D5478-98 or ASTM D5125-97. [District Rule 4603] Federally Enforceable Through Title V Permit

42. The quantification of coating as a metallic/iridescent topcoat shall be determined by SCAQMD Method 318 (Determination of Weight Percent of Elemental Metal in Coatings by X-ray Diffraction Method), July 1996. [District Rule 4603] Federally Enforceable Through Title V Permit

43. VOC emissions from enclosed systems used to clean coating application equipment shall be determined by the manufacturer using the SCAQMD General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems. [District Rule 4605] Federally Enforceable Through Title V Permit

44. Cleaning activities that use solvents shall be performed by one or more of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4606] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

45. Permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit

46. The permittee shall minimize spills of VOC-containing adhesive products, cleaning products, and process-related waste materials. [District Rule 4653] Federally Enforceable Through Title V Permit

47. The permittee shall convey VOC-containing adhesive products, cleaning materials, and process-related waste materials from one location to another in closed containers or pipes. [District Rule 4653] Federally Enforceable Through Title V Permit

48. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

49. Permittee shall maintain records to support that the following aerospace coatings have been specified for their intended application: adhesion promoter, antichafe coating, electric/radiation effect, fuel tank adhesive, high temperature coating, impact resistant coating, optical anti-reflective coating, rain erosion resistant wing coating. [District Rule 4605] Federally Enforceable Through Title V Permit

50. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: C-2106-198-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: NAS LEMOORE
MAILING ADDRESS: 750 ENTERPRISE AVE. RM 107
LEMOORE, CA 93246-5001

LOCATION: NAVAL AIR STATION LEMOORE
750 ENTERPRISE AVE
LEMOORE, CA 93246-5001

EQUIPMENT DESCRIPTION:
SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS INCLUDING METAL AND WOOD PARTS AND PRODUCTS; WITH HVLP SPRAY GUN(S) AND OTHER APPROVED APPLICATION METHODS, AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 3)

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender surplus VOC emission reduction credits for the following quantity of emissions: 1st quarter - 525 lb, 2nd quarter - 453 lb, 3rd quarter - 1,063 lb, and fourth quarter - 59 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Number C-1046-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

DRAFT

Brian Clements, Director of Permit Services

C-2106-198-0 : Feb 3 2022 1:41PM -- PROCOPIS : Joint Inspection NOT Required

5. Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender surplus PM10 emission reduction credits for the following quantity of emissions: 1st quarter - 144 lb, 2nd quarter - 144 lb, 3rd quarter - 145 lb, and fourth quarter - 145 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
6. ERC Certificate Number C-1050-4 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]
7. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
8. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
9. Coating of aerospace parts not attached to the aircraft, metal or wood parts and products shall be done using brush, dip, roll coating application equipment in this module. If spray coating equipment is used for these operations, coating shall be done in the paint spray booths listed on permit units C-2106-39 or '-149. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Solvent-based solid film lubricant coatings shall have a VOC content, as applied, equal to or less than 6.4 lb/gal (767 g/l), excluding water and exempt solvents. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit
11. VOC content of coatings as applied, excluding water and exempt compounds, for maintenance and refinishing of metal parts on aircraft shall not exceed any of the following limits: antichafe coatings 420 g/l (3.5 lb/gal), high temperature coatings 420 g/l (2.5 lb/gal), radiation effect coatings 600 g/l (5.0 lb/gal), metalized epoxy coatings 700 g/l (5.8 lb/gal). [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit
12. Total PM10 emissions shall not exceed 9.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Total VOC emissions shall not exceed 32.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Total annual PM10 emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 578 lb/yr. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
15. Total annual VOC emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 1,400 lb/yr. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
16. Permittee shall keep daily and annual records of total VOC emissions in lb/day and lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall keep daily and annual records of total PM10 emissions (lb/day and lb/year) only for coatings that used an HVLP gun as the application method. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Daily PM10 emissions of each coating and/or primer applied shall be calculated as follows: daily PM10 emissions of each coating and/or primer applied = coating and/or primer density (lb/gallon) x coating and/or primer solids content (% by weight) x usage (gallons/day) x control efficiency factor. Control efficiency factor is 0.25 for primers applied outside the booth, and 0.0125 for coating and/or primers applied inside the booth. Total daily PM10 emissions is the sum of PM10 emissions from all coating and/or primers applied. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Daily VOC emissions of each coating and/or solvent shall be calculated as follows: daily VOC emissions = VOC content (lb/gallon) as applied x usage (gallon/day). Total daily VOC emissions is the sum of VOC emissions from all coatings and/or solvents used. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Architectural coating shall be performed using only aerosol coating products. [District Rule 4601] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. For metal parts and products, VOC content of air-dried coatings as applied, excluding water and exempt compounds, shall not exceed 2.8 lb/gal (340 g/l). For specialty coatings, the VOC content shall not exceed the following limits: camouflage 420 g/l (3.5 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 420 g/l (3.5 lb/gal), high gloss: 420 g/l (3.5 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic coating: 420 g/l (3.5 lb/gal), pretreatment coating: 420 g/l (3.5 lb/gal), touch up and repair coating: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), and solar absorbent: 420 g/l (3.5 lb/gal). [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit

22. For wood products, VOC content of coatings as applied, excluding water and exempt compounds, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), low-solids stain 120 g/l (1.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), water-based pigmented primers 0.68 lb/gal, water-based pigmented topcoats 1.62 lb/gal, sanding sealer 275 g/l (2.3 lb/gallon), and stripper 350 g/l (2.9 lb/gallon). [District Rules 2201 and 4606] Federally Enforceable Through Title V Permit

23. The operator shall comply with the following work practice standards: 1) store all VOC-containing coatings, thinners, cleaning materials, and waste materials in closed non-absorbent and non-leaking containers, keeping the containers closed at all times except when specifically in use; 2) close mixing vessels that contain VOC coatings and other materials, except when specifically in use; 3) minimize spills of any VOC-containing materials and clean up spills immediately; and 4) convey VOC-containing materials in closed containers or pipes. [District Rules 4603 and 4606] Federally Enforceable Through Title V Permit

24. VOC content of aerospace coatings as applied, excluding water and exempt compounds, used for aerospace components shall not exceed any of the limits listed in section 5.1, Table 1 of Rule 4605 (6/16/2011), unless otherwise allowed in this permit. [District Rule 4605] Federally Enforceable Through Title V Permit

25. For solvent cleaning operations of metal and wood parts and products, VOC content of solvents shall not exceed 25 g/l (0.21 lb/gal). [District Rules 4603 and 4606] Federally Enforceable Through Title V Permit

26. For aerospace surface cleaning, cleanup, or jet engine or rocket engine gas path cleaning or flushing, excluding stripping coatings or cleaning coating application equipment, permittee shall not use solvents with a VOC content greater than or equal to 200 g/l (1.67 lb/gal) as applied or with a VOC composite vapor pressure greater than 45 mmHg (0.87 psia) at 68 F. [District Rule 4605] Federally Enforceable Through Title V Permit

27. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, sealants, catalysts, thinners, or any unused VOC-containing materials in closed, non-absorbent, and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The containers shall be self-closing. [District Rules 4603, 4605, 4606, and 4653] Federally Enforceable Through Title V Permit

28. For the coating of metal and wood parts and products, only dip, roller, or brush shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201, 4603, and 4606] Federally Enforceable Through Title V Permit

29. For coating of aircraft, HVLP, electrostatic, electrodeposition, flow, roll, dip, or brush coating application equipment shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit

30. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

31. If an HVLP spray gun is used, the operator must demonstrate that the spray gun operates between 0.1 and 10 pounds per square inch, gauge, (psig) air atomizing pressure, measured dynamically at the center of the air cap and at the air horns. For a gun permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall either be in the form of manufacturer's published technical information or by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. For a gun not permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall be based on manufacturer's published technical material and by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

32. Each container or accompanying data sheet of any coating shall display; 1) a statement of the manufacturer's recommendation regarding thinning of the coating excluding the thinning of coatings with water, and 2) the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). VOC content displayed may be calculated using product formulation data, or may be determined using approved test methods. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

33. All solvents shall indicate on the solvent container, or on a separate product data sheet or material safety data sheet, the name of the solvent, manufacturer's name, the VOC content (in gm/liter or lb/gallon), and density of the solvent, as supplied. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

34. Permittee shall not use or specify for use within the District an aerospace coating stripper with a VOC content greater than or equal to 300 g/l (2.5 lb/gal) as applied or with a VOC composite vapor pressure of greater than 9.5 mmHg (0.18 psia) at 68 F. [District Rule 4605] Federally Enforceable Through Title V Permit

35. VOC content of coatings and solvents shall be analyzed by EPA Method 24 or its constituents methods; and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432 or SCAQMD Method 303 (Determination of Exempt Compounds). [District Rule 4605] Federally Enforceable Through Title V Permit

36. The solid content of pretreatment coatings shall be determined by EPA Method 24. Measurement of acid content of pre-treatment coatings shall be determined using ASTM Method D1613-06, Standard Test for Acidity of Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related products. [District Rules 4603 and 4605] Federally Enforceable Through Title V Permit

37. The fire resistance of an interior coating shall be determined by the Federal Aviation Administration-required Ohio State University Heat Release, Fire, and Burn Tests. [District Rule 4605] Federally Enforceable Through Title V Permit

38. The VOC composite vapor pressure of a blended solvent shall be determined by quantifying the amount of each organic compound using gas chromatographic analysis SCAQMD Test Method 308. [District Rule 4605] Federally Enforceable Through Title V Permit

39. VOC content of coatings and solvents shall be analyzed by EPA Method 24 and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603] Federally Enforceable Through Title V Permit

40. Emissions of VOC shall be measured by EPA Method 25, 25A or 25B, as applicable, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603] Federally Enforceable Through Title V Permit

41. The viscosity of coatings used for dip coating of steel joists shall be determined by using ASTM D5478-98 or ASTM D5125-97. [District Rule 4603] Federally Enforceable Through Title V Permit

42. The quantification of coating as a metallic/iridescent topcoat shall be determined by SCAQMD Method 318 (Determination of Weight Percent of Elemental Metal in Coatings by X-ray Diffraction Method), July 1996. [District Rule 4603] Federally Enforceable Through Title V Permit

43. VOC emissions from enclosed systems used to clean coating application equipment shall be determined by the manufacturer using the SCAQMD General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems. [District Rule 4605] Federally Enforceable Through Title V Permit

44. Cleaning activities that use solvents shall be performed by one or more of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4606] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

45. Permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit

46. The permittee shall minimize spills of VOC-containing adhesive products, cleaning products, and process-related waste materials. [District Rule 4653] Federally Enforceable Through Title V Permit

47. The permittee shall convey VOC-containing adhesive products, cleaning materials, and process-related waste materials from one location to another in closed containers or pipes. [District Rule 4653] Federally Enforceable Through Title V Permit

48. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

49. Permittee shall maintain records to support that the following aerospace coatings have been specified for their intended application: adhesion promoter, antichafe coating, electric/radiation effect, fuel tank adhesive, high temperature coating, impact resistant coating, optical anti-reflective coating, rain erosion resistant wing coating. [District Rule 4605] Federally Enforceable Through Title V Permit

50. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: C-2106-199-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: NAS LEMOORE
MAILING ADDRESS: 750 ENTERPRISE AVE. RM 107
LEMOORE, CA 93246-5001

LOCATION: NAVAL AIR STATION LEMOORE
750 ENTERPRISE AVE
LEMOORE, CA 93246-5001

EQUIPMENT DESCRIPTION:
SQUADRON AIRCRAFT CORROSION CONTROL AND MAINTENANCE COATING OPERATIONS INCLUDING METAL AND WOOD PARTS AND PRODUCTS; WITH HVLP SPRAY GUN(S) AND OTHER APPROVED APPLICATION METHODS, AND AN ENCLOSED GUN CLEANER (HANGAR 6, MODULE 4)

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender surplus VOC emission reduction credits for the following quantity of emissions: 1st quarter - 525 lb, 2nd quarter - 453 lb, 3rd quarter - 1,063 lb, and fourth quarter - 59 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Number C-1046-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services
C-2106-199-0 : Feb 3 2022 1:41PM -- PROCOPIS : Joint Inspection NOT Required

5. Prior to operating equipment under any of the following Authorities to Construct: '-195-0, '-197-0, '-198-0, or '-199-0, permittee shall surrender surplus PM10 emission reduction credits for the following quantity of emissions: 1st quarter - 144 lb, 2nd quarter - 144 lb, 3rd quarter - 145 lb, and fourth quarter - 145 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 8/15/19) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
6. ERC Certificate Number C-1050-4 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]
7. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
8. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
9. Coating of aerospace parts not attached to the aircraft, metal or wood parts and products shall be done using brush, dip, roll coating application equipment in this module. If spray coating equipment is used for these operations, coating shall be done in the paint spray booths listed on permit units C-2106-39 or '-149. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Solvent-based solid film lubricant coatings shall have a VOC content, as applied, equal to or less than 6.4 lb/gal (767 g/l), excluding water and exempt solvents. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit
11. VOC content of coatings as applied, excluding water and exempt compounds, for maintenance and refinishing of metal parts on aircraft shall not exceed any of the following limits: antichafe coatings 420 g/l (3.5 lb/gal), high temperature coatings 420 g/l (2.5 lb/gal), radiation effect coatings 600 g/l (5.0 lb/gal), metalized epoxy coatings 700 g/l (5.8 lb/gal). [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit
12. Total PM10 emissions shall not exceed 9.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Total VOC emissions shall not exceed 32.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Total annual PM10 emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 578 lb/yr. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
15. Total annual VOC emissions for the entire hangar 6, which includes C-2106-195, '-197, '-198, and '-199, shall not exceed 1,400 lb/yr. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
16. Permittee shall keep daily and annual records of total VOC emissions in lb/day and lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall keep daily and annual records of total PM10 emissions (lb/day and lb/year) only for coatings that used an HVLP gun as the application method. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Daily PM10 emissions of each coating and/or primer applied shall be calculated as follows: daily PM10 emissions of each coating and/or primer applied = coating and/or primer density (lb/gallon) x coating and/or primer solids content (% by weight) x usage (gallons/day) x control efficiency factor. Control efficiency factor is 0.25 for primers applied outside the booth, and 0.0125 for coating and/or primers applied inside the booth. Total daily PM10 emissions is the sum of PM10 emissions from all coating and/or primers applied. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Daily VOC emissions of each coating and/or solvent shall be calculated as follows: daily VOC emissions = VOC content (lb/gallon) as applied x usage (gallon/day). Total daily VOC emissions is the sum of VOC emissions from all coatings and/or solvents used. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Architectural coating shall be performed using only aerosol coating products. [District Rule 4601] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. For metal parts and products, VOC content of air-dried coatings as applied, excluding water and exempt compounds, shall not exceed 2.8 lb/gal (340 g/l). For specialty coatings, the VOC content shall not exceed the following limits: camouflage 420 g/l (3.5 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 420 g/l (3.5 lb/gal), high gloss: 420 g/l (3.5 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic coating: 420 g/l (3.5 lb/gal), pretreatment coating: 420 g/l (3.5 lb/gal), touch up and repair coating: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), and solar absorbent: 420 g/l (3.5 lb/gal). [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit

22. For wood products, VOC content of coatings as applied, excluding water and exempt compounds, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), low-solids stain 120 g/l (1.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), water-based pigmented primers 0.68 lb/gal, water-based pigmented topcoats 1.62 lb/gal, sanding sealer 275 g/l (2.3 lb/gallon), and stripper 350 g/l (2.9 lb/gallon). [District Rules 2201 and 4606] Federally Enforceable Through Title V Permit

23. The operator shall comply with the following work practice standards: 1) store all VOC-containing coatings, thinners, cleaning materials, and waste materials in closed non-absorbent and non-leaking containers, keeping the containers closed at all times except when specifically in use; 2) close mixing vessels that contain VOC coatings and other materials, except when specifically in use; 3) minimize spills of any VOC-containing materials and clean up spills immediately; and 4) convey VOC-containing materials in closed containers or pipes. [District Rules 4603 and 4606] Federally Enforceable Through Title V Permit

24. VOC content of aerospace coatings as applied, excluding water and exempt compounds, used for aerospace components shall not exceed any of the limits listed in section 5.1, Table 1 of Rule 4605 (6/16/2011), unless otherwise allowed in this permit. [District Rule 4605] Federally Enforceable Through Title V Permit

25. For solvent cleaning operations of metal and wood parts and products, VOC content of solvents shall not exceed 25 g/l (0.21 lb/gal). [District Rules 4603 and 4606] Federally Enforceable Through Title V Permit

26. For aerospace surface cleaning, cleanup, or jet engine or rocket engine gas path cleaning or flushing, excluding stripping coatings or cleaning coating application equipment, permittee shall not use solvents with a VOC content greater than or equal to 200 g/l (1.67 lb/gal) as applied or with a VOC composite vapor pressure greater than 45 mmHg (0.87 psia) at 68 F. [District Rule 4605] Federally Enforceable Through Title V Permit

27. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, sealants, catalysts, thinners, or any unused VOC-containing materials in closed, non-absorbent, and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The containers shall be self-closing. [District Rules 4603, 4605, 4606, and 4653] Federally Enforceable Through Title V Permit

28. For the coating of metal and wood parts and products, only dip, roller, or brush shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201, 4603, and 4606] Federally Enforceable Through Title V Permit

29. For coating of aircraft, HVLP, electrostatic, electrodeposition, flow, roll, dip, or brush coating application equipment shall be used as coating application methods. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit

30. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

31. If an HVLP spray gun is used, the operator must demonstrate that the spray gun operates between 0.1 and 10 pounds per square inch, gauge, (psig) air atomizing pressure, measured dynamically at the center of the air cap and at the air horns. For a gun permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall either be in the form of manufacturer's published technical information or by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. For a gun not permanently labeled HVLP by the manufacturer, a satisfactory demonstration shall be based on manufacturer's published technical material and by a demonstration of the operation of the gun using an air pressure tip gauge from the manufacturer of the gun. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

32. Each container or accompanying data sheet of any coating shall display; 1) a statement of the manufacturer's recommendation regarding thinning of the coating excluding the thinning of coatings with water, and 2) the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). VOC content displayed may be calculated using product formulation data, or may be determined using approved test methods. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

33. All solvents shall indicate on the solvent container, or on a separate product data sheet or material safety data sheet, the name of the solvent, manufacturer's name, the VOC content (in gm/liter or lb/gallon), and density of the solvent, as supplied. [District Rules 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

34. Permittee shall not use or specify for use within the District an aerospace coating stripper with a VOC content greater than or equal to 300 g/l (2.5 lb/gal) as applied or with a VOC composite vapor pressure of greater than 9.5 mmHg (0.18 psia) at 68 F. [District Rule 4605] Federally Enforceable Through Title V Permit

35. VOC content of coatings and solvents shall be analyzed by EPA Method 24 or its constituents methods; and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432 or SCAQMD Method 303 (Determination of Exempt Compounds). [District Rule 4605] Federally Enforceable Through Title V Permit

36. The solid content of pretreatment coatings shall be determined by EPA Method 24. Measurement of acid content of pre-treatment coatings shall be determined using ASTM Method D1613-06, Standard Test for Acidity of Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related products. [District Rules 4603 and 4605] Federally Enforceable Through Title V Permit

37. The fire resistance of an interior coating shall be determined by the Federal Aviation Administration-required Ohio State University Heat Release, Fire, and Burn Tests. [District Rule 4605] Federally Enforceable Through Title V Permit

38. The VOC composite vapor pressure of a blended solvent shall be determined by quantifying the amount of each organic compound using gas chromatographic analysis SCAQMD Test Method 308. [District Rule 4605] Federally Enforceable Through Title V Permit

39. VOC content of coatings and solvents shall be analyzed by EPA Method 24 and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603] Federally Enforceable Through Title V Permit

40. Emissions of VOC shall be measured by EPA Method 25, 25A or 25B, as applicable, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4603] Federally Enforceable Through Title V Permit

41. The viscosity of coatings used for dip coating of steel joists shall be determined by using ASTM D5478-98 or ASTM D5125-97. [District Rule 4603] Federally Enforceable Through Title V Permit

42. The quantification of coating as a metallic/iridescent topcoat shall be determined by SCAQMD Method 318 (Determination of Weight Percent of Elemental Metal in Coatings by X-ray Diffraction Method), July 1996. [District Rule 4603] Federally Enforceable Through Title V Permit

43. VOC emissions from enclosed systems used to clean coating application equipment shall be determined by the manufacturer using the SCAQMD General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems. [District Rule 4605] Federally Enforceable Through Title V Permit

44. Cleaning activities that use solvents shall be performed by one or more of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4606] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

45. Permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rules 2201 and 4605] Federally Enforceable Through Title V Permit

46. The permittee shall minimize spills of VOC-containing adhesive products, cleaning products, and process-related waste materials. [District Rule 4653] Federally Enforceable Through Title V Permit

47. The permittee shall convey VOC-containing adhesive products, cleaning materials, and process-related waste materials from one location to another in closed containers or pipes. [District Rule 4653] Federally Enforceable Through Title V Permit

48. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, solvents used for surface preparation and cleanup, thinners, reducers, and strippers, in use and in storage. The file shall include the following information: material safety data sheet (MSDS) or product data sheet showing material name, manufacturer's name, VOC content as applied (lb/gal or g/l), mixing instructions, and density; volume of coating/solvent mix ratio; volume of each coating used (gal), quantity of cleanup solvent used (gal), specific chemical constituents of coatings and solvents used for surface preparation and cleanup; and vapor pressure of solvents used. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit

49. Permittee shall maintain records to support that the following aerospace coatings have been specified for their intended application: adhesion promoter, antichafe coating, electric/radiation effect, fuel tank adhesive, high temperature coating, impact resistant coating, optical anti-reflective coating, rain erosion resistant wing coating. [District Rule 4605] Federally Enforceable Through Title V Permit

50. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rules 2201, 4603, 4605, and 4606] Federally Enforceable Through Title V Permit