Facility Name: Rohr, Inc.

Equipment Address: 8200 Arlington Avenue
Riverside, CA 92503

Mailing Address: Same

Facility ID#: 800113

PERMIT TO CONSTRUCT
NEW CONSTRUCTION

RECLAIM/Title V
Facility Permit Ammendment:
Application No. 498844

Equipment Description:

PROCESS 4: SURFACE COATINGS					
SYSTEM 1: PRODUCTION SPRAY BOOTHS					
Equipment	Device ID	Connected To	Source Type/ Monitoring Unit	Emissions	Equipment Specific Conditions
SPRAY COATING OPERATION, G81, SPRAY BOOTH, 18FT. W. X 18FT L. X 8 FT. H. WITH FORTY 20" X 20" X 2" (FIRST STAGE), FORTY 20" X 20" X 2" (SECOND STAGE) EXHAUST FILTERS AND 3 H.P. EXHAUST FAN.	D250			**HAP: (10) [40CFR 63 SUBPART GG, 12-8-2000]: PM: (9) [RULE 404, 2-7-1986]: VOC: (9) [RULE 1124, 9-21-2001]; RULE 1171, 2-1-2008**	P2.1, A63.20, B27.11, C1.21, C6.20, D322.1, E71.1, E175.3, E193.2, H23.5, K67.1, K67.2, K67.6
HEATER, MAKEUP AIR, WITH LOW NOX BURNER, NATURAL GAS FIRED, 0.887 MMBTU/HR Reference A/N 498845	D251		NOX: PROCESS UNIT**	**CO: 2000 PPMV NATURAL GAS(5)[rule 407, 4-2-1982]; CO: 50 PPMV (4) [rule 1303(a)(1)-BACT]; NOx:130 LBS/MMSCF NATURAL GAS(1) [rule 2012, 5-6-2005]; NOX: 30 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005]** **PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: (9) [RULE 404, 2-7-1986]**	

Conditions:

P2.1 The operator shall limit emissions from this process as follows:

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than or equal to 1179 lbs in any one day

For the purpose of this condition, the emission limit(s) shall be based on the total combined emissions from process 1(ovens) and 4(surface coating)

A63.20 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than 13 lbs in any one day

[Rule 1132, 1303(b)(2)-OFFSET]

B27.11 The operator shall not use materials, except Xylene, Ethylene glycol methyl ether, ethyl benzene, methyl ethyl ketone, Toluene, containing any toxic air contaminants (TACs) identified in SCAQMD Rule 1401, as amended 03/07/2008.
[Rule 1401]

C1.21 The operator shall limit the material processed to no more than 20 gallons per year.

For the purpose of this condition, material processed shall be defined as the adhesion promoter DC 1200.
[Rule 1124]

C6.20 The operator shall use this equipment in such a manner that the differential pressure being monitored, as indicated below, does not exceed 0.38 inches water column.

To comply with this condition, the operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the two stage filter media.
[Rule 1303(a)(1)-BACT]

D322.1 The operator shall perform a weekly inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter

media.
[Rule 3004(a)(4)]

E71.1 The operator shall only operate this equipment if the exhaust fan of this equipment is operating at 10,000 SCFM or greater. If the exhaust fan is repaired, modified or replaced, the operator shall conduct tests to determine the exhaust flow rate.
[Rule 1132]

E175.3 The operator shall not use this equipment unless all the exhaust air passes through the following:
Two stage particulate dry filters.
[Rule 1303(a)(1)-BACT]

E193.2 The operator shall construct this equipment according to the following requirements:

This permit shall expire if the construction of this equipment is not completed within one year from the date of the issuance of this permit unless an extension of time has been approved in writing by a District representative.

The operator shall notify a District representative when construction has been completed.

H23.5This equipment is subject to the applicable requirements of the following rules and regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	109
VOC	District Rule	481

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

the name of the person performing the inspection and/or maintenance of the filter media

the date, time and results of the inspection

the date, time and description of any maintenance or repairs resulting from the inspection

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

weekly record of pressure drop across the filter media

K67.6 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

daily usage and volatile organic compound emissions in a manner approved by the Executive Officer

Equipment Description:

PROCESS 1: OVENS					
Equipment	Device ID	Connected To	Source Type/ Monitoring Unit	Emissions	Equipment Specific Conditions
ROOM, CURING x 20 ft W x X 60 ft L x X 10 ft H, WITH A MAKEUP AIR HEATER, WITH LOW NOX BURNER, NATURAL GAS FIRED, 0.887 MMBTU/HR Reference A/N 498846	DXX		NOX: PROCESS UNIT**	**CO: 2000 PPMV NATURAL GAS(5)[rule 407, 4-2-1982]; CO: 50 PPMV (4) [rule 1303(a)(1)-BACT]; NOx:130 LBS/MMSCF NATURAL GAS(1) [rule 2012, 5-6-2005]; NOX: 30 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005]** **PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: (9) [RULE 404, 2-7-1986]**	P2.1, E193.2

Conditions:

E193.2 The operator shall construct this equipment according to the following requirements:

This permit shall expire if the construction of this equipment is not completed within one year from the date of the issuance of this permit unless an extension of time has been approved in writing by a District representative.

The operator shall notify a District representative when construction has been completed.

Background

Rohr, Inc submitted applications 498844 - 498847 on 5/19/2009. Application 498844 was submitted as the RECLAIM/ Title V revision. A/n 498845 & 498846 are for the new construction of a new heated spray booth and a heated cure room. A/n 498847 will be cancelled because it was submitted for the spray booth heater which was incorporated into a/n 498845.
Construction of the new two stage dry filtration spray booth and the adjacent cure room at building 24 will replace the existing water curtain spray booth under equipment no. G-9, device D-27(a/n440412). The new spray booth and cure room are designed for the application of a specific ablative coating system previously applied in device 27. The facility has an equipment cap, P2.1, of 1179 lbs VOC per day which is a combined cap for all equipment under Process 1(ovens) and Process 4(surface coating). Process 1 has a total of 29 ovens and Process 4 has 25 spray booth for a total of 54 devices. D27 will be removed and a new spray booth and cure room will be installed. The new spray booth and cure room will be limited to 13 lbs VOC per day.

This is a RECLAIM/Title V facility. Application no. 498844 has been submitted on 5/19/09 to modify this permit. A review of District compliance records indicates that there are no Public Complaints filed or Notices of Violations issued in the last two years. However, the facility was issued a Notice to Comply (D14113) on 9/19/08 requiring the facility to submit the semi annual monitoring reports and the APEP report by the due dates. The applicant provided the requested information and is currently operating in compliance with applicable permit conditions and rules and regulations.

Emissions Calculations:

The VOC emissions will be based on a daily limit of 13 pounds per day. The particulate emissions have been proportioned from the applicant's submittal showing a 0.17 lbs PM for every 6.07 lbs VOC and a maximum VOC usage of 13 lbs/day.

Operating Schedule:
Spray booth: 8 hrs/day, 7 days/week, 52 weeks/yr
Cure Room: 24 hrs/day, 7 days/week, 52 weeks/yr
Application no. 498845
Facility cap of 1179 lbs/day
Equipment Cap of 13 lbs/day

ROG R1 = R2 = (13.0 lbs/day)/(8hrs/day) = 1.625 lb/hr

PM R2 = 0.364 lb/day)/(8hrs/day) = 0.045 lb/hr
R1 = 0.045 lb/hr/0.10 = 0.455 lb/hr
PM10 R1= 0.455 lb/hr * 0.5 = 0.227 lb/hr * 8 hrs/day = 1.82 lb/day
R2 = 0.045 lb/hr * 0.5 = 0.023 lb/hr * 8 hrs/day = 0.184 lb/day

30 day monthly average:
The equipment emissions are bubbled under the combined equipment cap of 1179 lbs VOC/day. No offset will be necessary.

Combustion Emissions:(per burner, 1 burner for the spray booth and 1 for the cure room)
Rating = 0.887mmbtu/hr
Operating schedule: 24 hrs/day, 7 days/week 50 weeks/year.

0.887mmbtu/hr = 0.00084476 mmcf/hr

Contaminant	Emission Factor lbs/mmcuft	Hourly Emissions lbs/hr	Daily Emissions lbs/day	Annual Emissions lbs/yr	30 day average lbs/day
ROG	7.0	0.00591	0.1419	51.66	0.0
NOX (30 ppm)	41.0	0.0346	0.831	302.57	1.0
SOX	0.83	0.0007	0.0168	6.13	0.0
CO (50 ppm)	39.4	0.033	0.79	279.9	1.0
PM10	7.5	0.00634	0.152	55.35	0.0

Total Emissions:

Contaminant	Hourly Emissions from combustion each lb/hr	Daily Emissions from combustion each lb/day	Hourly Emissions from Spray booth non combustion lb/hr	Daily Emissions from Spray booth non combustion lb/day	Total Emissions Lb/day
ROG	0.00591	0.1419	1.625	13.0	13.28
NOX	0.0346	0.831			1.66
SOX	0.0007	0.0168			0.033
CO	0.033	0.79			1.58
PM10	0.00634	0.152	0.023	0.184	0.49

Risk Assessment:
The only materials used that contain toxic compounds are DC1200 RTV Prime Coat and MI-15 type 1 Ablator Base Part A. The emissions are based on the emission estimates from the applicant totaling 6.07 lbs VOC/day that is proportioned to correspond to the 13 lb VOC cap. (13/6.07)

Coating Material	usage gal/day	density lbs/gal	Daily Mass lbs/day
DC 1200 RTV	0.107	6.33	0.677
MI-15 Type 1 Ablator	0.8824	4.75	4.191

DC1200 RTV
Toxics: (0.677 lbs/day)

Toxic	CAS #	WT%	Toxic Emissions lbs/day	Adjusted Toxic Emissions lbs/day
Xylene	1330-20-7	5.0 - 10.0	0.0677	0.1448
Ethlene Glycol methyl Ether	109-86-4	< 3.0	0.0203	0.0434
Ethyl Benzene	100-41-4	1.0 - 5.0	0.0339	0.0725

MI-15 Type 1 Ablator
Toxics:(4.191 lbs/day)

Toxic	CAS #	WT%	Toxic Emissions lbs/day	Adjusted Toxic Emissions lbs/day
Methyl ethyl ketone	78-93-3	9.0 - 12.0	0.5029	1.076
Toluene	108-88-3	12.0 - 16.0	0.6706	1.435
Xylene	1330-20-7	0 - 3.0	0.1257	0.269

Total		Hourly
Mek	- 1.076 lbs/day	0.1345 lbs/hr

Xylene	- 0.4138	0.0517
Ethylene Glycol	- 0.0836	0.01045
Ethyl Benzene	- 0.0725	0.009
Toluene	- 1.435	0.179

Combined Tier 1 results for the toxics from coatings and combustion emissions are as follows:

	Cancer/Chronic ASI	Acute ASI
Combustion	9.61E-02	1.10E-02
Coatings	2.85E-02	1.16E-01
total	**1.24E-01**	**1.27E-01**
	Passed	Passed

The cure room has an identical burner and will pass the tier 1 as stated before.

RULE EVALUATION

Rule 212 (c)(1):This section requires a public notice for all new or modified permit units that emit air contaminants located within 1,000 feet from the outer boundary of a school.

No public notice is required since no school is located within 1,000 ft from the above site.

Rule 212 (c)(2):This section requires a public notice for all new or modified facilities that have on-site emission increases exceeding any of the daily maximums as specified by Rule 212(g).

The proposed project will not result in an emission increase for the entire facility exceeding the limits specified in Rule 212(g). A Rule 212(c) (2) notice will not be triggered.

Rule 212(c)(3):This section requires a public notice for all new or modified permit unit with increases in emissions of toxic air contaminants listed in Table I of Rule 1401 resulting in MICR greater than 1E-6 per permit unit or greater than 10E-6 per facility.

The proposed project will have an increased toxic risk but as stated before it will pass the Tier 1 risk screening. Public Notice is not required under this section of the rule.

Rule 212(g): This section requires a public notice for all new or modified sources that result in emission increases exceeding any of the daily maximums as specified by Rule 212(g).

The emission increase due to the replacement of Device 27 and the addition of the new spray booth and cure room will be as follows:

	Maximum Daily Emissions					
	ROG	NO_x	PM_{10}	SO_2	CO	Pb
Emission increase	13	2	0	0	2	0
MAX Limit (lb/day)	**30**	**40**	**30**	**60**	**220**	**3**
Compliance Status	Yes	Yes	Yes	Yes	Yes	Yes

No public notice is required since the emission increase is below the thresholds.

Rule 401: With the proper maintenance and operation of this equipment, compliance with this rule is expected.

Rule 402: With proper maintenance and operation, this equipment is not expected to create a nuisance.

Rule 1124: Ablative coating, ablative top coat, and solvent cleaning materials are to be used in this spray booth. All the material used in this spray booth are rule 1124 compliant except for an adhesion promoter which contains VOC in excess of the current rule 1124 VOC limit of 250 g/l. The material has a VOC content of 774 g/l. A substitute material has been identified that meets the limits of the rule and the material is currently undergoing testing and requalification to include its use. However, until the testing and qualification of the material is complete, the applicant is proposing to use the non compliant material and will limit its use to less than 20 gallons per year pursuant to the exemption provided in rule 1124(l)(1).

"1124(l)(1) The provisions of paragraph (c)(1) of this rule shall not apply to materials, exclusive of adhesives, with separate formulations that are used in volumes of less than 20 gallons per year provided that the total

of such formulations applied annually by a facility is less than 200 gallons."

According to the applicant, this is the only non-compliant formulation being used at the facility and therefore meets both requirements of 20 and 200 gallons per year specified in 1124(l)(1).

The material in this spray booth will be applied with a HVLP spray gun which will meet the transfer efficiency requirements of subsection (c)(3) of this rule. For solvent cleaning purposes, the facility will be using acetone for items processed in the spray booth. Acetone is defined as an exempt compound under Rule 102. Compliance with this rule is expected.

Rule 1132: The facility has a VOC PTE greater than 20 tons per year and is subject to the requirements of this rule. This spray booth will meet the exemption from section (c) of this rule by meeting the requirements of 1132(h)(2). The allowable VOC emission for this booth is 13 lbs of VOC per day. The flow rate of the spray booth is 14,400 cfm. Therefore this spray booth qualifies under the second tier in the table in this subsection and will meet the exemption requirements. A flow rate permit conditions will be added (E71.1) for compliance this rule. Continued compliance with this rule is expected.

Rule 1171: The applicant will use acetone for spray gun cleaning. Acetone is defined as an exempt compound under Rule 102. Compliance with this rule is expected.

Rule 1303(a) BACT: The spray booth will be limited to a 13 lb VOC per day emission cap which will not trigger BACT requirement for VOC. The spray booth is equipped with a two stage filtering system to control the PM emissions which meets the BACT requirements for the control of PM emissions.

Rules 1303(b)(1) & 1303(b)(2): VOC Emission Offsets will not be required since the new installation of the spray booth and cure room will have their emissions bubbled under the existing equipment cap of 1179 lbs/day. The PM10 and Sox emissions are negligible and will not trigger emission offsets. The CO and PM10 emissions are below the limits specified in Table A-1 and will not require further modeling analysis. The heaters will be limited to a 50 ppmv CO limit satisfying BACT requirements. Since Rohr is a NOx RECLAIM facility, the NOx emissions will be discussed under the appropriate section of reg 20. Compliance.

Rule 1303(b)(4): The facility is expected to be in full compliance with all applicable rules and regulations of the District.

Rule 1401: Toxics: Rule 1401 contains the following requirements:

1) *(d)(1) MICR and Cancer Burden* - The cumulative increase in MICR which is the sum of the calculated MICR values for all toxic air contaminants emitted from the new, relocated or modified permit unit will not result in any of the following:
   (A) an increased MICR greater than one in one million (1.0×10^{-6}) at any receptor location, if the permit unit is constructed without T-BACT;
   (B) an increased MICR greater than ten in one million (1.0×10^{-5}) at any receptor location, if the permit unit is constructed with T-BACT;
   (C) a cancer burden greater than 0.5.

2) *(d)(2) Chronic Hazard Index* - The cumulative increase in total chronic HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.
3) *(d)(3) Acute Hazard Index* - The cumulative increase in total acute HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.

According to the Material Safety Data Sheets (MSDS) that were submitted with these applications, Rohr, Inc. will be spraying material in the spray booth that contains toxic air contaminants (TAC) identified in Table 1 of Rule 1401. However, as indicated in the emission calculations, the emissions from the spray booth and drying room passes a Tier I health risk assessment.

The spray booth will be conditioned such that it will not be permitted to use coatings that contain any toxic air contaminants listed under Rule 1401 as amended March 7, 2008 except Xylene (cas# 1330-20-7), Ethylene glycol(cas# 109-86-4), Ethyl benzene(cas# 100-41-4), Methyl Ethyl Ketone(cas#78-93-3), and Toluene(cas# 108-88-3). Compliance is expected.

REGULATION XX-RECLAIM
RULE 2005-NEW SOURCE REVIEW FOR RECLAIM

Rohr, Inc. is a NOx RECLAIM facility and the heaters in the spray booth and the curing room are the only source of NOx for this project.

RULE 2005(c)(1)(A)-BEST AVAILABLE CONTROL TECHNOLOGY
The present BACT guidelines require that the heaters for the spray booth and curing room be limited to 30 ppmvd NOx (corrected to 3% O_2). The heaters will have a Winnox WX400 Low NOx burner that will meet the 30 ppm emission limits. Compliance with this rule is expected.

RULE 2005(c)(1)(B)-MODELING
Each heater will result in an emission of 0.0346 lb NOx/hr. The heaters have a 0.887 MMBTU/hr burner each. The corresponding Screening Analysis limit in Table A-1 of Rule 2005 is 0.2 lb NOx/hr. Since the emissions from each heater will be less than the screening limit, a significant increase in air quality concentration of NOx will not occur. Compliance with this rule is expected.

RULE 2005(c)(2)-RTC
The facility holds sufficient RTCs to offset the annual emission increase of 730 lbs/yr. Both burners have a 1.0 pound NOx /day increase. (2 x 1.0lbs/day x 365 day/yr = 730 lbs/yr). The company has an allocation of 19075 lb NOx f, and they reported 5,730 lb NOx for year 2006-2007. Compliance with this rule is expected.

RULE 2012 – Requirements for MRR for NOx Emissions
The oven will qualify as a NOx Process Unit under this rule. The facility will be subject to all the applicable requirements under this rule.

40 CFR 63 SUBPART GG- National Emission Standards for Aerospace Manufacturing
The facility is a major source pursuant to §63.2, and will be subject to the requirements of this subpart. Operation of the propose spray booth includes application of two specialty coatings as defined in Appendix A of 40 CFR 63 Subpart GG, ablative coating and adhesion promoter. Subpart GG does not contain control requirements for the use of these specialty coatings. All cleaning activities associated with the operation of the proposed spray booth, including hand wipe cleaning and HVLP gun washing in an enclosed system using only acetone, an exempt solvent listed under 40 CFR 51.100, will comply with applicable requirements of 40 CFR 63 Subpart GG. No other activities regulated under 40 CFR 63 Subpart GG are associated with the operation of the spray booth. The facility routinely complies with all applicable requirements under §63.744 through §63.745, as well as the reporting requirements under §63.753, and will include the proposed spray booth and cleaning activities within its existing 40 CFR 63 Subpart GG monitoring and reporting program.

REGULATION XXX: TITLE V

This facility is in the RECLAIM program. The proposed project is considered as a "de minimis significant permit revision" for non-RECLAIM pollutants or hazardous air pollutants (HAPs), and a "minor permit revision" for RECLAIM pollutants to the RECLAIM/Title V permit for this facility.

Non-RECLAIM Pollutants or HAPs

Rule 3000(b)(6) defines a "de minimis significant permit revision" as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or HAPs from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	**Daily Maximum (lbs/day)**
HAP	30
VOC	30
NOx*	40
PM_{10}	30
SOx*	60
CO	220

* Not applicable if this is a RECLAIM pollutant

To determine if a project is considered as a "de minimis significant permit revision" for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project is the 7th permit revision to the Title V renewal permit issued to this facility on May 9, 2005. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued:

Revision	**HAP**	**VOC**	**NOx***	**PM_{10}**	**SOx**	**CO**
Previous permit Revisions.	*0*	*4*	*12*	*0*	*0*	*9*

7th Permit Revision: Addition of a new Spray Booth D250 and curing room D252.	*0*	*0*	*2**	*0*	*0*	*2*
Cumulative Total	*0*	*4*	*14**	*0*	*0*	*11*
Maximum Daily	30	30	40*****	30	60	220

* RECLAIM pollutant, not subject to emission accumulation requirements
\+ Reduced emissions will not be subtracted from Cumulative Total

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a "de minimis significant permit revision" for non-RECLAIM pollutants or HAPs.

RECLAIM Pollutants

Rule 3000(b)(12)(A)(v) defines a "minor permit revision" as any Title V permit revision that does not result in an emission increase of RECLAIM pollutants over the facility starting Allocation plus nontradable Allocations, or higher Allocation amount which has previously undergone a significant permit revision process.

Since NOx is a RECLAIM pollutant for this facility, a separate analysis shall be made to determine if the proposed permit revision is considered a "minor permit revision" for RECLAIM pollutants. The addition of the two heaters will result in an increase in NOx emissions but not in excess of their Allocation. As a result, this proposed project is considered as a "minor permit revision" for RECLAIM pollutants.

RECOMMENDATION

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a "de minimis significant permit revision" for non-RECLAIM pollutants or hazardous air pollutants (HAPs), and a "minor permit revision" for RECLAIM pollutants, it is exempt from the public participation requirements under Rule 3006(b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V/RECLAIM permit will be issued to this facility.