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PERMIT TO CONSTRUCT

OWNER/OPERATOR: ROHR, INC. OPERATING AS GOODRICH AEROSTRUCTURES, A UTC AEROSPACE SYSTEMS CO.

FACILITY ID: 800113

EQUIPMENT LOCATION: 8200 ARLINGTON AVE., RIVERSIDE, CA 92503

MAILING ADDRESS: SAME AS ABOVE

Title V Permit Revision Application:

A/N: 565353 (De minimis Significant Permit Revision)

SECTION H: PERMITS TO CONSTRUCT

EQUIPMENT DESCRIPTION:

Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions	Conditions
Process 20: LASER CUTTING					
CUTTER, PRODUCTION R&D PROTOTYPE , LASER NO. 1, 20 WATTS OUTPUT, 220 WATTS MAXIMUM INPUT. A/N: 546538 Reference: A/N: 565358	D275	C277, C264		PM: [RULE 405, 2-7-1986]	B59.12, C1.20, D323.1, E57.1, E147.1, <u>E193.3</u> <u>E193.4</u> .
CUTTER, R&D PROTOTYPE , LASER NO. 2, 80 WATTS, 1000 WATTS MAXIMUM INPUT. A/N: 546543 Reference: A/N: 565352	D276	C277		PM: [RULE 405, 2-7-1986]	B59.12, C1.24, D323.1, E57.1, E147.1, <u>E193.4</u>
CUTTER, PRODUCTION LASER NO. 3, SPI LASER REDENERGY G4, 80 W POWER, 1000 W MAXIMUM INPUT. Reference: A/N: 565354	<u>D293</u>	C277		PM: [RULE 405, 2-7-1986]	<u>B59.12</u> , <u>C1.24</u> , <u>D323.1</u> , <u>E57.1</u> , <u>E147.1</u> , <u>E193.4</u>

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DUST COLLECTOR, FSC2, THREE STAGE FILTERS CONSISTING: PRE-FILTER, 220 SQ. FT, SECOND STAGE ACTIVATED CARBON & ALUMINA, AND ONE 1 SQ. FT HEPA FINAL FILTER, 2 H.P. BLOWER, 552 CFM A/N: 546537 Reference:A/N: 565357	C277	D275, D276, <u>D293</u>		PM: [RULE 404, 2-7-1986]	A63.21, C6.19, D90.2, D322.4, D381.2, E102.1, E175.6, <u>E193.4</u> , H23.14, K67.1
DUST COLLECTOR, THREE STAGE FILTER CONSISTING: PRE-FILTER, DAYTON, 3AA31, FILTER, FUMEX, FA5, WITH MAX 95 SQ. FT DEEP PLEATED DIMPLED FILTER, AND 1 HEPA FINAL FILTER, 0.75 H.P. A/N: 534122 Reference:A/N: 565356	C264	D248, D253, D260, <u>D275</u>		PM: [RULE 404, 2-7-1986]	A63.21, C6.19, D90.2, D322.4, D381.2, E102.1, E175.6, <u>E193.3</u> , H23.14, K67.1
Process 9: ABRASIVE BLASTING					
ABRASIVE BLASTING, ROOM, NO.3, PROGRESSIVE TECHNOLOGIES, ALUMINUM OXIDE, WIDTH: 16 FT: HEIGHT, 14 FT LENGTH, 22 FT ABRASIVE BLASTING NOZZLE, FOUR, DIAMETER 0.375 IN; 110 PSIG Reference:A/N: 565348	D287	C288, C290		PM: (9) [RULE: 1140, 2-1-1980 : RULE 1140, 8-2-1985; RULE 405, 2-7-1986]	D323.1, E448.2
BAGHOUSE, WITH PULSE JET CLEANING SYSTEM, DONALDSON TORIT, DF04-32, EACH CARTRIDGES 14 IN DIA. X 26 IN L, 75-HP, 32 CARTRIDGE, 6080 SQ. FT., WITH 8000 CFM BLOWER. Reference:A/N: 565350	C288	D287, C289		PM: (9) [RULE 404, 2-7-1986]	A63.21, C6.27, D322.2, E102.1, H23.14, K67.1
FILTER, HEPA, FOUR, WIDTH, 11.5 IN; HEIGHT: 1 FT, LENGTH: 1 FT. Reference:A/N: 565350	C289	C288		PM: (9) [RULE 404, 2-7-1986]	A63.21, C6.26, D322.2, E175.2, H23.14, K67.1
CYCLONE, ZERO/CLEMCO, MODEL 4000, HEIGHT: 7 FT 10 IN, DIAMETER: 3 FT 6 IN.	C290	D287, C291			

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Reference: A/N: 565351					
BAGHOUSE, WITH PULSE JET CLEANING SYSTEM, DONALDSON TORIT, DF04-32, EACH CARTRIDGES 13 IN DIA. X 26 IN L, 20- HP, 32 CARTRIDGE, 6080 SQ. FT., WITH 8000 CFM BLOWER. Reference:A/N: 565351	C291	C290, C292		PM: (9) [RULE 404, 2-7-1986]	A63.21, C6.27, D322.2, E102.1, H23.14, K67.1
FILTER, HEPA, FOUR, WIDTH, 11.5 IN; HEIGHT: 1 FT, LENGTH: 1 FT. Reference:A/N: 565351	C292	C291		PM: (9) [RULE 404, 2-7-1986]	A63.21, C6.26, D322.2, E175.2, H23.14, K67.1

Please note the changes to the conditions, the strikethrough are deletions and the underlined items are additions.

Laser Cutters Conditions:

B59.12 The operator shall not use the following materials in this device:

Materials containing any toxic air contaminants (TAC) listed in Table 1 of Rule 1401 except methyl ethyl ketone, with an effective date of September 10, 2010, or earlier.

C1.20 The operator shall limit the material processed to no more than 15 lb(s) in any one calendar month.

For the purposes of this condition, material processed shall be defined as the total weight of material being cut by the laser.

For the purpose of this condition, material processed shall be defined as resins impregnated carbon fiber, resin impregnated fiberglass, epoxy film adhesive, and peel ply material.

To comply with this condition, the operator shall maintain records of the type of material used, total length, width and thickness of the material being cut.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[D275]

C1.24 The operator shall limit the material processed to no more than 38 lb(s) in any one calendar month.

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For the purposes of this condition, material processed shall be defined as the total weight of material being cut by the laser.

For the purpose of this condition, material processed shall be defined as reins impregnated carbon fiber, resin impregnated fiberglass, epoxy film adhesive, and peel ply material.

To comply with this condition, the operator shall maintain records of the type of material used, total length, width and thickness of the material being cut.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[D276, D293]

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and an associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either;

- 1) Take corrective action(s) that eliminate the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2) Have a Carb-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emissions Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records;

- 1) Stack or emission point identification
- 2) Description of any corrective actions taken to abate visible emissions
- 3) Date and time visible emission was abated, and
- 4) All visible emissions observation records by operator or a certified smoke reader.

E57.1 The operator shall vent this equipment to an air pollution control device which is in full use and which has been issued a permit to operate by the Executive Officer whenever it is in operation.

E147.1 The operator shall only conduct the processing of resin impregnated carbon fiber, resin impregnated fiberglass, epoxy film adhesive, and peel ply material in this equipment.

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E193.3 The operator shall restrict operation of this equipment according to the following requirements:
Only two out of ~~three~~ four laser cutters Devices D248, D253, D260, D275 shall be operated at any one time.
 [D275]

E193.4 The operator shall restrict operation of this equipment according to the following requirements:
Only two out of three laser cutters Devices D275, D276, D293 shall be operated at any one time.
 [D275, D276, D293]

Baghouse C264, C277:

A63.21 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSION LIMIT
Visible emissions	Less than or equal to 0 Percent Opacity

C6.19 The operator shall use this equipment in such a manner that the differential pressure being monitored, as indicated below, does not exceed 6.0 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 filters.

The operator shall determine and record the parameter being monitored once every 7 days.

D90.2 The operator shall periodically monitor the hydrocarbon concentration at the inlet and outlet according to the following specifications:

The operator shall use a District approved Organic Vapor Analyzer (OVA) to monitor the parameter.

The operator shall calibrate the instrument used to monitor the parameter in ppmv methane.

The operator shall monitor once every month

The monitoring frequency shall be reduced to at least quarterly, if three consecutive monthly monitoring show no hydrocarbon readings.

The monitoring frequency shall be increased to once every month, no later than 30 days after the discovery of any hydrocarbon readings.

The operator shall maintain records to demonstrate compliance with this condition.

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D322.4 The operator shall perform a monthly inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

D381.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected, the operator shall take corrective action(s) that eliminate the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records;

- 1) Stack or emission point identification
- 2) Description of any corrective actions taken to abate visible emissions
- 3) Date and time visible emission was abated, and

E102.1 The operator shall discharge dust collected in this equipment only into closed containers.

E175.6 The operator shall not use this equipment unless all exhaust air passes through the following:

HEPA filters that are individually DOP tested with 0.3 micron particulates and certified to have an efficiency of not less than 99.97%.

E193.3 The operator shall restrict operation of this equipment according to the following requirements; Only two out of ~~three~~ four laser cutters Devices D248, D253, D260, D275 shall be operated at any one time.

[D275]

E193.4 The operator shall restrict operation of this equipment according to the following requirements; Only two out of three laser cutters Devices D275, D276, D293 shall be operated at any one time.

[D293]

H23.14 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule Rule/Subpart
PM	District Rule	1155

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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.

Abrasive Blasting Conditions:

D323.1The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either;

- 1) Take corrective action(s) that eliminate the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2) Have a Carb-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emissions Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records;

- 1) Stack or emission point identification
- 2) Description of any corrective actions taken to abate visible emissions
- 3) Date and time visible emission was abated, and
- 4) All visible emissions observation records by operator or a certified smoke reader.

E448.2The operator shall comply with the following requirements:

Only Aluminum oxide shall be used as an abrasive media.

This equipment shall only be used to blast composite material.

Dust Collector C288, C291 Conditions:

A63.21The operator shall limit emissions from this equipment as follows:

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CONTAMINANT	EMISSION LIMIT
Visible emissions	Less than or equal to 0 Percent Opacity

C6.27 The operator shall use this equipment in such a manner that the differential pressure being monitored, as indicated below, does not exceed 5 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 cartridge filters.
The operator shall determine and record the parameter being monitored once every 7 days.

D322.2 The operator shall perform an annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

E102.1 The operator shall discharge dust collected in this equipment only into closed containers.

H23.14 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule Rule/Subpart
PM	District Rule	1155

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.

HEPA Filter Conditions:

A63.21 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSION LIMIT
Visible emissions	Less than or equal to 0 Percent Opacity

C6.26 The operator shall use this equipment in such a manner that the differential pressure being monitored, as indicated below, does not exceed 2 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 HEPA filters.
The operator shall determine and record the parameter being monitored once every 7 days.

D322.2 The operator shall perform an annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

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E175.2 The operator shall not use this equipment unless all exhaust air passes through the following:
HEPA filters that are individually DOP tested with 0.3 micron particulates and certified to have an efficiency of not less than 99.97%.

H23.14 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule Rule/Subpart
PM	District Rule	1155

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.

BACKGROUND:

Rohr submitted above applications as expedited permit processing for Permits to Construct a new abrasive blasting room, two air pollution control systems, a laser cutter, and modification of an existing laser cutter and two air pollution control systems. The new abrasive blasting room will be vented to two air pollution control systems consisting of a cartridge type dust collector followed by a HEPA filter, and a cyclone followed by a cartridge type dust collector and HEPA filters. The new laser cutter will be vented to the existing three stage air pollution control system C277 consisting of a pre-filter, carbon filter and impregnated activated alumina followed by a final HEPA filter. In addition, existing air pollution control system C264 will be modified by venting existing laser cutter D275.

The existing laser cutters currently list the power input of each laser in the equipment description, the applicant is requesting that the laser unit output should also be reflected. This change will be reflected for all laser cutters at this facility as part of this permit revision.

This is a RECLAIM/Title V facility and the Title V renewal permit was issued on July 6, 2010. This project is the 8th permit revision since the issuance of the renewal permit. There are no records of complaints or Notices of Violation issued to the facility during the last two years. However, the facility was issued two Notices to Comply on 10/23/12 and 12/13/13 requiring the applicant to submit accurate NOx emissions reports for process units, Rule 219 equipment, and large NOx sources as required by regulation XX, demonstrate compliance with various permit conditions, and submit the semi-annual compliance report on time. The applicant complied with the NC's and is currently operating in compliance with the applicable rules and regulation.

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PROCESS DESCRIPTION:

Rohr manufactures aerospace components for commercial and military aircraft. They perform metal and composite material processing, structural bonding and assembly operations. Manufacturing processes conducted at this location include composite bonding, resin curing, core stabilizing, primer and topcoat spray painting, roller coating, degreasing, solvent cleaning, metal surface preparation, abrasive blasting and tooling preparation.

The company will be operating the new laser cutter D293 initially for R&D purposes and eventually will be used for production. The configuration, operating hours and materials processed in the new laser cutter will be identical to existing laser cutter D276. The laser cutters are used to cut panels which are comprised of resin impregnated carbon fibers, resin impregnated fiberglass, epoxy film adhesive and peel ply epoxy resin film. No more than ten panels will be processed per day since the processing time takes anywhere from one to three hours per panel. The laser cutters are operated up to 20 hrs/day, 7 days/wk and 52 wks/yr. Emissions from the new laser cutter will be vented to existing air pollution control system Device C277. The control system consists of stage one dust filter, followed by blended activated carbon and impregnated activated alumina, and a final HEPA filter rated at 99.97% for 0.3 micron particulates.

The applicant is also requesting the option of venting existing laser cutter D275 to air pollution control system C264. This request will be approved since the D265 is the same size as existing laser cutters venting to the control system and since only two laser cutters can be vented to the air pollution control equipment at any one time.

The new abrasive blasting system D287 and associated air pollution control equipment dust collectors will be used for the surface preparation of aircraft engine composite parts. Both air pollution control systems are equipped with cartridge and HEPA filters with minimum efficiency of 99.97% on 0.3 micron particles and DOP tested. The blasting operation is performed by an integrated robotic abrasive blasting system inside the room. Air from the blast room is vented through the main dust collector, and the spent blast media falls through a grated floor of the room and is extracted by suction into a cyclone. Large media is separated for reuse in the abrasive blasting pots. Fines are diverted from the top of the cyclone into the baghouse and HEPA filters. Aluminum oxide is used as abrasive blasting media.

EMISSIONS CALCULATIONS:

Laser Cutter and Associated APC:

PM10 and VOC emissions are expected from the cutting operation. The calculations will be based on results of source test conducted in July of 2012. The test was conducted while both existing laser cutters D248 and D260 were in operation. The test results indicate a control efficiency of 98% for PM10 and 57.7% for VOC emissions.

The total amount of material removal during the test was 0.02268 lb/hr. However, the exhaust system was only collecting 74.5 percent of the material. This indicates that there is 25.6 percent fallout from this operation.

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PM10 R1 = 0.0128 lb/hr Test result
PM10 R2 = 0.00026 lb/hr “
VOC R1 = 0.00402 lbs/hr “
VOC R2 = 0.0017 lb/hr “
PM10 = 76% of material emitted to APC
VOC = 24% of material emitted to APC

Operating hours = 20 hrs/day, 30 days/month
Process weight = 38 lbs/month of material removed (permit condition)
Total material to be vented to APC = 38 lbs/month x 74.5% = 28.31 lbs/month

PM10 Emissions:

R1 = 28.31 lbs/month x 76% = 21.52 lbs/month, 0.717 lbs/day
R1 = 0.036 lbs/hr
R2 = 21.52 lbs/month (1-0.98) = 0.43 lbs/month, 0.014 lbs/day
R2 = 0.0007 lbs/hr

VOC Emissions:

R1 = 28.31 lbs/month x 24% = 6.8 lbs/month, 0.23 lbs/day
R1 = 0.011 lbs/hr
R2 = 6.8 lbs/month x (1-0.577) = 2.87 lbs/month, 0.095 lbs/day
R2 = 0.0048 lbs/hr

Laser Cutter D275, A/N 565358:

Adding the option of venting laser cutter D275 to air pollution control system C264 will have no impact on the emissions from this unit. Permit conditions E193.3 and E193.4 will be added to allow the laser cutter to be vented to any of two control systems C264 or C277. The NSR and AEIS emissions will be entered as calculated under previous application.

Laser Cutter D276, A/N 565352:

The only change that will be made to this laser cutter is the addition of permit condition E193.4 limiting the operation to only two out of three laser cutters D275, D276, and D293 that can operate at any one time. The NSR and AEIS emissions will be entered as calculated under previous application.

Dust collector C277, A/N 565357:

The facility will be venting the new laser cutter which is identical to existing laser cutter D276 to the existing air pollution control system Device C277. The APC system consists of stage one dust filter, followed by blended activated carbon and impregnated activated alumina, and a final HEPA filter rated at 99.97% for 0.3 microns particulates. A permit condition will be placed on the permit that only two out of three laser cutters D275, D276, D293 shall be operated at any one time.

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R2, PM10 = 0.118 lb/day 0.005 lbs/hr

Rule 404 emission calculation:

Exhaust PM concentration:

$$= (0.00987 \text{ lb/hr} \times 7000 \text{ gr/lb}) \times (\text{min} / 8000 \text{ ft}^3) \times (\text{hr} / 60\text{min}) = 0.00014 \text{ grains/ ft}^3$$

Total CFM for both dust collectors would be:

$$8000 + 8000 = 16,000 \text{ CFM}$$

Rule 404 allowable limit based on 15,890 cfm is 0.0664 grains/ft³

Rule 405 emissions calculation:

Actual PM emission = 0.00987 lb/hr

Rule 405 allowable limit based on a process weight of 5062 lbs/hr is 6.1 lb/hr

Abrasive Blasting System

Abrasive Material: Aluminum Oxide
 Nozzle Diameter, Inches: 3/8"
 Room Dimensions (W' X L' X H'): 10' x 14' x 10'
 Blower rating, H.P.: 20- H.P.
 Total CFM: 6,080 + 6,080= 12,160
 No. of Nozzles: four

Room Cross draft Velocity (CD)

Room Cross Area: 10 W. X 10 H. = 100 Ft².

CD = Blower CFM / Area = 16,000/100 = 160 fpm (min required 50 ft/min)

In draft Velocity through Air Port (ID):

Air -to- Cloth Ratio (A/C) = 16,000/12,160 = 1.3 (max allowed 8.0:1)

Baghouse and Abrasive Blasting Room Guideline Review:

	Recommended	Actual	Compliance
A/C Ratio	8:1 Max	1.3	Yes
Bag Shaker	PJ/MN	PJ	Yes
Access Door	Yes	Yes	Yes
Closed Container	Yes	Yes	Yes
Pressure Gauge	Yes	Yes	Yes

The abrasive blasting nozzle diameter and maximum air pressure supply at the facility will be the limiting factors for daily usage. No daily limit usage will be required for the abrasive blasting equipment.

RULE ANALYSIS

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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.

(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 equipment will not result in on-site emission increases exceeding the daily maximums for any criteria pollutant emissions as specified in Rule 212(g). Therefore, a 30-day public notice period will not be required.

(c)(3) This section requires a public notice for all new or modified permit units with increases in emissions of toxic air contaminants listed in Table I of Rule 1401 resulting in a cancer risk equal or greater than one in a million.

The proposed installation of the new laser cutter will not result in any emission increase that will cause a cancer risk equal or greater than one in a million. There are no toxics emissions associated with the abrasive blasting operation. Public notice is not required under this section of the 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 proposed installation of the new laser cutter and abrasive blasting system will not result in an emission increase exceeding the daily maximums.

	Maximum Daily Emissions					
	ROG	NO_x	PM₁₀	SO₂	CO	Pb
Emission increase	0	0	0	0	0	0
MAX Limit (lb/day)	30	40	30	60	220	3
Compliance Status	Yes	Yes	Yes	Yes	Yes	Yes

RULEs 401 & 402: Emissions from the laser cutter will be vented to an air pollution control system consisting of a prefilter, a carbon absorber with alumina, and a HEPA filter. With the proper operation and maintenance of the equipment, no visible emissions are expected from the above operations.

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Emissions from the abrasive blasting room will be vented to an air pollution control system dust collectors and HEPA filters. With the proper operation and maintenance of the equipment, compliance with this rule is expected.

RULE 404: The emission calculations indicate that the proposed equipment is expected to comply with the requirements of this rule.

Rule 405: The emission calculations indicate that the proposed equipment is expected to comply with the requirements of this rule.

Rule 1140: The abrasive blasting room is totally enclosed and vented to an air pollution control equipment baghouse and HEPA filters to minimize particulate matter emissions to the atmosphere. Compliance with this rule is expected.

RULE 1155: The abrasive blasting room will be vented to two dust collectors with a total filter area of 6,080 ft² each and as a result meet the definition of Tier 3. Each dust collector will be vented to HEPA filters before venting to atmosphere. Rule 1155 (g)(13) states that “With the exception of paragraph (d)(1), high efficiency particulate air (HEPA) equipment is exempt from the provisions of this rule.” Since the HEPA filters are the last control equipment prior to venting to the atmosphere, the proposed air pollution control equipment is exempt from the BLDS and source test requirements. The air pollution control equipment will only have to meet the visible emission requirement of the Rule. Compliance is expected.

The laser cutter will be vented to an air pollution control system consisting of a prefilter, a carbon absorber with alumina, and a HEPA filter before venting to atmosphere. As a result the air pollution control equipment is also exempt from all the provisions of the Rule except for the visible emission requirement of (d)(1). Compliance is expected.

REGULATION XIII

RULE 1303(a), BEST AVAILABLE CONTROL TECHNOLOGY (BACT)

The abrasive blasting system will be vented to a baghouse and HEPA filters which will satisfy BACT requirements.

PM emissions from the laser cutter are vented to a dust collector and HEPA filters which satisfies BACT requirements.

RULE 1303(b)(1), MODELING

Controlled hourly PM₁₀ emissions are below the screening threshold of 0.41 lb/hr. No further modeling analysis is required. Compliance with this rule is expected.

RULE 1303(b)(2), OFFSET

The proposed installation of the abrasive blasting system and laser cutter will result in negligible PM emission increase. Therefore no offsets will be required for this project.

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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.

The operation of the laser cutter will result in toxic air contaminants (TAC) identified in Table 1 of Rule 1401. However, as indicated in the emission calculations, the emissions from the laser is negligible and passes a Tier I health risk assessment.

The laser cutter will be conditioned such that it will not be permitted to use any material containing any toxic air contaminants listed under Rule 1401 as amended September 10, 2010 except methyl ethyl ketone. Compliance is expected.

The proposed installation of the abrasive blasting system will not result in toxics emissions. Compliance with this rule is expected.

REGULATION XX-RECLAIM

RULE 2005-NEW SOURCE REVIEW FOR RECLAIM

Rohr, Inc. is a NO_x RECLAIM facility. This project will not affect NO_x emissions at the facility. This rule is not applicable to this project.

REGULATION XXX

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

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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
NO _x *	40
PM ₁₀	30
SO _x *	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 8th. permit revision to the Title V renewal permit issued to this facility on July 6, 2010. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued:

Revision	HAP	VOC	NO _x *	PM ₁₀	SO _x	CO
Previous permit Revisions.	0	0	1*	0	0	1
8 th . Permit Revision Installation of Abrasive Blasting Room, a laser cutter, air pollution control system, and modification of two laser cutters and an air pollution control system.	0		0	0	0	0
Cumulative Total	0	0	1	0	0	1
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 nontradeable Allocations, or higher Allocation amount which has previously undergone a significant

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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 proposed installation of the abrasive blasting system and laser cutter will not result in an increase in NOx emissions. 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 and hazardous air pollutants, 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 raise any objections within the review period, a revised Title V permit will be issued to this facility.