

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION <i>Large Coating, Printing and Chemical Operations Team</i> APPLICATION PROCESSING AND CALCULATIONS	PAGE	1 of 12
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**PERMIT TO CONSTRUCT EVALUATION
(REGENERATIVE THERMAL OXIDIZER)**

Applicant's Name

GREIF INDUSTRIAL PACKAGING

Company I.D.

142907

Mailing Address

8250 ALMERIA AVE., FONTANA, CA 92335

Equipment Address

8250 ALMERIA AVE., FONTANA, CA 92335

EQUIPMENT DESCRIPTION

APPLICATION NO. 503361 (Replacement for P/O F72953, A/N 438002)

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. RECUPERATIVE THERMAL OXIDIZER, EPCON, MODEL NO. E-16-T70-XX, HORIZONTAL TYPE, 18,000 CFM, 11' – 7" W X 54' – 1.25" L X 8' – 6" H, WITH A 9,800,000 BTU/HR MAXON LOW NOX NATURAL GAS-FIRED BURNER, MODEL KINEDIZER LE, A 15 H.P. COMBUSTION BLOWER AND AN INTERNAL FIVE PASS PRE-HEAT EXCHANGER.
2. LARGE DRUM SPRAY BOOTH # 1, CONVEYORIZED, FLOOR TYPE, 13'-4" W. X 16'-10" L. X 7'-10" H., WITH ONE RECIRCULATION AIR FAN AND EIGHTEEN 20" X 20" FILTERS, AND ONE 3 HP EXHAUST FAN AND TWO 20" X 20" EXHAUST FILTERS.
3. SMALL DRUM SPRAY BOOTH # 2, CONVEYORIZED, FLOOR TYPE, 8'-0" W. X 9'-0" L. X 7'-0" H., WITH TWELVE 20" X 20" EXHAUST FILTERS AND A 1 ½ HP EXHAUST FAN.
4. SMALL PARTS SPRAY BOOTH # 3, FLOOR TYPE, BINKS, 5'-0" W. X 6'-0" L. X 7'-0" H., WITH TWELVE 20" X 20" EXHAUST FILTERS, AND ONE ½ HP EXHAUST FAN.
5. EXHAUST SYSTEM WITH ONE 125 HP BLOWER, 18,000 SCFM, VENTING THREE SPRAY BOOTHS (LARGE DRUM, SMALL DRUM AND SMALL PARTS) AND TWO OVENS.

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APPLICATION NO. 506823 (Modification, Previous P/O F72951, A/N 438000)

BAKE OVEN, DESPATCH, 5'-0" W. X 40'-0" L. X 6'-0" H., NATURAL GAS FIRED, WITH ONE 2.7 MM BTU PER HOUR MAXON PACKAGED CYCLOMAX LOW NOX BURNER, MODEL NO. 2.7 M, ONE 3 HP COMBUSTION BLOWER, TWO 10 HP CIRCULATING FANS, ONE 1 HP EXHAUST FAN AND ONE 5 HP COOLING SECTION FAN.

APPLICATION NO. 506824

TITLE V REVISION

HISTORY

The above applications from Greif Industry were submitted to the District to install a new recuperative afterburner with a 9.8 mm BTU/HR natural gas-fired burner.

The applicant is proposing to install a new functionally identical but a larger recuperative afterburner at this location to replace an old recuperative afterburner with 5.0 mm BTU/HR. The new afterburner will be equipped with a Maxon Kinedizer LE burner with guaranteed less than 30 ppm NOx emissions @ 3% O₂, which complies with the current BACT requirements. At present two spray booths and one oven are vented to the existing afterburner. The applicant is proposing to vent all the three spray booths and two ovens to the new afterburner. As a result, Greif Industry has submitted above permit applications with the District, as class I applications to install the afterburner and modify the oven to vent it to the afterburner.

Greif Industry manufactures steel drums in sizes ranging from 5 to 55 gallons. The drum manufacturing operation is performed at this location for a number of years. Recently there was a change of ownership at this location. The previous operator was Greif Brothers Corp. operating under District I.D. # 073301. The facility currently has three spray booths and two ovens operating with District permits under I.D. # 142907.

Greif Industry has a VOC emission cap of 65 pounds per day. The applicant requested to maintain the same 65 pounds per day VOC cap under this project. The applicant has not requested any changes in the manufacturing process or the materials under this project. Rules 1125 and 1171 apply to this facility and the above described equipment.

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The district database shows no complaints on file in the last two years against this facility. One notice to comply was issued in last two years to provide records. Two notices of violation were issued to the facility for not submitting annual compliance certificate and using non-compliant cleaning solvent. The company was operating in compliance upon follow-up inspections.

This facility is not located within 1000 feet from any school and there will not be any emission increases exceeding Rule 212 thresholds from this project, hence, these applications will not require a public notice.

Greif Industry is a Title V facility. A Title V permit was issued to this facility in September 3, 2008. This is the first revision to the Title V permit. The proposed permit revision is considered as a “de-minimis permit revision”, as described in Regulation XXX evaluation.

PROCESS DESCRIPTION

This is a steel drum manufacturing facility. The drums are manufactured from sheets of steel. The sheets are cut to size, formed to desired shape, welded, coated in spray booths and dried in ovens. The facility has two drum manufacturing lines with two spray booths and one oven vented to a recuperative afterburner. The spray booths are enclosed and the conveyors are used to transfer the parts to the oven. The conveyors are in enclosed tunnels. Under this project the applicant proposes to vent one additional spray booth with 720 cfm airflow and oven with 1500 cfm airflow to the new recuperative afterburner. The applicant is proposing to enclose the spray booth and the conveyor for the additional spray booth to be vented to the new afterburner to increase the VOC collection efficiency. The new larger afterburner is capable to handle the extra contaminated air.

A recuperative afterburner is basically a direct-fired afterburner with heat recovery added at the discharge end of the combustion chamber. In the afterburner, heat recovery is achieved in a gas to gas heat exchanger. In the heat exchanger the contaminated air stream gets heated to an elevated temperature, so that the heat consumption from the burner is reduced. The above equipment will be equipped with a five pass heat exchanger to recover all the heat possible.

The facility uses Precision coatings in the spray booths with maximum VOC content of 1.07 pounds per gallon, which comply with the Rule 1125 VOC requirements. The VOC content of the clean-up material is 0.2 lbs/gal, which complies with the Rule 1171 requirements. All the VOC emissions will be vented to the afterburner.

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OPERATING HOURS

Average: 8 hr/day, 7 day/week, 52 weeks/year
Maximum: 24 hr/day, 7 day/week, 52 weeks/year

OXIDIZER DESIGN

Design capacity of the control equipment:	18,000 cfm
Inlet operating temperature	70 ⁰ F
Outlet operating temperature from combustion chamber	1400 ⁰ F
Heat exchanger efficiency:	70%
Heat Input Rating of the burner for initial heating of the media	9.8 mm BTU/HR
Volume of the combustion zone	2420 ft ³

Heat required to heat air from spray booths from 70⁰F to 1400⁰F

$$M = 12000 \text{ scfm} \times 0.075 \text{ lb/scf} \times 60 \text{ min/hr} = 54000 \text{ lb/hr}$$

$$Cp_{70} = 0.240 \text{ Btu/lb } ^\circ\text{F} \quad Cp_{1400} = 0.274 \text{ Btu/lb } ^\circ\text{F}$$

$$Cp_{\text{avg}} = 0.257 \text{ Btu/lb } ^\circ\text{F}$$

$$\begin{aligned} Q &= MCp \Delta T \\ &= 54000 \times 0.257 \times (1400 - 70) \\ &= 18.46 \text{ MM Btu/hr} \end{aligned}$$

Heat required to heat air from ovens from 350⁰F to 1400⁰F

$$M = 6000 \text{ scfm} \times 0.075 \text{ lb/scf} \times 60 \text{ min/hr} = 27000 \text{ lb/hr}$$

$$Cp_{350} = 0.244 \text{ Btu/lb } ^\circ\text{F} \quad Cp_{1400} = 0.274 \text{ Btu/lb } ^\circ\text{F}$$

$$Cp_{\text{avg}} = 0.259 \text{ Btu/lb } ^\circ\text{F}$$

$$\begin{aligned} Q &= MCp \Delta T \\ &= 27000 \times 0.259 \times (1400 - 350) \\ &= 9.23 \text{ MM Btu/hr} \end{aligned}$$

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Total heat required = $18.46 + 9.23 = 27.69$ MM Btu/hr

After 70% heat recovery (conservative estimate, not including solvent heat)

$Q = 27.69 \times 0.3 = 8.307$ MM Btu/hr

The afterburner is rated at 9.8 MM Btu/hr. This is more than adequate.

Residence time calculations

Flow rate = 18000 cfm

Flow rate per minute = $18000 \text{ cfm} / 60 \text{ sec/min} = 300 \text{ cfs}$

Corrected volume = $300 \text{ cfs} \times 1860 / 530 = 1053 \text{ cfs}$ (1400 °F to 70 °F)

Combustion zone volume = 2420 cubic feet

Residence time = $2420 / 1053 = 2.3 \text{ sec}$

(greater than 0.5 sec recommended - OK)

EMISSION CALCULATIONS

The new recuperative afterburner with 9.8 MM Btu/hr heat input is replacing existing recuperative afterburner with 5 MM Btu/hr heat input. Both afterburners have low NOx Maxon Kinedizer LE burner with less than 30 ppmv NOx emissions at 3% O₂.

There will be increase in combustion emissions under this project. The increase in emissions will also have some increase in the toxic related MICR, HIA and HIC.

Please refer to following Tables for combustion emissions from the existing afterburner, from the new afterburner and the emission increases under this project.

Emissions from the combustion in the oven will not change under this project, while VOC emissions from the coatings are assigned to the spray booth. Previous NSR emission data will be re-assigned to the oven application.

A/N 503361

Proposed Afterburner

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	maximum	normal		
hr/dy	24	8	max heat input	9.80E+06 (BTU/hr)
<u>dy/wk</u>	7	7	<u>gross heating value</u>	1050 (BTU/scf)
<u>wk/yr</u>	52	52		
<u>load</u>	100%	75%		

	Emission Factors	MAX (lb/hr)	AVE (lb/hr)	MAX (lb/dy)	30-DAY (lb/dy)	MAX (lb/yr)	MAX (ton/yr)
SO ₂ (R1)	0.6	0.006	0.004	0.134	NA	49	0.024
SO ₂ (R2)	0.6	0.006	0.004	0.134	0.134	49	0.024
NO ₂ (R1)	38.94	0.363	0.273	8.723	NA	3,175	1.588
NO ₂ (R2)	38.94	0.363	0.273	8.723	8.723	3,175	1.588
CO (R1)	39.5	0.369	0.277	8.848	NA	3,221	1.610
CO (R2)	39.5	0.369	0.277	8.848	8.848	3,221	1.610
TOC (R1=R2)	5.8	0.054	0.041	1.299	1.299	473	0.236
N ₂ O (R1=R2)	2.2	0.021	0.015	0.493	0.493	179	0.090
PM, PM ₁₀ (R1=R2)	7.5	0.070	0.053	1.680	1.680	612	0.306
Hexane	0.0063	5.9E-05	4.4E-05	1.4E-03	NA	5.14E-1	2.57E-4
Ammonia	3.2	3.0E-02	2.2E-02	7.2E-01	NA	2.61E+2	1.30E-1
ethyl benzene	0.0095	8.9E-05	6.7E-05	2.1E-03	NA	7.75E-1	3.87E-4
acetaldehyde	0.0043	4.0E-05	3.0E-05	9.6E-04	NA	3.51E-1	1.75E-4
acrolein	0.0027	2.5E-05	1.9E-05	6.0E-04	NA	2.20E-1	1.10E-4
benzene	0.008	7.5E-05	5.6E-05	1.8E-03	NA	6.52E-1	3.26E-4
formaldehyde	0.017	1.6E-04	1.2E-04	3.8E-03	NA	1.39E+0	6.93E-4
naphthalene	0.0003	2.8E-06	2.1E-06	6.7E-05	NA	2.45E-2	1.22E-5
PAH's	0.0001	9.3E-07	7.0E-07	2.2E-05	NA	8.15E-3	4.08E-6
toluene	0.0366	3.4E-04	2.6E-04	8.2E-03	NA	2.98E+0	1.49E-3
xylene	0.0272	2.5E-04	1.9E-04	6.1E-03	NA	2.22E+0	1.11E-3
Propylene	0.731	6.8E-03	5.1E-03	1.6E-01	NA	5.96E+1	2.98E-2
NO ₂ @ 3% excess O ₂ ----->>		30.00	(ppmv)		SO ₂ @ 3% excess O ₂ ----->>	0.33	(ppmv)
CO @ 3% excess O ₂ ----->>		49.98	(ppmv)		PM @ 12% CO ₂ ----->>	5.5E-09	(grain/ft ³)

Existing Afterburner

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	maximum	normal		
hr/dy	24	8	max heat input	5.00E+06 (BTU/hr)
<u>dy/wk</u>	7	7	<u>gross heating value</u>	1050 (BTU/scf)
<u>wk/yr</u>	52	52		
<u>load</u>	100%	75%		

	Emission Factors	MAX (lb/hr)	AVE (lb/hr)	MAX (lb/dy)	30-DAY (lb/dy)	MAX (lb/yr)	MAX (ton/yr)	
SO ₂ (R1)	0.6	0.003	0.002	0.069	NA	25	0.012	
SO ₂ (R2)	0.6	0.003	0.002	0.069	0.069	25	0.012	
NO ₂ (R1)	38.94	0.185	0.139	4.450	NA	1,620	0.810	
NO ₂ (R2)	38.94	0.185	0.139	4.450	4.450	1,620	0.810	
CO (R1)	39.5	0.188	0.141	4.514	NA	1,643	0.822	
CO (R2)	39.5	0.188	0.141	4.514	4.514	1,643	0.822	
TOC (R1=R2)	5.8	0.028	0.021	0.663	0.663	241	0.121	
N ₂ O (R1=R2)	2.2	0.010	0.008	0.251	0.251	92	0.046	
PM, PM ₁₀ (R1=R2)	7.5	0.036	0.027	0.857	0.857	312	0.156	
Hexane	0.0063	3.0E-05	2.3E-05	7.2E-04	NA	2.62E-1	1.31E-4	
Ammonia	3.2	1.5E-02	1.1E-02	3.7E-01	NA	1.33E+2	6.66E-2	
ethyl benzene	0.0095	4.5E-05	3.4E-05	1.1E-03	NA	3.95E-1	1.98E-4	
acetaldehyde	0.0043	2.0E-05	1.5E-05	4.9E-04	NA	1.79E-1	8.94E-5	
acrolein	0.0027	1.3E-05	9.6E-06	3.1E-04	NA	1.12E-1	5.62E-5	
benzene	0.008	3.8E-05	2.9E-05	9.1E-04	NA	3.33E-1	1.66E-4	
formaldehyde	0.017	8.1E-05	6.1E-05	1.9E-03	NA	7.07E-1	3.54E-4	
naphthalene	0.0003	1.4E-06	1.1E-06	3.4E-05	NA	1.25E-2	6.24E-6	
PAH's	0.0001	4.8E-07	3.6E-07	1.1E-05	NA	4.16E-3	2.08E-6	
toluene	0.0366	1.7E-04	1.3E-04	4.2E-03	NA	1.52E+0	7.61E-4	
xylenes	0.0272	1.3E-04	9.7E-05	3.1E-03	NA	1.13E+0	5.66E-4	
Propylene	0.731	3.5E-03	2.6E-03	8.4E-02	NA	3.04E+1	1.52E-2	
NO ₂ @ 3% excess O ₂ ----->>		30.00	(ppmv)		SO ₂ @ 3% excess O ₂ ----->>		0.33	(ppmv)
CO @ 3% excess O ₂ ----->>		49.98	(ppmv)		PM @ 12% CO ₂ ----->>		5.5E-09	(grain/ft ³)

Increase in Combustion emissions

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	maximum	normal			
hr/dy	24	8	max heat input	4.80E+06 (BTU/hr)	
dy/wk	7	7	<u>gross heating value</u>	1050 (BTU/scf)	
wk/yr	52	52			
load	100%	75%			

	Emission Factors	MAX (lb/hr)	AVE (lb/hr)	MAX (lb/dy)	30-DAY (lb/dy)	MAX (lb/yr)	MAX (ton/yr)
SO ₂ (R1)	0.6	0.003	0.002	0.066	NA	24	0.012
SO ₂ (R2)	0.6	0.003	0.002	0.066	0.066	24	0.012
NO ₂ (R1)	38.94	0.178	0.134	4.272	NA	1,555	0.778
NO ₂ (R2)	38.94	0.178	0.134	4.272	4.272	1,555	0.778
CO (R1)	39.5	0.181	0.135	4.334	NA	1,577	0.789
CO (R2)	39.5	0.181	0.135	4.334	4.334	1,577	0.789
TOC (R1=R2)	5.8	0.027	0.020	0.636	0.636	232	0.116
N ₂ O (R1=R2)	2.2	0.010	0.008	0.241	0.241	88	0.044
PM, PM ₁₀ (R1=R2)	7.5	0.034	0.026	0.823	0.823	300	0.150
Hexane	0.0063	2.9E-05	2.2E-05	6.9E-04	NA	2.52E-1	1.26E-4
Ammonia	3.2	1.5E-02	1.1E-02	3.5E-01	NA	1.28E+2	6.39E-2
ethyl benzene	0.0095	4.3E-05	3.3E-05	1.0E-03	NA	3.79E-1	1.90E-4
acetaldehyde	0.0043	2.0E-05	1.5E-05	4.7E-04	NA	1.72E-1	8.59E-5
acrolein	0.0027	1.2E-05	9.3E-06	3.0E-04	NA	1.08E-1	5.39E-5
benzene	0.008	3.7E-05	2.7E-05	8.8E-04	NA	3.19E-1	1.60E-4
formaldehyde	0.017	7.8E-05	5.8E-05	1.9E-03	NA	6.79E-1	3.39E-4
naphthalene	0.0003	1.4E-06	1.0E-06	3.3E-05	NA	1.20E-2	5.99E-6
PAH's	0.0001	4.6E-07	3.4E-07	1.1E-05	NA	3.99E-3	2.00E-6
toluene	0.0366	1.7E-04	1.3E-04	4.0E-03	NA	1.46E+0	7.31E-4
xylenes	0.0272	1.2E-04	9.3E-05	3.0E-03	NA	1.09E+0	5.43E-4
Propylene	0.731	3.3E-03	2.5E-03	8.0E-02	NA	2.92E+1	1.46E-2
NO ₂ @ 3% excess O ₂ ----->>		30.00	(ppmv)	SO ₂ @ 3% excess O ₂ ----->>		0.33	(ppmv)
CO @ 3% excess O ₂ ----->>		49.98	(ppmv)	PM @ 12% CO ₂ ----->>		5.5E-09	(grain/ft ³)

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Toxic Compound Emissions and Risk Assessment

A Tier 2 Risk Assessment was performed to determine the health risk from the increase in toxic air contaminants emitted from the combustion of natural gas under this project. The assessment calculated a cancer risk of 0.0537 in a million (5.37E-08) for the residential receptor and 0.0199 in a million (1.99E-08) for a commercial receptor. The assessment also calculated both acute and chronic hazard index risks and all the risks were below 1. Thus, the Tier 2 risk assessment demonstrated compliance with the Rule 1401 requirements.

RULES/REGULATION EVALUATION

▣ **RULE 212, PUBLIC NOTIFICATION**

v **SECTION 212(c)(1):**

This section requires a public notice for all new or modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school. This source is not located within 1,000 feet from the outer boundary of a school. Therefore, public notice will not be required by this section.

v **SECTION 212(c)(2):**

This section requires a public notice for all new or modified facilities which have on-site emission increases exceeding any of the daily maximums as specified in subdivision (g). This is a replacement with an increase in combustion emissions. As shown in the following table, the emission increases from this project are below the daily maximum limits specified by Rule 212(g). Therefore, public notice will not be required by this section.

LB/DAY	CO	NOX	PM₁₀	ROG	Lead	SOX
MAX. LIMIT	220	40	30	30	3	60
INCREASES	4.3	4.3	0.82	0.64	0	0.07

v **SECTION 212(c)(3):**

See Rule 1401 evaluation section. Public notice is not required by this section. There is no toxic emission increase from the use of coatings in this equipment since the VOC cap will remain the same. The toxic emission increases from the combustion of natural gas in the new larger afterburner results in MICR below 1 in a million. Therefore, this application will not be subject to this section.

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v **SECTION 212(g):**

This section requires a public notice for all new or modified sources which undergo construction or modifications resulting in an emissions increase exceeding any of the daily maximum specified in the table below. As shown in the following table, the emission increases from this project are below the daily maximum limits specified by Rule 212(g). Therefore, public notice will not be required by this section.

LB/DAY	CO	NOX	PM₁₀	ROG	Lead	SOX
MAX. LIMIT	220	40	30	30	3	60
INCREASES	8.85	8.72	1.68	1.30	0	0.13

▣ **RULES 401 & 402, VISIBLE EMISSIONS & NUISANCE**

AQMD database has no records of any visible emissions or nuisance violations against this company in the last two years.

▣ **RULE 1125, METAL CONTAINER, CLOSURE, AND COIL COATING OPERATIONS**

v **SECTION (C)(1), VOC CONTENT OF COATING**

The applicant is in compliance with these requirements by using following compliant coatings.

Coating Category	VOC Content (lbs/gal)	
	Rule Limit	Actual
Precision Coatings	2.8 (Exterior)	1.07
Red, Blue, Green	3.5 (Interior)	1.07

▣ **RULE 1125, METAL CONTAINER, CLOSURE, AND COIL COATING OPERATIONS**

v **SECTION (C)(4), TRANSFER EFFICIENCY**

The use of HVLP spray equipment comply with transfer efficiency requirements.

▣ **RULE 1171, SOLVENT CLEANING OPERATIONS**

The applicant is in compliance with these requirements by using following compliant coatings.

Coating Category	VOC Content (lbs/gal)	
	Rule Limit	Actual
Precision Coatings 18C5907	0.25	0.2

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REGULATION XIII

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

(a) VOC EMISSIONS

VOC emissions from spray booths and ovens will be vented to an air pollution control system consisting of an afterburner with a sufficient VOC control efficiency (at least 90% collection, 95% destruction and 90% overall). This will comply with the provisions of the current BACT requirements.

(a) NOx EMISSIONS

The manufacturer has guaranteed the NOx emissions to be 30 ppmv at 3% oxygen level to comply with the current BACT requirements. A permit condition will require to source test the equipment to show compliance with these requirements.

▣ **RULE 1303(b)(1), MODELING**

Screening modeling analysis is not required since emission increases are below the Table A-1 allowable emissions, for NOx emissions <0.20 lbs/hr (calculated 0.18 lbs/hr), CO emissions <11.0 lbs/hr (calculated 0.18 lbs/hr) and PM10 emissions <1.2 lbs/hr (calculated 0.034 lbs/hr).

▣ **RULE 1303 (b)(2), EMISSION OFFSETS**

There will be increase in the emissions under this project. However, the emissions are below the Rule 1304 threshold limits, except VOC. The increase in the VOC emissions (1 lb/day) will be taken from the facility cap of 65 lb/day. The new VOC emission cap for the facility will be established at 64 lbs/day.

▣ **RULE 1401, NEW SOURCE REVIEW OF CARCINOGENIC AIR CONTAMINANTS**

As discussed in this evaluation report, this equipment is expected to comply with the rule requirements. (MICR from the combustion of the natural gas is expected to be less than 1×10^{-6} and HIA &HIC to be below 1.)

REGULATION XXX

This facility is not in the RECLAIM program. The proposed project is considered as a “de minimis significant permit revision” to the Title V permit for this facility.

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 hazardous air pollutants (HAPs) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

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Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NOx	40
PM10	30
SOx	60
CO	220

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 1st permit revision to the Title V permit issued to this facility on September 3, 2008. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V permit was issued:

Revision	HAP	VOC	NOx	PM ₁₀	SOx	CO
1 st Revision. Install new afterburner (A/N 503361) and vent additional Oven (A/N 506823).	0	1	4	1	0	4
Total	0	1	4	1	0	4
Maximum Daily	30	30	40	30	60	220

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”.

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”, 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 permit will be issued to this facility.