South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

April 11, 2012

Mr. Gerardo Rios
Chief – Permits Office
U. S. EPA, Region IX
75 Hawthorne Street, Air 3
San Francisco, CA 94105

Dear Mr. Rios:

Subject: TAMCO (ID 18931) - Title V Permit Revision

TAMCO has proposed to revise their Title V permit by adding a new baghouse and a carbon storage and injection system; modifying the lime silo D8, and three ladle heaters. This is a ferrous scrap metal recycling facility (SIC 3312) located at 12459-B Arrow Route, Rancho Cucamonga, CA 91739. This proposed permit revision is considered as a "de minimis significant permit revision" to their Title V permit. Enclosed for your review are the permit evaluations and the proposed Section D. With your receipt of the proposed Section D today, we will note that the EPA 45-day review period begins on April 11, 2012.

If you have any questions or need additional information regarding the proposed permit revision, please contact Ms. Dixie Richards at (909) 396-2395.

Sincerely,

Brian L. Yeh
Senior Manager
Mechanical, Chemical, and Public Services

BLY:kh

Enclosures

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Page	1 of 5
	A/N	527122 & 529029
ENGINEERING & COMPLIANCE	Processed By	KH/DR
	Checked By	DR
APPLICATION PROCESSING AND CALCULATIONS	Date	10/5/11

Applicant's Name: TAMCO
Mailing Address: 12459-B Arrow Route
Rancho Cucamonga, CA 91739
Equipment Location: Same

Equipment Description:
APPLICATION NO. 527122: Previous permit: E2094B A/N 00443B D8

ALTERATION TO LIME STORAGE SILO PERMIT TO OPERATE E2094B (A/N 00443B), DEVICE D8, BY:
THE ADDITION OF:
- ONE LIME HOPPER
- ONE HOPPER DISCHARGE SCREW CONVEYOR
- ONE DISCHARGE DUST COLLECTION SHROUD
AND THE REMOVAL OF:
- TWO PNEUMATIC CONVEYORS

APPLICATION NO. 529029: New

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:
1. BAGHOUSE, DIVERSIFIED STORAGE SYSTEMS MODEL WAM 250, WITH 14 FILTER CARTRIDGES, EACH 0' - 5.25"DIA. x 2' - 6"L., 250 SQ. FT. TOTAL FILTERING AREA, AND PULSE JET CLEANING.
2. EXHAUST SYSTEM WITH ONE 5-HP BLOWER VENTING ONE HOPPER AND ONE DISCHARGE DUST COLLECTION SHROUD.

HISTORY:
Applications received on: 9/8/11
Equipment installed: Yes (lime hopper) No (above baghouse)
Compliance records: No Notice of Violation or Notice to Comply has been issued in the last two years.

Application 527122 was filed to revise the lime storage silo permit to reflect the addition of a lime hopper, a discharge conveyor, and the removal of two pneumatic conveyors. The previous A/N 00443B was deemed complete prior to October 1976; therefore, the equipment was not subject to NSR when the associated Permit E02094B was issued.

Application 529029 was filed for permit to construct a new dust collector venting the new hopper, and the new discharge conveyor. The hopper is currently vented to an unpermitted baghouse.

PROCESS DESCRIPTION

The modified lime silo is still loaded pneumatically from delivery trucks. The lime is gravity fed into the lime hopper. From the hopper, lime is metered to a bucket loader by a screw conveyor. The bucket loader feeds lime to the Electric Arc Furnace (EAF). The silo vents to the existing bin vent. The proposed dust collector vents the hopper (with the blower off when the hopper is filling from the silo) and the discharge shroud. The dust collector blower is turned on automatically when the screw conveyor is operated.

CALCULATIONS

Unloading to silo (pneumatic)[1]: (Assumed as for cement)

Uncontrolled PM			0.73	lb/ton
Uncontrolled PM10			0.47	lb/ton

[1]Data from Table 11.12-2, AP-2 Section 11.12, Concrete Batching, 6/06

Transfer point PM[2]: 8.8*10^-5 lb/ton/(1-0.99) = 0.0088 lb/ton

[2]Data from Table 11.17-4, AP-42 Section 11.17, Lime Manufacturing, 2/98. (Calculated from controlled emission factor and an assumed control efficiency of 99%)

PM10 in PM:				
Uncontrolled emissions	(From the above emission factors)		64%	
Controlled emissions	(Assumed)		100%	
Number of loads received			15	loads/day
			226	loads/month
Weight of each load	10 tons/load	10 tons/load*2,000 lbs/ton =	20,000	lbs/load
Loading rate	(Applicant's data)		0.50	hr/load
Bin vent control efficiency:			99%	
Bin vent maximum flow rate:			675	cfm
Operating schedule: (For data inputs)				
hrs.day			8	hrs.day
days/wk			5	days/wk
wks/yr			36	wks/yr

Computations:

Process weight:	20,000 lb/load/0.5 hr/load =	40,000	lb/hr
Silo:			
PM emissions:			
Uncontrolled:			
lb/hr	40,000 lb/hr/2000 lb/ton*0.73 lb/ton =	14.6	lb/hr
lb/day			
Max.	14.60 lb/hr*8 hrs/day =	116.80	lb/day
Avg.	116.80 lb/day*226 loads/month/15 loads/day/30 days/month =	58.65956	lb/day
Controlled:			
lb/hr	14.6 lb/hr*(1-0.99) =	0.15	lb/hr
lb/day			
Max.	116.8 lb/day*(1-0.99) =	1.17	lb/day
Avg.	58.7 lb/day*(1-0.99) =	0.59	lb/day
PM10 emissions:			
Uncontrolled:			
lb/hr	15 lb/hr*64% =	9.33	lb/hr
lb/day			
Max.	9.33 lb/hr*8 hrs/day =	74.62	lb/day
Avg.	74.62 lb/day*226 loads/month/15 loads/day/30 days/month =	37.48	lb/day
Controlled:			
lb/hr	0.15 lb/hr*100% =	0.15	lb/hr
lb/day			
Max.	1.17 lb/day*100% =	1.17	lb/day

Avg.	0.59 lb/day*100% =	0.59 lb/day
lb/yr	0.59 lb/day*30 days/month*12 months/yr =	211.174 lb/yr
Transfer point:		
PM emissions:		
Uncontrolled:		
lb/hr	40,000 lb/hr/2,000 lb/ton*0.0088 lb/ton =	0.18 lb/hr
lb/day		
Max.	0.18 lb/hr*8 hrs/day =	1.41 lb/day
Avg.	1.41 lb/day*226 loads/month/15 loads/day/30 days/month =	0.71 lb/day
Controlled:		
lb/hr	0.18 lb/hr*(1-0.99) =	0.002 lb/hr
lb/day		
Max.	1.4 lb/day*(1-0.99) =	0.01 lb/day
Avg.	0.7 lb/day*(1-0.99) =	0.01 lb/day
PM10 emissions:		
Uncontrolled:		
lb/hr	15 lb/hr*64% =	0.11 lb/hr
lb/day		
Max.	0.11 lb/hr*8 hrs/day =	0.90 lb/day
Avg.	0.90 lb/day*226 loads/month/15 loads/day/30 days/month =	0.45 lb/day
Controlled:		
lb/hr	0.002 lb/hr*100% =	0.002 lb/hr
lb/day		
Max.	0.01 lb/day*100% =	0.01 lb/day
Avg.	0.01 lb/day*100% =	0.01 lb/day
lb/yr	0.01 lb/day*30 days/month*12 months/yr =	2.546 lb/yr
Combined emissions:		
PM emissions:		
Uncontrolled:		
lb/hr	(14.60+0.18) lb/hr =	14.78 lb/hr
lb/day		
Max.	(116.80+1.41) lb/day =	118.21 lb/day
Avg.	(58.66+0.71) lb/day =	59.37 lb/day
Controlled:		
lb/hr	(0.15+0.002) lb/hr =	0.15 lb/hr
lb/day		
Max.	(1.17+0.01) lb/day =	1.18 lb/day
Avg.	(0.59+0.01) lb/day =	0.59 lb/day
PM10 emissions:		
Uncontrolled:		
lb/hr	(9.33+0.11) lb/hr =	9.44 lb/hr
lb/day		
Max.	(74.62+0.90) lb/day =	75.52 lb/day
Avg.	(37.48+0.45) lb/day =	37.93 lb/day
Controlled:		
lb/hr	(0.15+0.00) lb/hr =	0.15 lb/hr
lb/day		
Max.	(1.17+0.01) lb/day =	1.18 lb/day
Avg.	(0.59+0.01) lb/day =	0.59 lb/day

lb/yr (211.17+2.55) lb/yr = 213.72 lb/yr

	PM	PM10
lb/hr		
Uncontrolled	14.78	9.44
Controlled	0.15	0.15
lb/day- 30 day		
Uncontrolled	59.37	37.93
Controlled	0.594	0.59
lb/yr	-	213.72

Grain loading: 0.15 lb/hr*7,000 grains/lb/60 minutes/hr/675 cfm = 0.026 grain/cf
Throughput limit: 10 tons/load*226 loads/month = 2,260 tons/month

Emission impact due to the modification:

PM10, lb/day- 30 days average:

After modification	0.59	lb/day
Before modification	0.29	lb/day
Increase	0.31	lb/day

RULE EVALUATION

Rule 212:

(c) (1): Emissions near a school

The equipment is not located within 1,000 feet from the outer boundary of a school. (The nearest school is 2,640 feet from the facility). This is not a project requiring notification under this paragraph.

(c) (2): On-site emission increases exceeding the daily maximums

The emission increases do not exceed any of the daily maximums specified in subdivision (g) of this rule. This is not a project requiring notification as described in this paragraph.

(c) (3): Emissions of toxic air contaminants

The emission increases are less than the screening levels: MICR is less than 1 in a million. This is not a project requiring notification under this paragraph.

(g): Emission increases exceeding the daily maximums

The emission increases do not exceed any of the daily maximums specified in subdivision (g) of this rule. This is not a project requiring notification as described in this paragraph.

Rule 401:

Based on experience with this type of equipment, compliance with this rule is expected.

Rule 402:

Similar equipment at this facility has operated in compliance with this rule. No nuisance complaints are expected.

Rule 404:

	Concentration, gr/cf		
Flow rate, cfm	Rule 404 Limit	Calculated	Compliance
675	0.196	0.026	Yes

Rule 405:

	Emission Rate, lb/hr		
Process Weight, lb/hr	Rule 405 Limit	Calculated	Compliance
40,000	13.80	0.15	Yes

Regulation XIII:

BACT:

The baghouse is BACT for the added hopper

Modeling:

The emissions are less than the amounts in Table A-1 of Rule 1303. No further analysis is required. Complies.

Offsets:

See attachment

DISCUSSIONS

An interlock requiring the blower to operate is needed when the screw conveyor is operated.

Based on information submitted with the application and the above evaluation, it is determined that the equipment operates in compliance with all the applicable rules and regulations of the District.

APPLICATION NO. 527122:

Issue PC/PO subject to the permit conditions as specified in Section D.

APPLICATION NO. 529029:

Issue PC/PO subject to the permit conditions as specified in Section D.

Previous Emissions

Permit: E2094B

Given:

Operating Data: (Applicant's data)

Lime deliveries operating days:

From	To	lbs	# operating days
9/1/09	8/31/10	6,340,140	157
9/1/10	8/30/11	9,920,740	257

Unloading to silo (pneumatic)[(1)]: (Assumed as cement)

Uncontrolled PM 0.73 lb/ton

PM control efficiency: 99%

[(1)]Data from Table 11.12-2, AP-2 Section 11.12, Concrete Batching, 6/06

Computations:

Lime deliveries:

Periods	From	To		
1	9/1/09	8/31/10	6,340,140 lb/2,000 lb/ton =	3,170 tons
2	9/1/10	8/30/11	9,920,740 lb/2,000 lb/ton =	4,960 tons

Because the silo capacity (270 tons) is small compared to the diliveries of each period (8.5% of period 1 deliveries and 5.4% of period 2 deliveries), we can use the delivery amounts as throughputs without causing a significant error.

Periods	From	To	Throughputs tons	# operating days
1	9/1/09	8/31/10	3,170	157
2	9/1/10	8/30/11	4,960	257

Uncontrolled PM emission factors: 0.73 lb/ton*2 = 1.46 lb/ton

Assumption: Prior to modification, pneumatic loading & unloading = 2 times unloading

PM10 factor for controlled emissions 100%

Computations:

Controlled PM emission factor: 1.46 lb/ton*(1-0.99) = 0.01 lb/ton

Controlled PM10 emission factor: 0.01 lb/ton*100% = 0.01 lb/ton

Daily average PM10 emissions:

Period 1: 3,170 tons*0.01 lb/ton/157 days = 0.29 lb/day

Period 2: 4,960 tons*0.01 lb/ton/257 days = 0.28 lb/day

Two-year average: (0.29+0.28) lb/day/2 = 0.29 lb/day

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Page	1 of 4
	A/N	526434
ENGINEERING & COMPLIANCE	Processed By	KH
	Checked By	DR
APPLICATION PROCESSING AND CALCULATIONS	Date	10/5/11

Applicant's Name: TAMCO

Mailing Address: 12459-B Arrow Route
Rancho Cucamonga, CA 91739

Equipment Location: Same

Equipment Description:

APPLICATION NO. 526434:

CARBON STORAGE AND INJECTION SYSTEM CONSISTING OF:

1. CARBON STORAGE TANK, 1,400 CUBIC FEET CAPACITY, WITH ONE PNEUMATIC CONVEYOR, 50 HP.
2. CARBON SILO, 2,250 CUBIC FEET CAPACITY.
3. ONE INCLINED SCREW CONVEYOR, 20 HP.
4. ONE TRANSFER SCREW CONVEYOR, 20 HP.
5. TWO CARBON INJECTION UNITS, COMPRESSED AIR OPERATED.
6. FILTER VENT, DIVERSIFIED STORAGE SYSTEMS MODEL AIRMAX 225, WITH 16 FILTER BAGS, EACH 0' - 8"DIA. x 8' - 0"L., WITH 225 SQ. FT. TOTAL FILTERING AREA, AND A PNEUMATIC SHAKER, VENTING ONE CARBON STORAGE TANK, ONE CARBON SILO AND TWO CARBON INJECTION UNITS.

HISTORY:

Application received on: 8/16/11

Equipment installed: Yes

Compliance records: No Notice of Violation or Notice to Comply has been issued in the last two years.

The application was filed for permit to operate the carbon storage and injection system which was installed and operated without the benefit of a permit to construct.

PROCESS DESCRIPTION

Carbon or carbon sand (it is called as such because it looks like sand) is loading into the carbon storage tank from transport trucks by a pneumatic conveyor. The carbon is transferred into the carbon silo with the same pneumatic conveyor. From the carbon silo, it is transferred to the carbon injection units by screw conveyors. Carbon from the carbon injection units is injected into the electric arc furnace by compressed air. Carbon storage tank, carbon silo and carbon injection units vent to the filter vent on top of the carbon storage tank for PM emission control.

CALCULATIONS

Assumptions:

Truck unloading, transfer to the carbon silo and conveyor transfer do not occur at the same time (Only one pneumatic conveyor for both operations).

Emissions from carbon sand to elevated silos are the same as those from sand and aggregate.

Emissions from conveyor transfer points are the same as those from crushed stone conveyor transfer points. For the first screw conveyor, the throughput is 100% of the total throughput, and for the second screw conveyor, the throughput is 50% of the total throughput (50% has gone through the first carbon injection unit). For calculation purpose, we will consider 1.5 points at the total 100% throughput (the venting to the control occurs when the injection vent valve is open).

Emissions from the carbon injection units (after injection when the injection vent valve is open) are small compared to those from carbon storage tank, carbon silo, and conveyors. They will be considered as being included in the transfer point emissions.

Given:

PM emission factor:

Sand and aggregate transfer to elevated bin[(1)]: 0.029 lb/ton

[(1)]Data from Table 11.12-2, AP-42 Section 11.12, Concrete Batching, 10/86

Crushed stone conveyor transfer point[(2)]:			0.003	lb/ton
[(2)]Data from Table 11.19.2-2, AP-42 Section 11.19, Crushed Stone Processing, 8/04				
Maximum nickel content in carbon			600	ppm
			0.06%	wt
PM10 in PM:				
Uncontrolled emissions			50%	
Controlled emissions			100%	
Number of loads received			10	loads/day
			141	loads/month
Weight of each load	10 tons/load	10 tons/load*2,000 lbs/ton =	20,000	lbs/load
Loading time	(Applicant's data)		0.50	hr/load
Bin vent control efficiency:			99%	
Truck delivery flow rate:			675	scfm
Operating schedule: (For data inputs)				
hrs.day			5	hrs.day
days/wk			3	days/wk
wks/yr			52	wks/yr
Computations:				
Process weight:		20,000 lb/load/0.5 hr/load =	40,000	lb/hr
Emission factors:				
Truck unloading & transfer from carbon storage tank to carbon silo:				
Uncontrol PM			0.029	lb/ton
Conveyor transfer:				
Each point		0.003 lb/ton		
Total 1.5 points:		0.003 lb/ton-point*1.5 points =	0.005	lb/ton
Carbon sand storage system uncontrolled PM emission factor:		(0.029+0.0045) lb/ton =	0.034	lb/ton
PM emissions:				
Uncontrolled:				
lb/hr		40,000 lb/hr/2000 lb/ton*0.0335 lb/ton =	0.67	lb/hr
lb/day				
Max.		0.67 lb/hr*5 hrs/day =	3.35	lb/day
Avg.		3.35 lb/day*141 loads/month/10 loads/day/30 days/month =	1.57	lb/day
Controlled:				
lb/hr		0.67 lb/hr*(1-0.99) =	0.007	lb/hr
lb/day				
Max.		3.35 lb/day*(1-0.99) =	0.03	lb/day
Avg.		1.57 lb/day*(1-0.99) =	0.02	lb/day
PM10 emissions:				
Uncontrolled:				
lb/hr		0.67 lb/hr*50%=	0.34	lb/hr
lb/day				
Max.		3.35 lb/day*50%=	1.68	lb/day
Avg.		1.68 lb/day*141 loads/month/10 loads/day/30 days/month =	0.79	lb/day
Controlled:				
lb/hr		0.01 lb/hr*100% =	0.007	lb/hr
lb/day				
Max.		0.03 lb/day*100% =	0.03	lb/day
Avg.		0.02 lb/day*100% =	0.02	lb/day
lb/yr		0.02 lb/dqy*30 days/month*12 months/yr =	5.67	lb/yr

Nickel emissions:

Uncontrolled emissions

lb/hr	0.7 lb/hr*0.06% =	0.0004 lb/hr
lb/day		
Max.	0.0004 lb/hr*5 hrs/day =	0.002 lb/day
Avg.	0.002 lb/day*141 loads/month/10 loads/day/30 days/month =	0.001 lb/day

Controlled:

lb/hr	0.0004 lb/hr*(1-0.99) =	0.000004 lb/hr
lb/day		
Max.	0.002 lb/day*(1-0.99) =	0.00002 lb/day
Avg.	0.001 lb/day*(1-0.99) =	0.00001 lb/day
lb/yr	0.00001 lb/day*30 days/month*12 months/yr =	0.003 lb/yr

	PM	PM10	Nickel
lb/hr			
Uncontrolled	0.67	0.34	0.0004
Controlled	0.007	0.007	0.000004
lb/day- 30 day			
Uncontrolled	1.57	0.79	0.0009
Controlled	0.02	0.02	0.00001
lb/yr	-	5.67	0.003

Grain loading:	0.007 lb/hr*7,000 grains/lb/60 minutes/hr/675 scfm =	0.001	grain/scf
Throughput limit:	10 tons/load*141 loads/month =	1,410	tons/month

RULE EVALUATION

Rule 212:

(c) (1): Emissions near a school

The equipment is not located within 1,000 feet from the outer boundary of a school. (The nearest school is 2,640 feet from the facility). This is not a project requiring notification under this paragraph.

(c) (2): On-site emission increases exceeding the daily maximums

The emission increases do not exceed any of the daily maximums specified in subdivision (g) of this rule. This is not a project requiring notification as described in this paragraph.

(c) (3): Emissions of toxic air contaminants

The emission increases are less than the screening levels: MICR is less than 1 in a million. This is not a project requiring notification under this paragraph.

(g): Emission increases exceeding the daily maximums

The emission increases do not exceed any of the daily maximums specified in subdivision (g) of this rule. This is not a project requiring notification as described in this paragraph.

Rule 401:

Based on experience with this type of equipment, compliance with this rule is expected.

Rule 402:

Similar equipment at this facility has operated in compliance with this rule. No nuisance complaints are expected.

Rule 404:

	Concentration, gr/cf		
Flow rate, cfm	Rule Limit	Calculated	Compliance
675	0.196	0.001	Yes

Rule 405:

	Emission Rate, lb/hr		
Process Weight, lb/hr	Rule Limit	Calculated	Compliance
40,000	13.80	0.007	Yes

Regulation XIII:

BACT:

The filter vent is BACT for the silos.

Modeling:

The emissions are less than the amounts in Table A-1 of Rule 1303. No further analysis is required. Complies.

Offsets:

See attachment

Rule 1401:

MICR is less than 1 in a million and HIs are less than 1. Complies.

DISCUSSIONS

Based on information submitted with the application and the above evaluation, it is determined that the equipment operates in compliance with all the applicable rules and regulations of the District.

APPLICATION NO. 526434:

Issue permit subject to the permit conditions as specified in Section D.

Table – 1A (continued)
Screening Emission Levels

Original Listing			Toxic Air Contaminant	CAS NO	Screening Emission Level					
					25 Meter		50 Meter		100 Meter	
Cancer	Chronic	Acute			Cancer / Chronic (lbs/yr)	Acute (lbs/hr)	Cancer / Chronic (lbs/yr)	Acute (lbs/hr)	Cancer / Chronic (lbs/yr)	Acute (lbs/hr)
	05/03/02		Maleic anhydride	108-31-6	2.31E+01		6.07E+01		1.81E+02	
	08/18/00		Manganese and manganese compounds	7439-96-5	6.61E+00		1.73E+01		5.17E+01	
	08/18/00	08/13/99	Mercury and mercury compounds (inorganic)	7439-97-6	2.96E-01	9.00E-04	7.76E-01	1.80E-03	2.31E+00	4.82E-03
			Mercuric chloride	7487-94-7	2.96E-01	9.00E-04	7.76E-01	1.80E-03	2.31E+00	4.82E-03
			Methyl mercury	593-74-8	3.31E+01		8.67E+01		2.58E+02	
	08/18/00	08/13/99	Methanol (methyl alcohol)	67-56-1	1.32E+05	1.40E+01	3.47E+05	2.80E+01	1.03E+06	7.50E+01
	08/18/00	08/13/99	Methyl bromide (Bromomethane)	74-83-9	1.65E+02	1.95E+00	4.33E+02	3.90E+00	1.29E+03	1.04E+01
	08/18/00	08/13/99	Methyl chloroform (1,1,1 Trichloroethane (TCA))	71-55-6	3.31E+04	3.40E+01	8.67E+04	6.80E+01	2.58E+05	1.82E+02
		08/13/99	Methyl ethyl ketone	78-93-3		6.50E+00		1.30E+01		3.48E+01
			Methyl methacrylate*							
	05/03/02		Methyl isocyanate	624-83-9	3.31E+01		8.67E+01		2.58E+02	
01/08/99			Methylene bis(2-chloroaniline), 4,4- (MOCA)	101-14-4	7.61E-02		2.00E-01		5.95E-01	
06/01/90	08/18/00	08/13/99	Methylene chloride(Dichloromethane)	75-09-2	3.26E+01	7.00E+00	8.55E+01	1.40E+01	2.55E+02	3.75E+01
09/08/98	05/03/02		Methylene dianiline, 4,4'- (and its dichloride)	101-77-9	1.21E-02		3.17E-02		9.45E-02	
	06/15/01		Methylene phenyl diisocyanate	101-68-8	2.31E+01		6.07E+01		1.81E+02	
05/02/03	08/18/00		Methyl tertiary-butyl ether	1634-04-4	6.34E+01		1.66E+02		4.96E+02	
01/08/99			Michler's ketone	90-94-8	1.33E-01		3.48E-01		1.04E+00	
			Mineral fibers(other than man-made)*	1135						
03/12/99	08/18/00	08/13/99	Nickel & nickel compounds (except nickel oxide):	7440-02-0	1.25E-01	3.00E-03	3.29E-01	6.00E-03	9.81E-01	1.61E-02
03/12/99	08/18/00	08/13/99	Nickel acetate	373-02-4	1.25E-01	3.00E-03	3.29E-01	6.00E-03	9.81E-01	1.61E-02
03/12/99	08/18/00	08/13/99	Nickel carbonate	3333-67-3	1.25E-01	3.00E-03	3.29E-01	6.00E-03	9.81E-01	1.61E-02
03/12/99	08/18/00	08/13/99	Nickel carbonyl	1330-20-7	1.25E-01	3.00E-03	3.29E-01	6.00E-03	9.81E-01	1.61E-02
12/99	08/18/00	08/13/99	Nickel hydroxide	12054-48-7	1.25E-01	3.00E-03	3.29E-01	6.00E-03	9.81E-01	1.61E-02
03/12/99	08/18/00	08/13/99	Nickelocene	1271-28-9	1.25E-01	3.00E-03	3.29E-01	6.00E-03	9.81E-01	1.61E-02
03/12/99	08/18/00	08/13/99	Nickel oxide	1313-99-1	1.25E-01	3.00E-03	3.29E-01	6.00E-03	9.81E-01	1.61E-02
12/07/90	08/18/00	08/13/99	Nickel refinery dust (from the pyrometallurgical process)	1146	1.25E-01	3.00E-03	3.29E-01	6.00E-03	9.81E-01	1.61E-02
12/07/90	08/18/00	08/13/99	Nickel subsulfide	120-35-72-2	1.25E-01	3.00E-03	3.29E-01	6.00E-03	9.81E-01	1.61E-02
		08/13/99	Nitric acid	7697-37-2		4.30E-02		8.59E-02		2.30E-01
			Nitrobenzene*							
			Nitropropane, 2-*							
12/07/90			Nitroso- compounds:							
12/07/90			Nitroso-n-ethylurea, n-	759-73-9	4.23E-03		1.11E-02		3.30E-02	
12/07/90			Nitroso-n-methylurea, n-	684-93-5	9.59E-04		2.52E-03		7.50E-03	
12/07/90			Nitrosodi-n-butylamine, n-	924-16-3	1.04E-02		2.72E-02		8.11E-02	
12/07/90			Nitrosodiethylamine, n-	55-18-5	3.17E-03		8.32E-03		2.48E-02	
12/07/90			Nitrosodimethylamine, n-	62-75-9	7.14E-03		1.87E-02		5.58E-02	
12/07/90			Nitrosodiphenylamine, n-	86-30-6	1.27E+01		3.33E+01		9.91E+01	
09/08/98			Nitrosodiphenylamine, p-	156-10-5	5.19E+00		1.36E+01		4.06E+01	
09/08/98			Nitrosodi-n-propylamine, n-	621-64-7	1.63E-02		4.28E-02		1.27E-01	
09/08/98			Nitrosomethylethylamine, n-	10595-95-6	5.19E-03		1.36E-02		4.06E-02	

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Page	1 of 9
	A/N	528834, 35 & 39
ENGINEERING & COMPLIANCE	Processed By	KH/DR
	Checked By	DR
APPLICATION PROCESSING AND CALCULATIONS	Date	3/6/12

Applicant's Name: TAMCO

Mailing Address: 12459-B Arrow Route
Rancho Cucamonga, CA 91739

Equipment Location: Same

Equipment Description:

APPLICATION NO. 528834: Previous 274588 D3 Mod P/O
ALTERATION TO LADLE HEATER PERMIT TO OPERATE D66192 (A/N 274588), DEVICE D3, BY:
THE ADDITION OF:
- ONE NORTH AMERICAN MODEL 4575-12 HIRAM 16.4 MM BTU/HR BURNER
AND THE REMOVAL OF:
- ONE 5 MM BTU/HR BURNER

APPLICATION NO. 528835: Previous 310965 D2 Mod P/O
ALTERATION TO LADLE HEATER PERMIT TO OPERATE F3191 (A/N 310965), DEVICE D2, BY:
THE ADDITION OF:
- ONE NORTH AMERICAN MODEL 4575-12 HIRAM 16.4 MM BTU/HR BURNER
AND THE REMOVAL OF:
- ONE 5 MM BTU/HR BURNER

APPLICATION NO. 528839: Previous 310966 D1 Mod P/O
ALTERATION TO LADLE HEATER PERMIT TO OPERATE F3193 (A/N 310966), DEVICE D1, BY:
THE ADDITION OF:
- ONE NORTH AMERICAN MODEL 4575-10-B HIRAM 11.9 MM BTU/HR BURNER
AND THE REMOVAL OF:
- ONE 5 MM BTU/HR BURNER

HISTORY:

Application(s) received on: 10/28/11
Equipment installed: Yes
Violations recorded: No Notice of Violation or Notice to Comply has been issued in the last two years.

The applications was filed to modify the equipment by replacing the existing burners with new, higher rating, and low NOx burners. The modification was done without the benefit of a Permit to Construct.

Based on our records, the three heaters were never subject to NSR before. Application 528839 is for modification of Device D1 with previous A/N 310966 that has a previous A/N 00446B. Application 528835 is for modification of Device D2 with previous A/N 310965 that has a A/N 00447B. Application 528834 is for modification of Device D3 with previous A/N 274588.

PROCESS DESCRIPTION

The equipment is for ladle heating.
It is fueled with natural gas.

CALCULATIONS:

Because the three heaters were never subject to NSR before, two-year averaged emissions will be used for emissions prior to modification.

APPLICATION NO. 528834: D3

Given:

Maximum Heat Input Rating, MM BTU/hr:	16.4	MM BTU/hr
Fuel:	Natural gas	
Equipment Operating Load:	100%	
Conversion Factors, ppm @ 3% O_2 to lb/MM BTU		
NOx	0.00121	[lb/MM BTU]/ppm
CO	0.00074	[lb/MM BTU]/ppm
Operating Schedule:		
hrs/day	24	hrs/day
days/wk	7	days/wk
weeks/yr	52	wks/yr
NOx Concentration, ppm @ 3% O_2 (dry)	60	
CO Concentration, ppm @ 3% O_2 (dry)		
Emission Factors, lb/MM BTU: (Default)		
ROG:	0.0067	
SOx :	0.0008	
CO:	0.0333	
PM:	0.0071	
PM_{10} in total PM:	100%	
HHV of natural gas:	1,050	BTU/ft^3
CO limit?	No	

Computations:

ROG:

lb/hr	0.0067 lb/MM BTU*16.4 MM BTU =	0.11 lb/hr
lb/day Max.	0.11 lb/hr*24 hrs/day =	2.62 lb/day Max.
lb/day, Avg	0.11 lb/hr*24 hrs/day*1.00 (Load factor) =	2.62 lb/day, Avg
lb/yr	2.62 lb/day*7 days/wk*52 wks/yr =	955.14 lb/yr

NOx:

lb/MM BTU	0.00121 lb/MM BTU-ppm*60 ppm =	0.0728 lb/MM BTU
lb/hr	0.0728 lb/MM BTU*16.4 MM BTU/hr =	1.19 lb/hr
lb/day Max.	1.19 lb/hr*24 hrs/day =	28.67 lb/day Max.
lb/day, Avg	1.19 lb/hr*24 hrs/day*1.00 (Load factor) =	28.67 lb/day, Avg
lb/yr	28.67 lb/day*7 days/wk*52 wks/yr =	10,436.29 lb/yr

SOx:

lb/hr	0.0008 lb/MM BTU*16.4 MM BTU =	0.013 lb/hr
lb/day Max.	0.013 lb/hr*24 hrs/day =	0.31 lb/day Max.
lb/day, Avg	0.013 lb/hr*24 hrs/day*1.00 (Load factor) =	0.31 lb/day, Avg
lb/yr	0.31 lb/day*7 days/wk*52 wks/yr =	113.25 lb/yr

CO:

lb/hr	0.0333 lb/MM BTU*16.4 MM BTU =	0.55 lb/hr
lb/day Max.	0.55 lb/hr*24 hrs/day =	13.12 lb/day Max.
lb/day, Avg	0.55 lb/hr*24 hrs/day*1.00 (Load factor) =	13.12 lb/day, Avg
lb/yr	13.12 lb/day*7 days/wk*52 wks/yr =	4,775.68 lb/yr

PM/PM10

lb/hr	0.0071 lb/MM BTU*16.4 MM BTU =	0.12 lb/hr
lb/day Max.	0.12 lb/hr*24 hrs/day =	2.81 lb/day Max.
lb/day, Avg	0.12 lb/hr*24 hrs/day*1.00 (Load factor) =	2.81 lb/day, Avg
lb/yr	2.81 lb/day*7 days/wk*52 wks/yr =	1023.36 lb/yr

AN 528834: D3

	ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
Factor (lb/MM BTU)	0.0067	0.0728	0.0008	0.0333	0.0071
lb/hr	0.11	1.19	0.013	0.55	0.12
lb/day					
Max.	2.62	28.67	0.31	13.12	2.81
Avg.	2.62	28.67	0.31	13.12	2.81
lb/yr	955.14	10,436.29	113.25	4,775.68	1,023.36

Emission increases, lb/day:

	ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
A/N 528834	2.62	28.67	0.31	13.12	2.81
A/N 274588	0.42	3.93	0.04	2.12	0.45
Increases	2.20	24.74	0.27	11.00	2.36

Emission increases, lb/hr (For modeling analysis)

	ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
A/N 528834	0.11	1.19	0.01	0.55	0.12
A/N 274588	0.03	0.62	0.00	0.17	0.04
Increases	0.08	0.58	0.01	0.38	0.08

APPLICATION NO. 528835: D2

Given:

Maximum Heat Input Rating, MM BTU/hr: 16.4 MM BTU/hr

Fuel: Natural gas

Equipment Operating Load: 100%

Conversion Factors, ppm @ 3% O_2 to lb/MM BTU

NOx 0.00121 [lb/MM BTU]/ppm

CO 0.00074 [lb/MM BTU]/ppm

Operating Schedule:

hrs/day 24 hrs/day

days/wk 7 days/wk

weeks/yr 52 wks/yr

NOx Concentration, ppm @ 3% O_2 (dry) 60

CO Concentration, ppm @ 3% O_2 (dry)

Emission Factors, lb/MM BTU: (Default)

ROG: 0.0067

SOx : 0.0008

CO: 0.0333

PM: 0.0071

PM_{10} in total PM: 100%

HHV of natural gas: 1,050 BTU/ft^3

CO limit? No

Computations:

ROG:

lb/hr	0.0067 lb/MM BTU*16.4 MM BTU =	0.11 lb/hr
lb/day Max.	0.11 lb/hr*24 hrs/day =	2.62 lb/day Max.
lb/day, Avg	0.11 lb/hr*24 hrs/day*1.00 (Load factor) =	2.62 lb/day, Avg
lb/yr	2.62 lb/day*7 days/wk*52 wks/yr =	955.14 lb/yr

NOx:

lb/MM BTU	0.00121 lb/MM BTU-ppm*60 ppm =	0.0728 lb/MM BTU
lb/hr	0.0728 lb/MM BTU*16.4 MM BTU/hr =	1.19 lb/hr
lb/day Max.	1.19 lb/hr*24 hrs/day =	28.67 lb/day Max.

lb/day, Avg	1.19 lb/hr*24 hrs/day*1.00 (Load factor) =	28.67 lb/day, Avg
lb/yr	28.67 lb/day*7 days/wk*52 wks/yr =	10436.29 lb/yr

SOx:

lb/hr	0.0008 lb/MM BTU*16.4 MM BTU =	0.013 lb/hr
lb/day Max.	0.013 lb/hr*24 hrs/day =	0.31 lb/day Max.
lb/day, Avg	0.013 lb/hr*24 hrs/day*1.00 (Load factor) =	0.31 lb/day, Avg
lb/yr	0.31 lb/day*7 days/wk*52 wks/yr =	113.25 lb/yr

CO:

lb/hr	0.0333 lb/MM BTU*16.4 MM BTU =	0.55 lb/hr
lb/day Max.	0.55 lb/hr*24 hrs/day =	13.12 lb/day Max.
lb/day, Avg	0.55 lb/hr*24 hrs/day*1.00 (Load factor) =	13.12 lb/day, Avg
lb/yr	13.12 lb/day*7 days/wk*52 wks/yr =	4775.68 lb/yr

PM/PM10

lb/hr	0.0071 lb/MM BTU*16.4 MM BTU =	0.12 lb/hr
lb/day Max.	0.12 lb/hr*24 hrs/day =	2.81 lb/day Max.
lb/day, Avg	0.12 lb/hr*24 hrs/day*1.00 (Load factor) =	2.81 lb/day, Avg
lb/yr	2.81 lb/day*7 days/wk*52 wks/yr =	1023.36 lb/yr

AN 528835: D2

	ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
Factor (lb/MM BTU)	0.0067	0.0728	0.0008	0.0333	0.0071
lb/hr	0.11	1.19	0.013	0.55	0.12
lb/day					
Max.	2.62	28.67	0.31	13.12	2.81
Avg.	2.62	28.67	0.31	13.12	2.81
lb/yr	955.14	10,436.29	113.25	4,775.68	1,023.36

Emission increases, lb/day:

	ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
A/N 528835	2.62	28.67	0.31	13.12	2.81
A/N 310965	0.05	0.85	0.004	0.23	0.05
Increases	2.58	27.82	0.31	12.89	2.76

Emission increases, lb/hr (For modeling analysis)

	ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
A/N 528835	0.11	1.19	0.01	0.55	0.12
A/N 310965	0.03	0.62	0.004	0.17	0.04
Increases	0.08	0.58	0.01	0.38	0.08

APPLICATION NO. 528839: D1

Given:

Maximum Heat Input Rating, MM BTU/hr: 11.9 MM BTU/hr

Fuel: Natural gas

Equipment Operating Load: 100%

Conversion Factors, ppm @ 3% O_2 to lb/MM BTU

NOx 0.00121 [lb/MM BTU]/ppm

CO 0.00074 [lb/MM BTU]/ppm

Operating Schedule:

hrs/day 24 hrs/day

days/wk 7 days/wk

weeks/yr 52 wks/yr

NOx Concentration, ppm @ 3% O_2 (dry) 60

CO Concentration, ppm @ 3% O_2 (dry)

Emission Factors, lb/MM BTU: (Default)

ROG: 0.0067

SOx : 0.0008

CO: 0.0333

PM: 0.0071

PM_{10} in total PM: 100%

HHV of natural gas: 1,050 BTU/ft^3

CO limit? No

Computations:

ROG:

lb/hr	0.0067 lb/MM BTU*11.9 MM BTU =	0.08 lb/hr
lb/day Max.	0.08 lb/hr*24 hrs/day =	1.90 lb/day Max.
lb/day, Avg	0.08 lb/hr*24 hrs/day*1.00 (Load factor) =	1.90 lb/day, Avg
lb/yr	1.90 lb/day*7 days/wk*52 wks/yr =	693.06 lb/yr

NOx:

lb/MM BTU	0.00121 lb/MM BTU-ppm*60 ppm =	0.0728 lb/MM BTU
lb/hr	0.0728 lb/MM BTU*11.9 MM BTU/hr =	0.87 lb/hr
lb/day Max.	0.87 lb/hr*24 hrs/day =	20.80 lb/day Max.
lb/day, Avg	0.87 lb/hr*24 hrs/day*1.00 (Load factor) =	20.80 lb/day, Avg
lb/yr	20.80 lb/day*7 days/wk*52 wks/yr =	7572.67 lb/yr

SOx:

lb/hr	0.0008 lb/MM BTU*11.9 MM BTU =	0.009 lb/hr
lb/day Max.	0.009 lb/hr*24 hrs/day =	0.23 lb/day Max.
lb/day, Avg	0.009 lb/hr*24 hrs/day*1.00 (Load factor) =	0.23 lb/day, Avg

lb/yr 0.23 lb/day*7 days/wk*52 wks/yr = 82.18 lb/yr

CO:

lb/hr 0.0333 lb/MM BTU*11.9 MM BTU = 0.40 lb/hr

lb/day Max. 0.40 lb/hr*24 hrs/day = 9.52 lb/day Max.

lb/day, Avg 0.40 lb/hr*24 hrs/day*1.00 (Load factor) = 9.52 lb/day, Avg

lb/yr 9.52 lb/day*7 days/wk*52 wks/yr = 3465.28 lb/yr

PM/PM10

lb/hr 0.0071 lb/MM BTU*11.9 MM BTU = 0.09 lb/hr

lb/day Max. 0.09 lb/hr*24 hrs/day = 2.04 lb/day Max.

lb/day, Avg 0.09 lb/hr*24 hrs/day*1.00 (Load factor) = 2.04 lb/day, Avg

lb/yr 2.04 lb/day*7 days/wk*52 wks/yr = 742.56 lb/yr

A/N 528839: D1

	ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
Factor (lb/MM BTU)	0.0067	0.0728	0.0008	0.0333	0.0071
lb/hr	0.08	0.87	0.009	0.40	0.09
lb/day					
Max.	1.90	20.80	0.23	9.52	2.04
Avg.	1.90	20.80	0.23	9.52	2.04
lb/yr	693.06	7,572.67	82.18	3,465.28	742.56

Emission increases, lb/day:

	ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
A/N 528839	1.90	20.80	0.23	9.52	2.04
A/N 310966	0.16	3.00	0.01	0.81	0.17
Increases	1.74	17.81	0.21	8.71	1.87

Emission increases, lb/hr (For modeling analysis)

	ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
A/N 528839	0.08	0.87	0.01	0.40	0.09
A/N 310966	0.03	0.62	0.004	0.17	0.04
Increases	0.05	0.25	0.01	0.23	0.05

Emission Increases, lb/day

	ROG	*NOx*	*SOx*	*CO*	*PM10*
A/N 528834	2.20	24.74	0.27	11.00	2.36
A/N 528835	2.58	27.82	0.31	12.89	2.76
A/N 528839	1.74	17.81	0.21	8.71	1.87
Total	6.52	70.37	0.79	32.61	6.99

Project ERC requirements
See attachment

RTCs Requirements:

A/Ns	NOx, lbs
528834	10,436
528835	10,436
528839	7,573
Total	28,445

RULES EVALUATION

Rule 212:

(c) (1): Emissions near a school

The equipment is not located within 1,000 feet from the outer boundary of a school. (The nearest school is 7,392 feet from the facility). This is not a project requiring notification under this paragraph.

(c) (2): On-site emission increases exceeding the daily maximums

Source is defined in RXIII as a permit unit or device. Each ladle heater has emissions increases less than the threshold. This is not a project requiring notification under this paragraph.

(c) (3): Emissions of toxic air contaminants

Risk is less than one in one million. This is not a project requiring notification under this paragraph.

Rule 401:

No visible emissions are expected from this type of equipment. Compliance is expected.

Rule 402:

Nuisance problems due to the operation of this equipment are unlikely.

Rule 404:

Combustion of natural gas does not generate a significant amount of PM emission. Compliance is expected

Rules 407/409:

This equipment is fired with natural gas. Compliance is expected.

Rule 1147:

Because the equipment is located at a NOx RECLAIM facility, it is exempted per Rule 1147 (g) (1) (B).

Rule 1401:

MICR is less than 1 in a million and HI is less than 1. Complies.

Rule 1703 - PSD Analysis:

This is an existing CO major facility. The modification, however, does not cause a significant emission increase of CO. Therefore, except for BACT, all other provisions of the rule are not applicable. Natural gas is considered BACT for the heaters.

New Source Review

BACT:

Currently, there is no listed BACT for ladle heaters. Even though the equipment is exempt from Rule 1147, the rule limit, 60 ppm NOx @ 3% O_2 (operating temperature > 1,200 F) could be used as BACT.

	ppm @ 3% O_2		
	Limit	Expected	Compliance
NOx	60	60	Yes

RTCs:

NOx RTCs requirements: 28,445 lb/yr

	From	To		
Facility NOx RTC Holding	7/1/11	6/30/12	147,455	lbs
	7/1/12	6/30/13	147,455	lbs

The facility holds enough NOx RTCs for the operation of the equipment modification.

Modeling:

The emission increase is less than the amount in Table A-1 of Rule 2005. No further analysis is required. Complies.

Offsets:

Facility PTE is over the offset threshold for ROG and PM10. Offsets are required. See attachment

Title V

Nox starting allocation + non tradable = 128,250 #

Nox increase is below this level, thus a deminimus significant project

Non RECLAIM pollutants are below the de minumus significant threshold

45 day EPA notice is required

RECOMMENDATIONS

Hold pending ROG & PM10 ERCs.

Emissions Prior to Modification
D3

A/N 274588

Given:

Fuel: Natural gas

Operating Data/Factors: From	To	Fuel Consumed ft^3	# days
Jan-98	Dec-98	24,824,700	308
Jan-99	Dec-99	11,958,900	297

Emission Factors, lb/MM ft^3 (Default):

ROG:	(Default)	7
NOx:	(Facility permit)	65
SOx :	(Default)	0.60
CO:	(Default)	35
PM:	(Default)	7.50

PM_{10} in total PM: 100%

Natural gas HHV: 1,050 BTU/ft^3

Computations:

ROG, lb/day:

Jan-98	Dec-98	7 lb/MM cf*24,824,700 cf*10^-6 MM cf/cf/308 days =	0.56 lb/day
Jan-99	Dec-99	7 lb/MM cf*11,958,900 cf*10^-6 MM cf/cf/297 days =	0.28 lb/day
	Average	(0.56+0.28) lb/day/2 =	0.42 lb/day

NOx:

Jan-98	Dec-98	65 lb/MM cf*24,824,700 cf*10^-6 MM cf/cf/308 days =	5.24 lb/day
Jan-99	Dec-99	65 lb/MM cf*11,958,900 cf*10^-6 MM cf/cf/297 days =	2.62 lb/day
	Average	(5.24+2.62) lb/day/2 =	3.93 lb/day

SOx:

Jan-98	Dec-98	0.6 lb/MM cf*24,824,700 cf*10^-6 MM cf/cf/308 days =	0.05 lb/day
Jan-99	Dec-99	0.6 lb/MM cf*11,958,900 cf*10^-6 MM cf/cf/297 days =	0.02 lb/day
	Average	(0.05+0.02) lb/day/2 =	0.04 lb/day

CO:

Jan-98	Dec-98	35 lb/MM cf*24,824,700 cf*10^-6 MM cf/cf/308 days =	2.82 lb/day
Jan-99	Dec-99	35 lb/MM cf*11,958,900 cf*10^-6 MM cf/cf/297 days =	1.41 lb/day
	Average	(2.82+1.41) lb/day/2 =	2.12 lb/day

PM:

Jan-98	Dec-98	7.5 lb/MM cf*24,824,700 cf*10^-6 MM cf/cf/308 days =	0.60 lb/day
Jan-99	Dec-99	7.5 lb/MM cf*11,958,900 cf*10^-6 MM cf/cf/297 days =	0.30 lb/day
	Average	(0.60+0.30) lb/day/2 =	0.45 lb/day

Summary: D3

lb/day				
ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
0.42	3.93	0.04	2.12	0.45

Emissions Prior to Modification
D2

A/N 310965

Given:
Fuel: Natural gas

Operating Data/Factors:		Fuel Consumed ft^3	# days
From	To		
Jan-98	Dec-98	2,108,710	325
Jan-99	Dec-99	2,016,540	305

Emission Factors, lb/MM ft^3 (Default):

ROG:	7
NOx:	130
SOx :	0.60
CO:	35
PM:	7.50
PM_{10} in total PM:	100%
Natural gas HHV:	1,050 BTU/ft^3

Computations:

ROG, lb/day:

Jan-98	Dec-98	7 lb/MM cf*2,108,710 cf*10^-6 MM cf/cf/325 days =	0.05 lb/day
Jan-99	Dec-99	7 lb/MM cf*2,016,540 cf*10^-6 MM cf/cf/305 days =	0.05 lb/day
	Average	(0.05+0.05) lb/day/2 =	0.05 lb/day

NOx:

Jan-98	Dec-98	130 lb/MM cf*2,108,710 cf*10^-6 MM cf/cf/325 days =	0.84 lb/day
Jan-99	Dec-99	130 lb/MM cf*2,016,540 cf*10^-6 MM cf/cf/305 days =	0.86 lb/day
	Average	(0.84+0.86) lb/day/2 =	0.85 lb/day

SOx:

Jan-98	Dec-98	0.6 lb/MM cf*2,108,710 cf*10^-6 MM cf/cf/325 days =	0.00 lb/day
Jan-99	Dec-99	0.6 lb/MM cf*2,016,540 cf*10^-6 MM cf/cf/305 days =	0.00 lb/day
	Average	(0.00+0.00) lb/day/2 =	0.00 lb/day

CO:

Jan-98	Dec-98	35 lb/MM cf*2,108,710 cf*10^-6 MM cf/cf/325 days =	0.23 lb/day
Jan-99	Dec-99	35 lb/MM cf*2,016,540 cf*10^-6 MM cf/cf/305 days =	0.23 lb/day
	Average	(0.23+0.23) lb/day/2 =	0.23 lb/day

PM:

Jan-98	Dec-98	7.5 lb/MM cf*2,108,710 cf*10^-6 MM cf/cf/325 days =	0.05 lb/day
Jan-99	Dec-99	7.5 lb/MM cf*2,016,540 cf*10^-6 MM cf/cf/305 days =	0.05 lb/day
	Average	(0.05+0.05) lb/day/2 =	0.05 lb/day

Summary: D2

lb/day				
ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
0.05	0.85	0.00	0.23	0.05

Emissions Prior to Modification
D1

A/N 310966

Given:
Fuel: Natural gas

Operating Data/Factors: From	To	Fuel Consumed ft^3	# days
Jan-98	Dec-98	9,246,830	303
Jan-99	Dec-99	5,220,450	335

Emission Factors, lb/MM ft^3 (Default):

ROG:	7
NOx:	130
SOx :	0.60
CO:	35
PM:	7.50
PM_{10} in total PM:	100%
Natural gas HHV:	1,050 BTU/ft^3

Computations:

ROG, lb/day:

Jan-98	Dec-98	7 lb/MM cf*9,246,830 cf*10^-6 MM cf/cf/303 days =	0.21 lb/day
Jan-99	Dec-99	7 lb/MM cf*5,220,450 cf*10^-6 MM cf/cf/335 days =	0.11 lb/day
	Average	(0.21+0.11) lb/day/2 =	0.16 lb/day

NOx:

Jan-98	Dec-98	130 lb/MM cf*9,246,830 cf*10^-6 MM cf/cf/303 days =	3.97 lb/day
Jan-99	Dec-99	130 lb/MM cf*5,220,450 cf*10^-6 MM cf/cf/335 days =	2.03 lb/day
	Average	(3.97+2.03) lb/day/2 =	3.00 lb/day

SOx:

Jan-98	Dec-98	0.6 lb/MM cf*9,246,830 cf*10^-6 MM cf/cf/303 days =	0.02 lb/day
Jan-99	Dec-99	0.6 lb/MM cf*5,220,450 cf*10^-6 MM cf/cf/335 days =	0.01 lb/day
	Average	(0.02+0.01) lb/day/2 =	0.01 lb/day

CO:

Jan-98	Dec-98	35 lb/MM cf*9,246,830 cf*10^-6 MM cf/cf/303 days =	1.07 lb/day
Jan-99	Dec-99	35 lb/MM cf*5,220,450 cf*10^-6 MM cf/cf/335 days =	0.55 lb/day
	Average	(1.07+0.55) lb/day/2 =	0.81 lb/day

PM:

Jan-98	Dec-98	7.5 lb/MM cf*9,246,830 cf*10^-6 MM cf/cf/303 days =	0.23 lb/day
Jan-99	Dec-99	7.5 lb/MM cf*5,220,450 cf*10^-6 MM cf/cf/335 days =	0.12 lb/day
	Average	(0.23+0.12) lb/day/2 =	0.17 lb/day

Summary: D1

lb/day				
ROG	*NOx*	*SOx*	*CO*	*PM/PM10*
0.16	3.00	0.01	0.81	0.17

Maximum Emissions Prior to Modification

D3 A/N 274588
D2 A/N 310965
D1 A/N 310966

Given:

Rating, MM BTU/hr		5	
Equipment load		100%	
Fuel HHV, BTU/ft^3		1050	
Emission Data:	Default		
VOC		7	lb/MM ft^3
NOx		130	lb/MM ft^3
SOx		0.83	lb/MM ft^3
CO		35	lb/MM ft^3
PM		7.5	lb/MM ft^3
PM10 in Total PM		100%	
Operating Schedule:			
hrs/day		24	
days/wk		7	
wks/yr		52	

Computations:

Fuel rate at rating:	5 MM BTU/hr/1050 BTU/ft3 =	0.0047619	MM ft^3/hr
VOC:			
lb/hr	7 lb/MM ft3*0.004762 MM ft3/hr =	0.033	lb/hr
lb/day	0.033 lb/hr*24 hrs/day =	0.8	lb/day
lb/yr	0.80 lb/hr*7 days/wk*52 wks/yr =	291.20	lb/yr
NOx			
lb/hr	130 lb/MM ft3*0.004762 MM ft3/hr =	0.619	lb/hr
lb/day	0.619 lb/hr*24 hrs/day =	14.86	lb/day
lb/yr	14.86 lb/hr*7 days/wk*52 wks/yr =	5408.00	lb/yr
SOx			
lb/hr	0.83 lb/MM ft3*0.004762 MM ft3/hr =	0.004	lb/hr
lb/day	0.004 lb/hr*24 hrs/day =	0.09	lb/day
lb/yr	0.09 lb/hr*7 days/wk*52 wks/yr =	34.53	lb/yr
CO			
lb/hr	35 lb/MM ft3*0.004762 MM ft3/hr =	0.167	lb/hr
lb/day	0.167 lb/hr*24 hrs/day =	4.00	lb/day
lb/yr	4.00 lb/hr*7 days/wk*52 wks/yr =	1456.00	lb/yr
PM/PM10			
lb/hr	7.5 lb/MM ft3*0.004762 MM ft3/hr =	0.036	lb/hr
lb/day	0.036 lb/hr*24 hrs/day =	0.86	lb/day
lb/yr	0.86 lb/hr*7 days/wk*52 wks/yr =	312.00	lb/yr

Summary:

	ROG	NOx	SOx	CO	PM/PM10
lb/hr	0.033	0.619	0.004	0.167	0.036
lb/day	0.80	14.86	0.09	4.00	0.86
lb/yr	291.20	5,408.00	34.53	1,456.00	312.00

1

A/N 528834

Toxics
D3

Furnace Rating:	16	MM BTU
Fuel HHV	1,050	BTU/ft^3
Fuel Consumption	15,619	ft^3/hr
Operating Schedule:		
hrs/day	24	
days/wk	7	
weeks/yr	50	
Equipment Operating Load:	100.0%	

		Emissions			
	lb/MM ft^3	lb/hr	lb/day	lb/yr	
Acetaldehyde	0.0031	4.84E-05	0.00116	0.40672	A1
Acrolein	0.0027	4.22E-05	0.00101	0.35424	A3
Benzene	0.0058	9.06E-05	0.00217	0.76096	B1
Formaldehyde	0.0123	1.92E-04	0.00461	1.61376	F3
Naphthalene	0.0003	4.69E-06	0.00011	0.03936	P30
PAH'S	0.0001	1.56E-06	0.00004	0.01312	P9
Toluene	0.0265	4.14E-04	0.00993	3.47680	T3
Xylenes	0.0197	3.08E-04	0.00738	2.58464	X1

Note:
Toxic air contaiminants are from Emission Factors for AB-2588

TIER 1 / TIER 2 SCREENING RISK ASSESSMENT DATA INPUT

Application deemed complete date: 10/28/11

A/N: 528834
Fac: 18931

Stack Data

		Units
Hour/Day	24	hr/day
Day/Week	7	day/wk
Week/Year	52	wk/yr
Emission Units	lb/hr	
		0
Control Efficiency	0.00	fraction range 0-1
Does source have TBACT?	NO	
Point or Volume Source ?	P	P or V
Stack Height or Building Height	10	feet
Area (For Volume Source Only)	900	ft^2
Distance-Residential	500	meters
Distance-Commercial	200	meters
Meteorological Station	Fontana	

Source Type:	O - Other
Screening Mode (NO = Tier 1 or Tier 2, YES = Tier 3)	NO

Emission Units	lb/hr	
Source output capacity	n/a	n/a

FOR USER-DEFINED CHEMICALS AND EMISSIONS, FILL IN THE TABLE BELOW

USER DEFINED CHEMICALS AND EMISSIONS				R1 - Uncontrolled	Efficiency Factor	R2 - Controlled
Cmpound Code	Compound	lb/hr	Molecular Weight	lbs/hr	Fraction range 0-1	lbs/hr
A1	Acetaldehyde	4.84E-05	44.06	4.8419E-05	0.00000	4.8419E-05
A3	Acrolein	4.22E-05	56.06	4.21714E-05	0.00000	4.21714E-05
B1	Benzene (including benzene from gasoline)	9.06E-05	78.11	9.05905E-05	0.00000	9.05905E-05
F3	Formaldehyde	1.92E-04	30.03	0.000192114	0.00000	0.000192114
P30	Naphthalene	4.69E-06	128.1732	4.68571E-06		4.68571E-06
P9	PolyCyclic Aromatic Hydrocarbon (PAHs)	1.56E-06	252.3	1.5619E-06		1.5619E-06
T3	Toluene (methyl benzene)	4.14E-04	92.13	0.000413905		0.000413905
X1	Xylenes (isomers and mixtures)	3.08E-04	106.2	0.000307695		0.000307695
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TIER 2 SCREENING RISK ASSESSMENT REPORT

A/N:	528834
Fac:	18931

Application deemed complete date: 10/28/11

2. Tier 2 Data

MET Factor	1.19
4 hr	0.92
6 or 7 hrs	0.78

Dispersion Factors tables

3	For Chronic X/Q
6	For Acute X/Q

Dilution Factors (ug/m3)/(tons/yr)

Receptor	X/Q	X/Qmax
Residential	0.42	25.4
Commercial	2.24	119.2

Adjustment and Intake Factors

	AFann	DBR	EVF
Residential	1	302	0.96
Worker	1	149	0.38

3. Rule 1401 Compound Data

Compound	R1 - uncontrolled (lbs/hr)	R2 - controlled (lbs/hr)	CP	MP MICR Resident	MP MICR Worker	MP Chronic Resident	MP Chronic Worker	REL Chronic	REL Acute
Acetaldehyde	4.84E-05	4.84E-05	1.00E-02	1.0000	1.0000	1.0000	1.0000	140	470
Acrolein	4.22E-05	4.22E-05		1	1	1	1	0.35	2.5
Benzene (including benzene from gasoline)	9.06E-05	9.06E-05	1.00E-01	1	1	1	1.0000	60	1300
Formaldehyde	1.92E-04	1.92E-04	2.10E-02	1	1	1	1	9	55
Naphthalene	4.69E-06	4.69E-06	1.20E-01	1.0000	1.0000	1	1	9	
PolyCyclic Aromatic Hydrocarbon (PAHs)	1.56E-06	1.56E-06	3.90E+00	29.7600	14.6211	1	1		
Toluene (methyl benzene)	4.14E-04	4.14E-04		1	1	1	1	300	37000
Xylenes (isomers and mixtures)	3.08E-04	3.08E-04		1	1	1	1	700	22000

4. Emission Calculations

Compound	uncontrolled R1 (lb/hr)	controlled R2 (lb/hr)	R2 (lb/yr)	R2 (ton/yr)
Acetaldehyde	4.84E-05	4.84E-05	0.4229888	0.000211494
Acrolein	4.22E-05	4.22E-05	0.3684096	0.000184205
Benzene (including benzene from gasoline)	9.06E-05	9.06E-05	0.7913984	0.000395699
Formaldehyde	1.92E-04	1.92E-04	1.6783104	0.000839155
Naphthalene	4.69E-06	4.69E-06	0.0409344	2.04672E-05
PolyCyclic Aromatic Hydrocarbon (PAHs)	1.56E-06	1.56E-06	0.0136448	6.8224E-06
Toluene (methyl benzene)	4.14E-04	4.14E-04	3.615872	0.001807936
Xylenes (isomers and mixtures)	3.08E-04	3.08E-04	2.6880256	0.001344013
Total	1.10E-03	1.10E-03	9.62E+00	4.81E-03

A/N: 528834 Application deemed complete date: 10/28/11

TIER 2 RESULTS

5a. MICR

MICR = CP (mg/(kg-day))^-1 * Q (ton/yr) * (X/Q) * AFann * MET * DBR * EVF * 1E-6* MP

Compound	Residential	Commercial
Acetaldehyde	3.06E-10	3.19E-10
Acrolein		
Benzene (including benzene from gasoline)	5.73E-09	5.97E-09
Formaldehyde	2.55E-09	2.66E-09
Naphthalene	3.56E-10	3.71E-10
PolyCyclic Aromatic Hydrocarbon (PAHs)	1.15E-07	5.87E-08
Toluene (methyl benzene)		
Xylenes (isomers and mixtures)		
Total	**1.24E-07**	**6.80E-08**
	PASS	**PASS**

No Cancer Burden, MICR<1.0E-6

5b. Cancer Burden	**NO**
X/Q for one-in-a-million:	
Distance (meter)	
Area (km2):	
Population:	-
Cancer Burden:	

6. Hazard Index

HIA = [Q(lb/hr) * (X/Q)max] * AF / Acute REL

HIC = [Q(ton/yr) * (X/Q) * MET * MP] / Chronic REL

Target Organs	Acute	Chronic	Acute Pass/Fail	Chronic Pass/Fail
Alimentary system (liver) - AL			Pass	Pass
Bones and teeth - BN			Pass	Pass
Cardiovascular system - CV			Pass	Pass
Developmental - DEV	9.64E-06	3.36E-05	Pass	Pass
Endocrine system - END			Pass	Pass
Eye	2.44E-03		Pass	Pass
Hematopoietic system - HEM	8.31E-06	1.76E-05	Pass	Pass
Immune system - IMM	8.31E-06		Pass	Pass
Kidney - KID			Pass	Pass
Nervous system - NS	1.33E-06	3.88E-05	Pass	Pass
Reproductive system - REP	9.64E-06		Pass	Pass
Respiratory system - RES	2.03E-03	1.68E-03	Pass	Pass
Skin			Pass	Pass

A/N: 528834 **Application deemed complete date:** 10/28/11

6a. Hazard Index Acute HIA = [Q(lb/hr) * (X/Q)max] *AF/ Acute REL

	HIA - Residential									
Compound	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Acetaldehyde				2.62E-06					2.62E-06	
Acrolein				4.28E-04					4.28E-04	
Benzene (including benzene from gasoline)			1.77E-06		1.77E-06	1.77E-06		1.77E-06		
Formaldehyde				8.87E-05						
Naphthalene										
PolyCyclic Aromatic Hydrocarbon (PAHs)										
Toluene (methyl benzene)			2.84E-07	2.84E-07			2.84E-07	2.84E-07	2.84E-07	
Xylenes (isomers and mixtures)				3.55E-07					3.55E-07	
Total			2.05E-06	5.20E-04	1.77E-06	1.77E-06	2.84E-07	2.05E-06	4.32E-04	

	HIA - Commercial									
Compound	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Acetaldehyde				1.23E-05					1.23E-05	
Acrolein				2.01E-03					2.01E-03	
Benzene (including benzene from gasoline)			8.31E-06		8.31E-06	8.31E-06		8.31E-06		
Formaldehyde				4.16E-04						
Naphthalene										
PolyCyclic Aromatic Hydrocarbon (PAHs)										
Toluene (methyl benzene)			1.33E-06	1.33E-06			1.33E-06	1.33E-06	1.33E-06	
Xylenes (isomers and mixtures)				1.67E-06					1.67E-06	
Total			9.64E-06	2.44E-03	8.31E-06	8.31E-06	1.33E-06	9.64E-06	2.03E-03	

6b. Hazard Index Chronic

HIC = [Q(ton/yr) * (X/Q) * MET * MP] / Chronic REL

	HIC - Residential												
Compound	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Acetaldehyde												7.55E-07	
Acrolein												2.63E-04	
Benzene (including benzene from gasoline)				3.30E-06			3.30E-06			3.30E-06			
Formaldehyde												4.66E-05	
Naphthalene												1.14E-06	
PolyCyclic Aromatic Hydrocarbon (PAHs)													
Toluene (methyl benzene)				3.01E-06						3.01E-06		3.01E-06	
Xylenes (isomers and mixtures)										9.60E-07		9.60E-07	
Total				6.31E-06			3.30E-06			7.27E-06		3.16E-04	

A/N: 528834 Application deemed complete date: 10/28/11

6b. Hazard Index Chronic (cont.)

	HIC - Commercial											
Compound	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Acetaldehyde												4.03E-06	
Acrolein												1.40E-03	
Benzene (including benzene from gasoline)				1.76E-05			1.76E-05			1.76E-05			
Formaldehyde												2.49E-04	
Naphthalene												6.06E-06	
PolyCyclic Aromatic Hydrocarbon (PAHs)													
Toluene (methyl benzene)				1.61E-05						1.61E-05		1.61E-05	
Xylenes (isomers and mixtures)										5.12E-06		5.12E-06	
Total				3.36E-05			1.76E-05			3.88E-05		1.68E-03	

Project emissions increases

A/N	Equipment	VOC #/day (x 1.2)	PM10 #/day (x 1.2)
528834	ladle heater	2.2 (3)	2.36 (3)
528835	ladle heater	2.58 (3)	2.76 (3)
528839	ladle heater	1.74 (2)	1.87 (2)
527122	lime hopper		0.31 (0)
526434	carbon storage		0.02 (0)
Total		6.52 (8)	7.32 (9)

Due to rounding, the project PM10 offset requirement is 9 pounds, one pound more than if each application were considered separately. Since the database determines offsets by application, the "extra" pound will be entered on A/N 527122.

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: PRE-HEATING					
HEATER, LADLE, NATURAL GAS, 11.9 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, NORTH AMERICAN, MODEL 4575-10-B HIRAM, WITH LOW NOX BURNER, 1 TOTAL; 11.9 MMBTU/HR	D1		NOX: LARGE SOURCE**	**CO**: 2000 PPMV (5A) **[RULE 407, 4-2-1982]**; **NOX**: 60 PPMV NATURAL GAS (3) **[RULE 2012, 5-6-2005]**; **NOX**: 60 PPMV NATURAL GAS (4) **[RULE 2005, 5-6-2005;** *RULE 2005, 6-3-2011*]; **PM**: (9) **[RULE 405, 2-7-1986]**; **PM**: 0.1 GRAINS/SCF (5) **[RULE 409, 8-7-1981]**	D323.2, I296.1
HEATER, LADLE, NATURAL GAS, 16.4 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, NORTH AMERICAN, MODEL 4575-12 HIRAM, WITH LOW NOX BURNER, 1 TOTAL; 16.4 MMBTU/HR	D2		NOX: LARGE SOURCE**	**CO**: 2000 PPMV (5A) **[RULE 407, 4-2-1982]**; **NOX**: 60 PPMV NATURAL GAS (4) **[RULE 2005, 5-6-2005;** *RULE 2005, 6-3-2011*]; **NOX**: 60 PPMV NATURAL GAS (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 405, 2-7-1986]**; **PM**: 0.1 GRAINS/SCF (5) **[RULE 409, 8-7-1981]**	D323.2, I296.2

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: PRE-HEATING					
HEATER, LADLE, NATURAL GAS, WITH LOW NOX BURNER, 16.4 MMBTU/HR WITH A/N:	D3		NOX: LARGE SOURCE**	**CO**: 2000 PPMV (5A) **[RULE 407, 4-2-1982]**; **NOX**: 60 PPMV NATURAL GAS (4) **[RULE 2005, 5-6-2005;** ***RULE 2005, 6-3-2011***]; **NOX**: 60 PPMV NATURAL GAS (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 405, 2-7-1986]**; **PM**: 0.1 GRAINS/SCF (5) **[RULE 409, 8-7-1981]**	D323.2, I296.3
BURNER, NATURAL GAS, NORTH AMERICAN, MODEL 4575-12 HIRAM, WITH LOW NOX BURNER, 1 TOTAL; 16.4 MMBTU/HR					
Process 2: METAL MELTING					
FURNACE, ELECTRIC, ARC TYPE, SCRAP STEEL, 120 TON CAPACITY, 100000 KVA A/N: 371370	D4	C5	NOX: MAJOR SOURCE**	**PM**: (9) **[RULE 405, 2-7-1986]**; **PM**: 0.005 GRAINS/SCF (8) **[40CFR 60 Subpart AA, 2-22-2005]**	C1.2, C409.1, D12.3, D323.3, E71.4, E71.6, E448.3
BAGHOUSE, WHEELABRATOR, MODEL 264, 9 COMPARTMENTS, EACH WITH 29,256 SQ. FT. FILTER AREA, WITH AUBURN BAG LEAK DETECTION SYSTEM WITH A/N: 510538	C5	D4		**PM**: (9) **[RULE 404, 2-7-1986]**	D12.4, D28.1, D322.1, D381.2, E71.2, E71.3, E193.1, E448.2, H23.3, K40.1, K67.2
TOWER, SPRAY, WITH 8 WATER SPRAY NOZZLES	D67			**PM**: (9) **[RULE 405, 2-7-1986]**	
CONVEYOR, SCREW	D6				
Process 3: RE-HEATING					

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 3: RE-HEATING					
FURNACE, BILLET HEATING, NATURAL GAS, WITH LOW NOX BURNER, FLUE GAS RECIRCULATION, 120.4 MMBTU/HR WITH A/N: 313809 BURNER, NATURAL GAS, NORTH AMERICAN MFG., MODEL 4316, PREHEAT ZONE, WITH LOW NOX BURNER, 2 TOTAL; 13.25 MMBTU/HR BURNER, NATURAL GAS, NORTH AMERICAN MFG., MODEL 4316, PREHEAT ZONE, WITH LOW NOX BURNER, 2 TOTAL; 14.8 MMBTU/HR BURNER, NATURAL GAS, NORTH AMERICAN MFG., MODEL 4316, HEATING ZONE, WITH LOW NOX BURNER, 2 TOTAL; 9.3 MMBTU/HR BURNER, NATURAL GAS, NORTH AMERICAN MFG., MODEL 4316, HEATING ZONE, WITH LOW NOX BURNER, 2 TOTAL; 11.85 MMBTU/HR	D7		NOX: MAJOR SOURCE**	**CO**: 2000 PPMV (5A) **[RULE 407, 4-2-1982]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **PM**: 0.1 GRAINS/SCF (5) **[RULE 409, 8-7-1981]**	C1.3, D12.1

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 3: RE-HEATING					
BURNER, NATURAL GAS, NORTH AMERICAN MFG., MODEL 4316, BOTTOM SOAK, WITH LOW NOX BURNER, 2 TOTAL; 6.05 MMBTU/HR BURNER, NATURAL GAS, NORTH AMERICAN MFG., MODEL 4316, SOAK ZONE, WITH LOW NOX BURNER, 3 TOTAL; 3.3 MMBTU/HR					
Process 4: MATERIAL STORAGE					
System 1: LIME STORAGE					
STORAGE SILO, 12,000 CUBIC FEET, LIME, WITH A FILTER VENT A/N:	D8			**PM**: (9) **[RULE 404, 2-7-1986; RULE 405, 2-7-1986]**	C1.10, D322.1, D323.2, D381.1, K67.2
HOPPER A/N:	D71	C73		**PM**: (9) **[RULE 404, 2-7-1986; RULE 405, 2-7-1986]**	D323.2
CONVEYOR, SCREW, WITH A DISCHARGE DUST COLLECTION SHROUD A/N:	D72	C73		**PM**: (9) **[RULE 404, 2-7-1986]**	D323.2
BAGHOUSE, DIVERSIFIED STORAGE SYSTEMS, MODEL WAM 250, WITH 14 CARTRIDGES, 250 SQ. FT. TOTAL FILTER AREA, AND A 5 HP BLOWER A/N:	C73	D71 D72		**PM**: (9) **[RULE 404, 2-7-1986]**	D12.4, D322.1, D381.1, E448.2, H23.3, K67.2
System 2: DOLOMITE RECEIVING AND STORAGE					

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 4: MATERIAL STORAGE					
STORAGE SILO, DOLOMITE, 4,800 CU. FT., WITH FABRIC FILTER A/N: 458462	D46			**PM**: (9) **[RULE 404, 2-7-1986; RULE 405, 2-7-1986]**	C1.5, D322.1, D381.1, E184.1, K67.2
System 3: CARBON STORAGE AND INJECTION					
STORAGE SILO, CARBON, 1,400 CUBIC FEET, WITH A 50 HP PNEUMATIC CONVEYOR A/N:	D74			**PM**: (9) **[RULE 405, 2-7-1986]**	C1.11, D323.2
STORAGE SILO, CARBON, 2,250 CUBIC FEET, WITH A FILTER VENT, 225 SQ. FT. TOTAL FILTERING AREA A/N:	D75			**PM**: (9) **[RULE 404, 2-7-1986; RULE 405, 2-7-1986]**	D322.1, D323.2, D381.1, E184.1, K67.2
CONVEYOR, SCREW A/N:	D76			**PM**: (9) **[RULE 405, 2-7-1986]**	D323.2
CONVEYOR, SCREW A/N:	D77			**PM**: (9) **[RULE 405, 2-7-1986]**	D323.2
INJECTOR, CARBON A/N:	D78			**PM**: (9) **[RULE 405, 2-7-1986]**	D323.2
INJECTOR, CARBON A/N:	D79			**PM**: (9) **[RULE 405, 2-7-1986]**	D323.2
Process 6: FUEL STORAGE & DISPENSING					
STORAGE TANK, GASOLINE A/N: 489915	D14			**ROG**: (9) *[RULE 461, Healy, Phase I and II EVR Conditions, 3-7-2008; RULE 461, Universal Conditions, 3-7-2008]*	D330.1
FUEL DISPENSING NOZZLE, HEALY PHASE II EVR W/O ISD: VR-201, GASOLINE, WITH PHASE II VAPOR RECOVERY SYSTEM A/N: 489915	D15			**ROG**: (9) *[RULE 461, Bellowsless Conditions, 3-7-2008; RULE 461, Healy, Phase I and II EVR Conditions, 3-7-2008; RULE 461, Universal Conditions, 3-7-2008]*	D330.1
Process 7: INTERNAL COMBUSTION ENGINE					

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 7: INTERNAL COMBUSTION ENGINE					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, CUMMINS, MODEL NTA855-G1, WITH TURBOCHARGER, 425 BHP A/N: 316128	D37		NOX: PROCESS UNIT**	**NOX**: 469 LBS/1000 GAL DIESEL (1) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**	D12.2, E448.1, K67.4
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, DETROIT, MODEL 1063-7005, 189 BHP A/N: 316129	D39		NOX: PROCESS UNIT**	**NOX**: 469 LBS/1000 GAL DIESEL (1) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**	D12.2, E448.1, K67.4
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, DETROIT DIESEL, MODEL 1063-7305, WITH AFTERCOOLER, TURBOCHARGER, 330 BHP A/N: 328590	D41		NOX: PROCESS UNIT**	**NOX**: 469 LBS/1000 GAL DIESEL (1) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**	D12.2, E448.1, K67.4
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, RICH BURN, NATURAL GAS, CUMMINS, MODEL GV12-525-IPG, 400 BHP A/N: 443929	D45		NOX: PROCESS UNIT**	**CO**: 2 GRAM/BHP-HR NATURAL GAS (4) **[RULE 1303(a)(1)-BACT, 5-10-1996;** *RULE 1303(a)(1)-BACT, 12-6-2002*]; **NOX**: 1.5 GRAM/BHP-HR NATURAL GAS (1) **[RULE 2012, 5-6-2005]**; **NOX**: 1.5 GRAM/BHP-HR NATURAL GAS (4) **[RULE 2005, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **ROG**: 1.5 GRAM/BHP-HR NATURAL GAS (4) **[RULE 1303(a)(1) -BACT, 5-10-1996;** *RULE 1303(a)(1)-BACT, 12-6-2002*]	D12.2, E115.1, E448.1, K67.4
Process 8: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, COOLING TOWERS	E42				H23.1

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 8: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E43			**ROG**: (9) **[RULE 1113, 11-8-1996;** *RULE 1113, 7-13-2007;* **RULE 1171, 11-7-2003;** *RULE 1171, 2-1-2008*]	K67.3
RULE 219 EXEMPT EQUIPMENT, REFRIGERATION UNITS	E51				H23.2
RULE 219 EXEMPT EQUIPMENT, REFRIGERANT RECOVERY AND/OR RECYCLING UNITS,	E52				H23.2

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
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SECTION D: DEVICE ID INDEX

The following sub-section provides an index to the devices that make up the facility description sorted by device ID.

FACILITY PERMIT TO OPERATE
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SECTION D: DEVICE ID INDEX

Device Index For Section D			
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D6	2	2	0
D7	4	3	0
D8	4	4	1
D14	5	6	0
D15	5	6	0
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D41	6	7	0
E42	6	8	0
E43	7	8	0
D45	6	7	0
D46	5	4	2
E51	7	8	0
E52	7	8	0
D67	2	2	0
D71	4	4	1
D72	4	4	1
C73	4	4	1
D74	5	4	3
D75	5	4	3
D76	5	4	3
D77	5	4	3
D78	5	4	3
D79	5	4	3

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F5.1 The following conditions shall apply to operations with lead containing materials and housekeeping practices for fugitive lead-dust emissions at this facility:

Dust-forming material which may contain lead, including but not limited to baghouse dust, dross, ash, or feed material, shall be stored in closed containers in enclosed storage areas

Surfaces upon which lead-containing dust accumulates and which are subject to vehicular or foot traffic shall be either washed down, vacuum-cleaned, or wet-mopped at least once a week, or shall be maintained with the use of non-toxic chemical dust suppressants

Lead or lead-containing wastes generated from housekeeping activities shall be stored, disposed of, recovered, or recycled using practices that do not lead to fugitive lead-dust emissions

Records of the quantities of each lead-containing material processed, and the lead content of the material shall be maintained. The records shall include but not limited to purchase records, usage records, results of analysis or other verification to indicate lead content and lead usage. The records shall be kept for at least the last five years, and made available to District personnel upon request

Records of housekeeping activities, and inspection and maintenance of emission collection system(s) and control device(s) shall be maintained. The records shall include the name of the person performing the activity, description of the activity, and the dates on which the specific activity was completed. The records shall be kept for at least the last five years, and made available to District personnel upon request

[RULE 1420, 9-11-1992]

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[**RULE 401, 3-2-1984;** RULE 401, 11-9-2001]

F14.1 The operator shall not purchase diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

[RULE 431.2, 9-15-2000]

F14.2 The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

[**RULE 431.2, 5-4-1990;** RULE 431.2, 9-15-2000]

DEVICE CONDITIONS

C. Throughput or Operating Parameter Limits

C1.2 The operator shall limit the material processed to no more than 51210 ton(s) in any one calendar month.

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

For the purpose of this condition, material processed shall be defined as scrap metal.

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

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D4]

C1.3 The operator shall limit the natural gas fuel usage to no more than 2.2 MM cubic feet per day.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D7]

C1.5 The operator shall limit the throughput to no more than 2100 ton(s) in any one calendar month.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D46]

C1.10 The operator shall limit the throughput to no more than 2260 ton(s) in any one calendar month.

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

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D8]

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

C1.11 The operator shall limit the throughput to no more than 1410 ton(s) in any one calendar month.

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

[**RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D74]

C409.1 The operator shall ensure that oil filters used in this equipment shall meet the following specified requirements:

The amount of oil filters used shall not exceed 750 tons in any one calendar month.

Oil filters shall be drained and crushed prior to being used in this equipment.

Records on the amount of oil filters used shall be maintained, in a manner approved by the District, to demonstrate compliance with this condition.

[**RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002; **RULE 401, 3-2-1984;** RULE 401, 11-9-2001]

[Devices subject to this condition : D4]

D. Monitoring/Testing Requirements

D12.1 The operator shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage of the billet heating furnace.

[**RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D7]

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D12.2 The operator shall install and maintain a(n) timer to accurately indicate the elapsed operating time of the engine.

[RULE 1110.2, 2-1-2008; **RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996; RULE 2012, 5-6-2005**]

[Devices subject to this condition : D37, D39, D41, D45]

D12.3 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature at the exit of the water cooled elbow in the exhaust system.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D4]

D12.4 The operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the the filter bags.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C5, C73]

D28.1 The operator shall conduct source test(s) in accordance with the following specifications:

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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted at least once during the life of the permit.

The test shall be conducted to determine the total PM emissions at the outlet.

The test shall be conducted to determine the PM emissions using EPA method 5D measured over a 60 minute averaging time period.

Source test shall be conducted when this equipment is operating at maximum load.

The District shall be notified of the date and time of the test at least 14 days prior to the test.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C5]

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

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C5, D8, D46, C73, D75]

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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D323.2 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 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 eliminates 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 Emission 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 emission observation records by operator or a certified smoke reader.

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D1, D2, D3, D8, D71, D72, D74, D75, D76, D77, D78, D79]

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D323.3 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 a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine semi-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 eliminates 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 Emission 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 emission observation records by operator or a certified smoke reader.

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D4]

D330.1 The operator shall have a person that has been trained in accordance with Rule 461conduct a semi-annual inspection of the gasoline transfer and dispensing equipment. The first inspection shall be in accordance with Rule 461, Attachment B, the second inspection shall be in accordance with Rule 461, Attachment C, and the subsequent inspections shall alternate protocols. The operator shall keep records of the inspection and the repairs in accordance to Rule 461 and Section K of this Permit.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 461, 6-3-2005; RULE 461, 3-7-2008]

[Devices subject to this condition : D14, D15]

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D381.1 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, the operator shall take corrective action(s) that eliminates 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; and

3). Date and time visible emission was abated.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D8, D46, C73, D75]

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

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 a quarterly basis, at least, unless the equipment did not operate during the entire quarterly period. The routine quarterly 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 eliminates 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; and

3). Date and time visible emission was abated.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C5]

E. Equipment Operation/Construction Requirements

E71.2 The operator shall not operate this equipment if the opacity of the exhaust gases from the baghouse is 3 percent or greater.

[40CFR 60 Subpart AA, 2-22-2005]

[Devices subject to this condition : C5]

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

E71.3 The operator shall not operate this equipment if the opacity of the gases from the screw conveyor is 10 percent or greater.

[40CFR 60 Subpart AA, 2-22-2005]

[Devices subject to this condition : C5]

E71.4 The operator shall only charge drained and crushed oil filters to this equipment during the portion of the operation which produces the maximum temperature at the exit of the water cooled elbow.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D4]

E71.6 The operator shall not operate this equipment if the opacity of the gases from the furnace building is 6 percent or greater.

[40CFR 63 Subpart YYYYY, 12-28-2007]

[Devices subject to this condition : D4]

E115.1 The operator shall maintain an automatic air-to-fuel ratio controller so as to regulate the air-to-fuel ratio within tolerance limits as recommended by the catalyst supplier or manufacturer.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 2005, 5-6-2005]**

[Devices subject to this condition : D45]

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

E184.1 The operator shall thoroughly clean the filters in the filter vents immediately after each load of material is received.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D46, D75]

E193.1 The operator shall operate and maintain this equipment according to the following requirements:

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The baghouse pressure differential across the filter bags shall be maintained between 4" and 20" of water column whenever the equipment it serves is in operation.

The operator shall operate and maintain a pressure differential gauge to measure and indicate the pressure differential across the baghouse filter bags pursuant to the operation and maintenance requirements in 40 CFR Part 64.7. The pressure differential across the filters shall be recorded continuously.

For the purpose of this condition, a deviation shall be defined as when the pressure differential across the filters is less than 4" of water column or more than 20" of water column occurs during the normal operation of the equipment it serves.

Whenever a deviation occurs, the operator shall inspect this equipment to identify the cause of such a deviation, take immediate corrective action to maintain the pressure differential across the filters between 4" and 20" of water column, and keep records of the duration and cause (including unknown cause, if applicable) of the deviation and the corrective actions taken.

All deviations shall be reported to the AQMD on a semi-annual basis pursuant to the requirements specified in 40 CFR Part 64.9 and Condition Nos. 22 and 23 in Section K of this permit. The semi-annual monitoring report shall include the total operating time of this equipment and the total accumulated duration of all deviations for each semi-annual reporting period specified in Condition No. 23 in Section K of this permit.

The operator shall submit an application with an Quality Improvement Plan (QIP) in accordance with 40 CFR Part 64.8 to the AQMD if more than six deviations occur in any semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report.

The operator shall inspect and maintain all components of this equipment on an annual basis in accordance with the manufacturer's specifications.

The operator shall keep adequate records in a format that is acceptable to the AQMD

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

to demonstrate compliance with all applicable requirements specified in this condition and 40 CFR Part 64.9 for a minimum of five years.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR Part 64, 10-22-1997]**

[Devices subject to this condition : C5]

E448.1 The operator shall comply with the following requirements:

The engine shall not be operated more than 200 hours in any one year, which includes no more than 50 hours in any one year for maintenance and testing.

Operation beyond the 50 hours per year allotted for engine maintenance and testing shall be allowed only in the event of a loss of grid power or up to 30 minutes prior to a rotating outage, provided that the utility distribution company has ordered rotating outages in the control area where the engine is located or has indicated that it expects to issue such an order at a certain time, and the engine is located in a utility service block that is subject to the rotating outage.

Engine operation shall be terminated immediately after the utility distribution company advises that a rotating outage is no longer imminent or in effect.

This engine shall not be used as part of an interruptible service contract in which a facility receives a payment or reduced rates in return for reducing electric load on the grid when requested to so by the utility or the grid operator.

[RULE 1110.2, 2-1-2008; **RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996;** RULE 1470, 6-1-2007]

[Devices subject to this condition : D37, D39, D41, D45]

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

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Dust collected in the baghouse shall be discharged only into enclosed containers or returned to process and shall not be handled in a manner that may result in the re-release of collected materials to the atmosphere.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C5, C73]

E448.3 The operator shall comply with the following requirements:

The operator shall only purchase motor scrap from scrap providers who participate in an EPA approved program for removal of mercury switches.

[40CFR 63 Subpart YYYYY, 12-28-2007]

[Devices subject to this condition : D4]

H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Chromium, Hexavalent	District Rule	1404

[RULE 1404, 4-6-1990]

[Devices subject to this condition : E42]

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Refrigerants	District Rule	1411
Refrigerants	District Rule	1415
Refrigerants	40CFR82, SUBPART	B
Refrigerants	40CFR82, SUBPART	F

[RULE 1411, 3-1-1991; RULE 1415, 10-14-1994; **40CFR 82 Subpart B, 7-14-1992; 40CFR 82 Subpart F, 5-14-1993**]

[Devices subject to this condition : E51, E52]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1155

[RULE 1155, 12-4-2009]

[Devices subject to this condition : C5, C73]

I. Administrative

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

I296.1 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the annual emissions increase for the first 12 months of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

For the purposes of this condition, the annual emission increase is 7573 lbs. of NOx

RTCs held for the purpose of demonstrating compliance with this condition either at the commencement of initial operation or of a compliance year may be sold only after 12 months of start of initial operation or after the fourth quarter of the applicable compliance year, respectively.

To comply with this condition, the operator shall prior to the 1st compliance year hold a minimum NOx RTCs of 7,573 lbs/yr. This condition shall apply during the 1st 12 months of operation, commencing with the initial operation of the heater.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the 1st compliance year, hold a minimum of 7,573 lbs/yr of NOx RTCs for operation of the heater. In accordance with Rule 2005(f), unused RTC's may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the 1st compliance year.

[**RULE 2005, 5-6-2005;** RULE 2005, 6-3-2011]

[Devices subject to this condition : D1]

I296.2 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the annual emissions increase for the first 12 months of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

For the purposes of this condition, the annual emission increase is 10436 lbs. of NOx

RTCs held for the purpose of demonstrating compliance with this condition either at the commencement of initial operation or of a compliance year may be sold only after 12 months of start of initial operation or after the fourth quarter of the applicable compliance year, respectively.

To comply with this condition, the operator shall prior to the 1st compliance year hold a minimum NOx RTCs of 10,436 lbs/yr. This condition shall apply during the 1st 12 months of operation, commencing with the initial operation of the heater.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the 1st compliance year, hold a minimum of 10,436 lbs/yr of NOx RTCs for operation of the heater. In accordance with Rule 2005(f), unused RTC's may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the 1st compliance year.

[**RULE 2005, 5-6-2005;** RULE 2005, 6-3-2011]

[Devices subject to this condition : D2]

I296.3 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the annual emissions increase for the first 12 months of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

For the purposes of this condition, the annual emission increase is 10436 lbs. of NOx

RTCs held for the purpose of demonstrating compliance with this condition either at the commencement of initial operation or of a compliance year may be sold only after 12 months of start of initial operation or after the fourth quarter of the applicable compliance year, respectively.

To comply with this condition, the operator shall prior to the 1st compliance year hold a minimum NOx RTCs of 10,436 lbs/yr. This condition shall apply during the 1st 12 months of operation, commencing with the initial operation of the heater.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the 1st compliance year, hold a minimum of 10,436 lbs/yr of NOx RTCs for operation of the heater. In accordance with Rule 2005(f), unused RTC's may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the 1st compliance year.

[**RULE 2005, 5-6-2005;** RULE 2005, 6-3-2011]

[Devices subject to this condition : D3]

K. Record Keeping/Reporting

K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of mass rate (lbs/hr). In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C5]

K67.2 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

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C5, D8, D46, C73, D75]

K67.3 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

FACILITY PERMIT TO OPERATE
TAMCO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : E43]

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

The engine operating log shall be kept and maintained on file to record when the engine is started manually. The log shall list the date of operation, the timer reading in hours at the beginning and end of operation, and the reason for operation.

By January 15th of each year, the operator shall total and record the total hours of operation (including hours for both manual and automatic operation) for the previous calendar year.

The records shall be maintained on file for at least the last five years, and made available to District personnel upon request.

[RULE 1110.2, 2-1-2008; **RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996;** RULE 1470, 6-1-2007]

[Devices subject to this condition : D37, D39, D41, D45]