



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

February 3, 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: TST Inc. (ID 43436) – Title V Permit Revision

TST Inc. has proposed to revise their Title V permit by adding Furnace D92; changing the NOx emission limit for D78 from RECLAIM concentration limit of 45 ppm @ 3% O₂ to RECLAIM emission factor of 130 lbs/MM; and correcting a typo on the model number of D74 burners. This is a secondary aluminum ingot and billet manufacturing facility (SIC 3341) located at 11601 Etiwanda Avenue, Fontana, CA 92337. This proposed permit revision is considered as a “de minimus significant permit revision” to their Title V permit. Attached for your review are the permit evaluation, proposed Section D and Section H. With your receipt of the proposed Section D and Section H today, we will note that the EPA 45-day review period begins on February 3, 2012.

If you have any questions or need additional information regarding the proposed permit revision, please call Kien Huynh at (909) 396-2635.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Brian L. Yeh', is written over a thin horizontal line.

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

BLY:KH

Attachments

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING & COMPLIANCE APPLICATION PROCESSING AND CALCULATIONS	Page	1 of 7
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	Processed By	KH
	Checked By	
	Date	1/24/12

Applicant's Name: TST, Inc.
Mailing Address: 11601 Etwanda Ave.
Fontana, CA 92337

Equipment Location: Same

Equipment Description:

APPLICATION NO. 517334: D92 P/C

HEAT TREAT FURNACE, ALUMINUM, WITH TWO NORTH AMERICAN MODEL 4575-8-B NATURAL GAS-FIRED BURNERS, EACH 6,576,000 BTU PER HOUR, TWO 50-HP CIRCULATION BLOWERS, AND ONE 25-HP COMBUSTION AIR BLOWER.

APPLICATION NO. 526441: Previous 318719 D72 C/C

HEAT TREAT FURNACE NO. 1, WITH TWO NORTH AMERICAN MODEL 6514-8B NATURAL GAS-FIRED BURNERS, EACH 7,000,000 BTU PER HOUR, ONE 20-HP COMBUSTION AIR BLOWER, TEN 7.5-HP COOLING FANS, AND TWO 50-HP CIRCULATION FANS.

APPLICATION NO. 526444: Previous 318720 D74 C/C

ALTERATION TO FURNACE PERMIT TO OPERATE F3669 (A/N 318720), DEVICE D74, BY: THE ADMINISTRATIVE CHANGE OF:

- THE BURNER MODEL NUMBER FROM 4575-8B TO 6575-8-B

APPLICATION NO. 526443: Previous 318721 D76 C/C

HEAT TREAT FURNACE NO. 3, WITH TWO NORTH AMERICAN MODEL 6514-8B NATURAL GAS-FIRED BURNERS, EACH 6,000,000 BTU PER HOUR, ONE 25-HP COMBUSTION AIR BLOWER, TEN 7.5-HP COOLING FANS, AND TWO 50-HP CIRCULATION FANS.

APPLICATION NO. 526442: Previous 492469 D78 C/C

FURNACE, HEAT TREATING, WITH TWO LOW NO_x BURNERS, EACH 7,000,000 BTU/HR, NORTH AMERICAN MODEL 4575-8B , NATURAL GAS-FIRED.

HISTORY: 517334 526441-4

Application(s) received on: 1/4/11 8/17/11

Equipment installed: Yes

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

Application 517334 was filed for Permit to Construct a new 13.152 MM BTU/hr pre-heat furnace.

The proposed burners are expected to meet a NO_x limit of 45 ppm @ 3% O₂.

The applicant asked for express permit processing. However, the processing was delayed pending the company's decision on the resolution of the offset issue (The existing facility PM10 PTE is 74 lb/day. The new furnace has a PM10 PTE of 2.25 lb/day).

Other applications were later filed for change of conditions to create a fuel consumption bubble including the four existing pre-heat furnaces and the new furnace. The purpose of the bubble is to avoid having to provide external offsets for the PM10 emission increase from the new furnace.

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However, after discovering that the bubble limit could not be set at their expected level, the company decided to forgo the bubble and accept the fuel limit for the new furnace to avoid having to provide offset credits.

Another delay on BACT limit followed. Currently, another similar furnace at the site has a NOx limit of 45 ppm @ 3% O₂ (considered achieved in practice). The manufacturer of the new furnace burners is reluctant to guarantee the 45 ppm NOx concentration. The current listed BACT is 50 ppm NOx @ 3% O₂. After checking the NOx concentrations from the similar furnace, the company believes that the 45 ppm NOx at 3% O₂ is achievable for the new furnace and takes the limit.

PROCESS DESCRIPTION

The equipment is for metal heat treating.
It is fueled with natural gas.

CALCULATIONS:

APPLICATION NO. 517334:

Given:

Maximum Heat Input Rating, MM BTU/hr:

$$2 \text{ burners} * 6.576 \text{ MM BTU/hr-burner} = 13.152 \text{ MM BTU/hr}$$

Fuel:

Natural gas

Equipment Operating Load:

18.18%

Conversion Factors, ppm @ 3% O₂ 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% O₂ (dry)

45 ppm @ 3% O₂

CO Concentration, ppm @ 3% O₂ (dry)

Emission Factors, lb/MM BTU: (Default)

ROG:

0.0067 lb/MM BTU

SOx :

0.0008 lb/MM BTU

CO:

0.0333 lb/MM BTU

PM:

0.0071 lb/MM BTU

PM₁₀ in total PM:

100%

HHV of natural gas:

1,050 BTU/ft³

CO limit?

No

Computations:

VOC:

lb/hr 0.0067 lb/MM BTU*13.152 MM BTU = 0.09 lb/hr
lb/day Max. 0.09 lb/hr*24 hrs/day = 2.10 lb/day Max.
lb/day, Avg 0.09 lb/hr*24 hrs/day*0.18 (Load factor) = 0.38 lb/day, Avg
lb/yr 0.38 lb/day*7 days/wk*52 wks/yr = 139.29 lb/yr

NOx:

lb/MM BTU 0.00121 lb/MM BTU-ppm*45 ppm = 0.0546 lb/MM BTU
lb/hr 0.0546 lb/MM BTU*13.152 MM BTU/hr = 0.72 lb/hr
lb/day Max. 0.72 lb/hr*24 hrs/day = 17.24 lb/day Max.
lb/day, Avg 0.72 lb/hr*24 hrs/day*0.18 (Load factor) = 3.14 lb/day, Avg
lb/yr 3.14 lb/day*7 days/wk*52 wks/yr = 1,141.47 lb/yr

SOx:

lb/hr 0.0008 lb/MM BTU*13.152 MM BTU = 0.010 lb/hr
lb/day Max. 0.010 lb/hr*24 hrs/day = 0.25 lb/day Max.
lb/day, Avg 0.010 lb/hr*24 hrs/day*0.18 (Load factor) = 0.05 lb/day, Avg
lb/yr 0.05 lb/day*7 days/wk*52 wks/yr = 16.52 lb/yr

CO:

lb/hr 0.0333 lb/MM BTU*13.152 MM BTU = 0.44 lb/hr
lb/day Max. 0.44 lb/hr*24 hrs/day = 10.52 lb/day Max.
lb/day, Avg 0.44 lb/hr*24 hrs/day*0.18 (Load factor) = 1.91 lb/day, Avg
lb/yr 1.91 lb/day*7 days/wk*52 wks/yr = 696.45 lb/yr

PM/PM10

lb/hr 0.0071 lb/MM BTU*13.152 MM BTU = 0.09 lb/hr
lb/day Max. 0.09 lb/hr*24 hrs/day = 2.25 lb/day Max.
lb/day, Avg 0.09 lb/hr*24 hrs/day*0.18 (Load factor) = 0.41 lb/day, Avg
lb/yr 0.41 lb/day*7 days/wk*52 wks/yr = 149.24 lb/yr

	ROG	NOx	SOx	CO	PM/PM10
lb/hr	0.09	0.72	0.01	0.44	0.09
lb/day					
Max.	2.10	17.24	0.25	10.52	2.25
Avg.	0.38	3.14	0.05	1.91	0.41
lb/yr	139.29	1,141.47	16.52	696.45	149.24

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NSR: lb/day

	ROG	NOx	SOx	CO	PM/PM10
Existing PTE	9	135	-	58	74
A/N 517334	0.38	3.14	0.05	1.91	0.41
ERCs required	-	-	-	-	-

PM10, lb/day x 1.2:

0.49 lb/day

Monthly heat input:

$$13.15 \text{ MM BTU/hr} \times 10^6 \text{ BTU/MM BTU} \times 24 \text{ hrs/day} \times 30 \text{ days/month} \times 18.18\% = 1.72\text{E}+09 \text{ BTU/month}$$

$$1.72\text{E}+09 \text{ BTU/month} / 1050 \text{ BTU/ft}^3 = 1.64\text{E}+06 \text{ ft}^3/\text{month}$$

Maximum annual heat input: $1.72\text{E}+09 \text{ BTU/month} \times 12 \text{ months/yr} = 2.07\text{E}+10 \text{ BTU/yr}$

(Less than $2.3\text{E}+10 \text{ BTU/yr}$, the annual limit to qualify as a process unit)

Existing furnaces previous emissions:

		MM BTU/hr	
<u>APPLICATION NO. 526444:</u>	Previous: 318720	14	D74

Operating Schedule*:

hrs/day	24
days/wk	7
weeks/yr	50

Emissions*

	ROG	NOx	SOx	CO	PM10	Rules
lb/hr	0.02	0.36	-	0.09	0.02	401
lb/day	0	8.64	-	2	0	402
lb/yr	151.20	3,024.00	-	764.40	168.00	404

*Information from A/N 318720

Daily NOx emissions are recalculated using hourly emissions.

		MM BTU/hr	
<u>APPLICATION NO. 526442:</u>	Previous: 492469	14	D78

Operating Schedule*:

hrs/day	24
days/wk	7
weeks/yr	52

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<u>Emissions*</u>	<i>ROG</i>	<i>NOx</i>	<i>SOx</i>	<i>CO</i>	<i>PM10</i>	Rules
lb/hr	0.02	0.55	0	0.09	0.02	401
lb/day	0.48	13.2	0.05	2.16	0.48	402
lb/yr	174.72	4,804.80	18	786.24	174.72	404
						407
						409

*Information from A/N 492469

The applicant also requests the following correction, change, or use:

- Device D74: Correct the burner model number to show 6575-8-B (instead of 4575-8B).
- Device D78: Change from RECLAIM concentration limit of 45 ppm @ 3% O₂ to RECLAIM emission factor of 130 lbs/MM cf (default). It is noted that at the applicant's request, for this same device D78, the NO_x RECLAIM emission factor of 130 lbs/MM cf was changed to RECLAIM concentration limit of 45 ppm @ 3% O₂ in 2008 (under A/N 492469).
- New Device D92: Use RECLAIM emission factor of 130 lbs/MM cf (default).

The applicant wants an annual heat input limit to have the new furnace D92 classified as a process unit. Because the maximum annual heat input calculated using the monthly heat input limit is lower than the annual heat input to qualify for process unit, no additional annual limit is necessary.

D78 & D92: The reason for the request to use RECLAIM emission factor is for not having to conduct a source test every 5 years for those process units (Devices D72, D74 and D76 already have RECLAIM emission factor of 130 lbs/MM cf).

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

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

Results of a screening analysis show that neither the cumulative cancer/chronic hazard nor acute hazard index exceeds 1. The equipment is not subject to the public notice requirements of subdivision (c).

(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. The equipment is not subject to the notification requirements of this subdivision.

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.

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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).

REGULATION XIII - New Source Review

CO:

CO is in attainment. See Rule 1703 evaluation.

Other non-RECLAIM Pollutants:

BACT:

	Limit	Proposed	Compliance
SOx	Nat. Gas	Nat. gas	Yes

Offsets:

ROG/SOx

The facility PTE is less than the amounts in Table A of Rule 1304. No offsets are required.

PM10:

The emission increase $\times 1.2 < 0.5$ lb/day. No offsets are required.

Modeling:

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

Rule 1401:

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

Rule 1703 - PSD Analysis:

Since the facility is not within 10 km of a Class I area and the CO emission increase is less than 100 tons per year, except for BACT, all other requirements of Regulation XVII - Prevention of Significant Deterioration - are not applicable to this facility.

Natural gas is considered CO BACT for this furnace.

Rule 2005 - New Source Review for RECLAIM

NOx:

Existing furnaces:

NSR is not triggered due an amistrative change.

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New furnace:

BACT:

This facility is a major source. The listed BACT is 50 ppm NOx @ 3% O₂. However, a similar furnace at the facility achieves 45 ppm NOx @ 3% O₂. Therefore, the BACT limit for the new furnace shall be 45 ppm @ 3% O₂.

	ppm @ 3% O ₂		
	Limit	Proposed	Compliance
NOx	45	45	Yes

The burner's manufacturer is reluctant to guarantee the 45 ppm @ 3% NOx concentration. However, the company believes that the required NOx concentration is attainable and will prove with source testing.

RTCs:

NOx RTCs requirements:

1,141 lb/yr

	From	To	
Facility NOx RTC Holding	1/1/12	12/31/12	38,630 lbs
	1/1/13	12/31/13	38,630 lbs

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

Modeling:

The emissions are less than the amounts in Table A-1 of Rule 2005. No further analysis is required. Complies.

DISCUSSIONS

D72: There is no change to Device D72.

D76: There is no change to Device D76.

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

RECOMMENDATIONS

APPLICATION NO. 517334: D92

Issue Permit to Construct subject to permit conditions as stated in Section H.

APPLICATION NO. 526441: D72

Cancel.

APPLICATION NO. 526443: D76

Cancel.

APPLICATION NOS. 526442, 526444: D78 D74

Issue Permits to Operate subject to permit conditions as stated in Section D.

TIER 2 SCREENING RISK ASSESSMENT REPORT

A/N: 517334
 Fac: 43436

Application deemed complete date: 01/04/11

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	0.12	8.4
Commercial	49.68	2000

Adjustment and Intake Factors

	AFarm	DBR	EVP
Residential	1	302	0.96
Worker	1	149	0.38

A/N: 517334

Application deemed complete date: 01/04/11

TIER 2 RESULTS

5a. MICR

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

Compound	Residential	Commercial
Acetaldehyde	1.28E-11	1.03E-09
Acrolein		
Benzene (including benzene from gasoline)	2.39E-10	1.93E-08
Formaldehyde	1.06E-10	8.60E-09
Naphthalene	1.48E-11	1.20E-09
PolyCyclic Aromatic Hydrocarbon (PAHs)	4.78E-09	1.90E-07
Toluene (methyl benzene)		
Xylenes (isomers and mixtures)		
Total	5.15E-09	2.20E-07
	PASS	PASS

No Cancer Burden, MICR < 1.0E-6

5b. Cancer Burden	NO
X/Q for one-in-a-million:	
Distance (meter)	
Area (km ²):	
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	2.36E-05	1.09E-04	Pass	Pass
Endocrine system - END			Pass	Pass
Eye	5.98E-03		Pass	Pass
Hematopoietic system - HEM	2.03E-05	5.69E-05	Pass	Pass
Immune system - IMM	2.03E-05		Pass	Pass
Kidney - KID			Pass	Pass
Nervous system - NS	3.26E-06	1.25E-04	Pass	Pass
Reproductive system - REP	2.36E-05		Pass	Pass
Respiratory system - RES	4.96E-03	5.44E-03	Pass	Pass
Skin			Pass	Pass

A/N: 517334

Application deemed complete date: 01/04/11

6a. Hazard Index Acute

$HIA = [Q(\text{lb/hr}) * (X/Q)\text{max}] * AF / \text{Acute REL}$

Compound	HIA - Residential									
	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Acetaldehyde				1.26E-07					1.26E-07	
Acrolein				2.07E-05					2.07E-05	
Benzene (including benzene from gasoline)			8.54E-08		8.54E-08	8.54E-08		8.54E-08		
Formaldehyde				4.28E-06						
Naphthalene										
PolyCyclic Aromatic Hydrocarbon (PAHs)										
Toluene (methyl benzene)			1.37E-08	1.37E-08			1.37E-08	1.37E-08	1.37E-08	
Xylenes (isomers and mixtures)				1.71E-08					1.71E-08	
Total			9.91E-08	2.51E-05	8.54E-08	8.54E-08	1.37E-08	9.91E-08	2.08E-05	

Compound	HIA - Commercial									
	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Acetaldehyde				3.00E-05					3.00E-05	
Acrolein				4.92E-03					4.92E-03	
Benzene (including benzene from gasoline)			2.03E-05		2.03E-05	2.03E-05		2.03E-05		
Formaldehyde				1.02E-03						
Naphthalene										
PolyCyclic Aromatic Hydrocarbon (PAHs)										
Toluene (methyl benzene)			3.26E-06	3.26E-06			3.26E-06	3.26E-06	3.26E-06	
Xylenes (isomers and mixtures)				4.08E-06					4.08E-06	
Total			2.36E-05	5.98E-03	2.03E-05	2.03E-05	3.26E-06	2.36E-05	4.96E-03	

6b. Hazard Index Chronic

$$HIC = [Q(\text{ton/yr}) * (X/Q) * MET * MP] / \text{Chronic REL}$$

Compound	HIC - Residential												
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Acetaldehyde												3.15E-08	
Acrolein												1.10E-05	
Benzene (including benzene from gasoline)				1.37E-07			1.37E-07			1.37E-07			
Formaldehyde												1.94E-06	
Naphthalene												4.74E-08	
PolyCyclic Aromatic Hydrocarbon (PAHs)													
Toluene (methyl benzene)				1.26E-07						1.26E-07		1.26E-07	
Xylenes (isomers and mixtures)										4.00E-08		4.00E-08	
Total				2.63E-07			1.37E-07			3.03E-07		1.31E-05	

6b. Hazard Index Chronic (cont.)

A/N: 517334

Application deemed complete date: 01/04/11

Compound	HIC - Commercial												
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Acetaldehyde												1.30E-05	
Acrolein												4.54E-03	
Benzene (including benzene from gasoline)				5.69E-05			5.69E-05			5.69E-05			
Formaldehyde												8.04E-04	
Naphthalene												1.96E-05	
PolyCyclic Aromatic Hydrocarbon (PAHs)													
Toluene (methyl benzene)				5.20E-05						5.20E-05		5.20E-05	
Xylenes (isomers and mixtures)										1.66E-05		1.66E-05	
Total				1.09E-04			5.69E-05			1.25E-04		5.44E-03	

Toxics

Furnace Rating: 13.152 MM BTU
 Fuel HHV 1,050 BTU/ft³
 Fuel Consumption 12,526 ft³/hr
 Operating Schedule:
 hrs/day 16
 days/wk 6
 weeks/yr 50
 Equipment Operating Load: 18.18%

	Emissions			
	lb/MM ft ³	lb/hr	lb/day	lb/yr
Acetaldehyde	0.0031	7.06E-06	0.00017	0.05084
Acrolein	0.0027	6.15E-06	0.00010	0.02952
Benzene	0.0058	1.32E-05	0.00021	0.06341
Formaldehyde	0.0123	2.80E-05	0.00045	0.13448
Naphthalene	0.0003	6.83E-07	0.00001	0.00328
PAH'S	0.0001	2.28E-07	0.00000	0.00109
Toluene	0.0265	6.04E-05	0.00097	0.28973
Xylenes	0.0197	4.49E-05	0.00072	0.21539

Note:

Toxic air contaminants are from Emission Factors for AB-2588

FACILITY PERMIT TO OPERATE TST, INC.

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: SECONDARY ALUMINUM PRODUCTION (TIMCO)					
BUCKET ELEVATOR A/N: 237753	D35			PM: (9) [RULE 405, 2-7-1986]	D323.2
SCREEN, CLASSIFYING, CLASSIFYING A/N: 237753	D58			PM: (9) [RULE 405, 2-7-1986]	D323.2
BIN, SURGE, FINES A/N: 237753	D36			PM: (9) [RULE 405, 2-7-1986]	D323.2
CYCLONE, DIAMETER: 2 FT 2.5 IN A/N: 510321	C37	D34 C38		PM: (9) [RULE 405, 2-7-1986]	D323.2
BIN, SURGE, FINES A/N: 237753	D44			PM: (9) [RULE 405, 2-7-1986]	D323.2
BIN, SURGE, FINES A/N: 237753	D45			PM: (9) [RULE 405, 2-7-1986]	D323.2
BIN, SURGE, FINES A/N: 237753	D46			PM: (9) [RULE 405, 2-7-1986]	D323.2
BAGHOUSE, 900 SQ. FT., WITH AUBURN TRIBO.GUARD I MODEL 4001 BAG LEAK DETECTION SYSTEM A/N: 510321	C39	C38		PM: (9) [RULE 404, 2-7-1986]	D12.1, D322.1, D381.1, E102.1, E193.1, H23.4, K67.2
BIN, SURGE, FINES A/N: 237753	D47			PM: (9) [RULE 405, 2-7-1986]	D323.2
BIN, SURGE, FINES A/N: 237753	D48			PM: (9) [RULE 405, 2-7-1986]	D323.2
BIN, SURGE, FINES A/N: 237753	D49			PM: (9) [RULE 405, 2-7-1986]	D323.2
BIN, SURGE, FINES A/N: 237753	D50			PM: (9) [RULE 405, 2-7-1986]	D323.2
BIN, SURGE, FINES A/N: 237753	D51			PM: (9) [RULE 405, 2-7-1986]	D323.2

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

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: SECONDARY ALUMINUM PRODUCTION (TIMCO)					
BAGHOUSE, ICA, WITH AUBURN TRIBO.GUARD I MODEL 4001 BAG LEAK DETECTION SYSTEM, 10000 SQ.FT. WITH A/N: 510323 INJECTOR, PRECOAT	C24 D43	C25		PM: (9) [RULE 404, 2-7-1986]	A72.1, D12.1, D322.1, D381.1, E102.1, H23.4, K67.2
COOLER A/N: 510323	C25	C24 C26			
SETTLING TANK, WIDTH: 5 FT ; HEIGHT: 8 FT 8 IN; LENGTH: 5 FT A/N: 510323	C26	D16 D17 C25			
BAGHOUSE, VENTS ONE ALUMINUM DROSS BUILDING, 812 SQ.FT.; 232 BAGS A/N: 436021	C91	D90		PM: (9) [RULE 404, 2-7-1986]	C6.1, C409.1, D322.1, D381.2, E102.1, K67.2
System 4: CHIP DRYING SYSTEM					
CRUSHER A/N: 237753	D30			PM: (9) [RULE 405, 2-7-1986]	D323.2
CONVEYOR A/N: 237753	D31			PM: (9) [RULE 405, 2-7-1986]	D323.2
HOPPER A/N: 237753	D32			PM: (9) [RULE 405, 2-7-1986]	D323.2
CONVEYOR A/N: 237753	D33			PM: (9) [RULE 405, 2-7-1986]	D323.2
DRYER, NATURAL GAS, 7 MMBTU/HR A/N: 237753	D34	C37	NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; HAP: (10) [40CFR 63 Subpart RRR, 4-20-2006]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	D323.1

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

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: SECONDARY ALUMINUM PRODUCTION (TIMCO)					
STORAGE BUILDING, DROSS, WITH AN INSIDE TRUCK LOADING DOCK, WIDTH: 105 FT ; HEIGHT: 20 FT ; LENGTH: 133 FT A/N: 436020	D90	C91		PM: (9) [RULE 405, 2-7-1986]	A101.1, D323.2, E57.1, E440.1
System 3: AIR POLLUTION CONTROL					
SETTLING TANK A/N: 510322	D40	D10 D12 D14 C20 C22 D41			
HEATER, NATURAL GAS, BAGHOUSE NO. 1 AND 2 PREHEAT, 4 MMBTU/HR A/N: 510322	D41	D40	NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	
BAGHOUSE, NO.1, WHEELABRATOR, MODEL 42RW-46, 36365 SQ. FT., WITH AUBURN TRIBO.GUARD I MODEL 4001 BAG LEAK DETECTION SYSTEM (COMMON TO C22) WITH A/N: 510322	C20	D40		PM: (9) [RULE 404, 2-7-1986]	A72.1, D12.1, D322.1, D381.1, E102.1, H23.4, K67.2
INJECTOR, PRECOAT	D21				
BAGHOUSE, NO.2, PANGBORNE, MODEL 456 CT, 43628 SQ. FT., WITH AUBURN TRIBO.GUARD I MODEL 4001 BAG LEAK DETECTION SYSTEM (COMMON TO C20) WITH A/N: 510322	C22	D40		PM: (9) [RULE 404, 2-7-1986]	A72.1, D12.1, D322.1, D381.1, E102.1, H23.4, K67.2
INJECTOR, PRECOAT	D23				

- | | |
|--|---|
| * (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 TST, INC.

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: SECONDARY ALUMINUM PRODUCTION (TIMCO)					
FURNACE, ROTARY, D1, NATURAL GAS, DROSS, 6 MMBTU/HR A/N: 435896	D16	C26	NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; HAP: (10) [40CFR 63 Subpart RRR, 4-20-2006]; NOX: 0.7 LBS/TON PROCESSED NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.1, B59.6, C1.2, D323.1
FURNACE, ROTARY, D2, NATURAL GAS, DROSS, 6 MMBTU/HR A/N: 435898	D17	C26	NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; HAP: (10) [40CFR 63 Subpart RRR, 4-20-2006]; NOX: 0.7 LBS/TON PROCESSED NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.1, B59.6, C1.2, D323.1
FURNACE, HOLDING, H1, NATURAL GAS, ALUMINUM, WITH LOW NOX BURNER, 6 MMBTU/HR WITH A/N: 374143 BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 4575-9, WITH LOW NOX BURNER, 6 MMBTU/HR	D18		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 45 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.2, C1.1, D28.1, E147.1

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

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: SECONDARY ALUMINUM PRODUCTION (TIMCO)					
FURNACE, REVERBATORY, M2, NATURAL GAS, ALUMINUM, WITH LOW NOX BURNER, 20 MMBTU/HR WITH A/N: 374146 INJECTOR, CHLORINE BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 4821-12-R, WITH LOW NOX BURNER, 2 TOTAL; 10 MMBTU/HR	D12	D40	NOX: LARGE SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; HAP: (10) [40CFR 63 Subpart RRR, 4-20-2006]; NOX: 45 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]	C1.4, D323.1
FURNACE, REVERBATORY, M3, NATURAL GAS, ALUMINUM, WITH LOW NOX BURNER, 20 MMBTU/HR WITH A/N: 374147 INJECTOR, CHLORINE BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 4821-12-R, WITH LOW NOX BURNER, 2 TOTAL; 10 MMBTU/HR	D14	D40	NOX: LARGE SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; HAP: (10) [40CFR 63 Subpart RRR, 4-20-2006]; NOX: 45 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]	C1.5, C1.6, D323.1

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

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

FACILITY PERMIT TO OPERATE TST, INC.

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: SECONDARY ALUMINIUM PRODUCTION (TIMCO)					
AFTERBURNER, NATURAL GAS, 14 MMBTU/HR A/N: 510321	C38	C37 C39	NOX: LARGE SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 101.4 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	C8.1, D12.2, D323.1
Process 2: SECONDARY ALUMINIUM PRODUCTION (TANDEM)					
FURNACE, REVERBATORY, NO. 1, FUEL OIL NO. 2, NATURAL GAS, ALUMINUM, WITH LOW NOX BURNER, 34 MMBTU/HR WITH A/N: 327689 BURNER, REGENERATIVE, FUEL OIL NO. 2, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 6316Q-10, 17 MMBTU/HR BURNER, REGENERATIVE, FUEL OIL NO. 2, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 6316Q-10, 17 MMBTU/HR	D66	C79	NOX: LARGE SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 35.055 PPMV FUEL OIL 2 (3) [RULE 2012, 5-6-2005]; NOX: 65 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]	A63.1, B59.3, C1.7, D323.3, E51.1

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

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 2: SECONDARY ALUMINIUM PRODUCTION (TANDEM)					
FURNACE, REVERBATORY, NO. 2, FUEL OIL NO. 2, NATURAL GAS, ALUMINUM, WITH LOW NOX BURNER, 34 MMBTU/HR WITH A/N: 327690 BURNER, REGENERATIVE, FUEL OIL NO. 2, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 6316Q-10, 17 MMBTU/HR BURNER, REGENERATIVE, FUEL OIL NO. 2, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 6316Q-10, 17 MMBTU/HR	D68	C79	NOX: LARGE SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 35.055 PPMV FUEL OIL 2 (3) [RULE 2012, 5-6-2005]; NOX: 65 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) ; PM: 0.1 GRAINS/SCF (5)	A63.1, B59.3, C1.7, D323.3

* (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 TST, INC.

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 2: SECONDARY ALUMINIUM PRODUCTION (TANDEM)					
FURNACE, REVERBATORY, NO. 3, NATURAL GAS, ALUMINUM, WITH LOW NOX BURNER, 14 MMBTU/HR WITH A/N: 327691 BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 4575-12, 7 MMBTU/HR BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 4575-12, 7 MMBTU/HR	D70	C79	NOX: LARGE SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 45 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]	B59.4, C1.8, D323.1
FURNACE, HEAT TREATING, NO. 1, NATURAL GAS, ALUMINUM, 14 MMBTU/HR WITH A/N: 318719 BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 6514-8B, 2 TOTAL; 7 MMBTU/HR	D72		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	C1.9, D323.1

- (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 TST, INC.

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 2: SECONDARY ALUMINIUM PRODUCTION (TANDEM)					
FURNACE, HEAT TREATING, NO. 2, NATURAL GAS, ALUMINUM, 14 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 6575-8-B, 2 TOTAL; 7 MMBTU/HR	D74		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	C1.9, D323.1
FURNACE, HEAT TREATING, NO. 3, NATURAL GAS, ALUMINUM, 12 MMBTU/HR WITH A/N: 318721 BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 6514-8B, 2 TOTAL; 6 MMBTU/HR	D76		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	C1.9, C1.10, D323.1

* (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 TST, INC.

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 2: SECONDARY ALUMINIUM PRODUCTION (TANDEM)					
FURNACE, HEAT TREATING, NATURAL GAS, ALUMINUM, WITH LOW NOX BURNER, 14 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 4575-8B, WITH LOW NOX BURNER, 2 TOTAL; 7 MMBTU/HR	D78		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 45 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.5, C1.9, D323.1, E147.2, E147.3
BAGHOUSE, ICA, MODEL 14-800, 11200 SQ. FT., WITH AUBURN TRIBO.GUARD I MODEL 4001 BAG LEAK DETECTION SYSTEM WITH A/N: 510324 BIN, SURGE, 600 LBS CONVEYOR, PNEUMATIC	C79 D80 D81	D66 D68 D70		PM: (9) [RULE 404, 2-7-1986]	D12.1, D322.2, D381.1, E102.1, H23.4, K67.2
Process 3: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT, SMALL, UNHEATED, NON-CONVEYORIZED	E59			ROG: (9) [RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]	H23.1
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E60			VOC: (9) [RULE 1113, 11-8-1996; RULE 1113, 7-13-2007; RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]	K67.1

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

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: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, OIL WATER SEPARATOR, GRAVITY TYPE, < 45 FT ² AIR/LIQUID INTERFACIAL AREA	E82				H23.2, H23.3

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

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
 TST, INC.**

SECTION D: DEVICE ID INDEX

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D4	1	1	1
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C22	4	1	3
D23	4	1	3
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D33	5	1	4
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D44	6	1	4
D45	6	1	4
D46	6	1	4
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**FACILITY PERMIT TO OPERATE
TST, INC.
SECTION D: DEVICE ID INDEX**

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FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

FACILITY CONDITIONS

F24.1 Accidental release prevention requirements of Section 112(r)(7):

a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).

b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[40CFR 68 - Accidental Release Prevention, 5-24-1996]

DEVICE CONDITIONS

A. Emission Limits

A63.1 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 0.47 LBS IN ANY ONE DAY
SOX	Less than or equal to 16.78 LBS IN ANY ONE DAY
CO	Less than or equal to 11.82 LBS IN ANY ONE DAY

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

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D66, D68]

A72.1 The operator shall maintain this equipment to achieve a minimum overall control efficiency of 99 percent for PM during the normal operation of the equipment it vents.

[RULE 1420, 9-11-1992]

[Devices subject to this condition : C20, C22, C24]

A101.1 The operator shall take all reasonable control measures to minimize fugitive emissions from this equipment.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001; RULE 402, 5-7-1976]

[Devices subject to this condition : D90]

B. Material/Fuel Type Limits

B59.1 The operator shall not use the following material(s) in this device :

fluorides, chlorine, or aluminum chloride

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

[Devices subject to this condition : D16, D17]

B59.2 The operator shall not use the following material(s) in this device :

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Metal contaminated with rubber, plastic, paper, rags, oil, grease

Smoke producing material

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

[Devices subject to this condition : D18]

B59.3 The operator shall only use the following material(s) in this device :

natural gas

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

[Devices subject to this condition : D66, D68]

B59.4 The operator shall only use the following material(s) in this device :

clean aluminum

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 401, 3-2-1984; RULE 401, 9-11-1998]

[Devices subject to this condition : D70]

B59.5 The operator shall not use the following material(s) in this device :

Metal contaminated with rubber, plastic, paper, rags, oil, grease

Fluorides, Chlorine, or Aluminum Chloride

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 401, 3-2-1984; RULE 401, 11-9-2001]

[Devices subject to this condition : D78]

B59.6 The operator shall only use the following material(s) in this device :

aluminum dross

salt flux

[40CFR 63 Subpart RRR, 4-20-2006]

[Devices subject to this condition : D16, D17]

C. Throughput or Operating Parameter Limits

C1.1 The operator shall limit the material processed to no more than 4500 ton(s) in any one calendar month.

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

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 : D18]

C1.2 The operator shall limit the material processed to no more than 60000 lbs in any one day.

FACILITY PERMIT TO OPERATE TST, INC.

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 aluminum.

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

[Devices subject to this condition : D16, D17]

- C1.4 The operator shall limit the material processed to no more than 3000 ton(s) in any one month.

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

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 : D2, D10, D12]

- C1.5 The operator shall limit the fuel usage to no more than 8.22857e+06 cubic feet per 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 : D14]

- C1.6 The operator shall limit the material processed to no more than 2500 ton(s) in any one month.

FACILITY PERMIT TO OPERATE TST, INC.

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 aluminum.

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 : D14]

C1.7 The operator shall limit the material processed to no more than 90 tons in any one day.

For the purpose of this condition, material processed shall be defined as pull rate.

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

[Devices subject to this condition : D66, D68]

C1.8 The operator shall limit the material processed to no more than 75 tons in any one day.

For the purpose of this condition, material processed shall be defined as pull rate.

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

[Devices subject to this condition : D70]

C1.9 The operator shall limit the natural gas fuel usage to no more than 2.3e+10 Btu in any one year.

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

The purpose(s) of this condition is to ensure that this equipment qualifies as a process unit.

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

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D72, D74, D76, D78]

C1.10 The operator shall limit the material processed to no more than 160000 lbs in any one day.

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

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

[Devices subject to this condition : D76]

C6.1 The operator shall use this equipment in such a manner that the differential pressure being monitored, as indicated below, does not exceed 6 inches water column.

To comply with this condition, the operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the bags.

The operator shall record the differential pressure across the filter bags once every operating day.

The operator shall maintain records of the differential pressure across the filter bags in a manner approved by the District to demonstrate compliance with this condition.

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

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : C91]

- C8.1 The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, is not less than 1400 Deg F.

The operator shall monitor the temperature the temperature as specified in condition number D12.2.

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

[Devices subject to this condition : C38]

- C409.1 The operator shall ensure that the damper to the dross building used in this equipment shall meet the following specified requirements:

The damper is to remain in the locked open position at all times to prevent the escape of fugitive emissions from the dross building, except during breakdowns or routine maintenance.

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

[Devices subject to this condition : C91]

D. Monitoring/Testing Requirements

- D12.1 The operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the bags.

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

[Devices subject to this condition : C20, C22, C24, C39, C79]

FACILITY PERMIT TO OPERATE TST, INC.

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) temperature reading device to accurately indicate the temperature in the afterburner secondary combustion chamber.

The operator shall also install and maintain a device to continuously record the parameter being measured.

[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]

[Devices subject to this condition : C38]

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

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

The test shall be conducted every five-year period, with the first five-year period ending December 31, 2004.

The test shall be conducted within 12 months of the approval of the concentration limit.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D18]

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 : C20, C22, C24, C39, C91]

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

D322.2 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 : C79]

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on 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 TST, INC.

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 : D10, D12, D14, D16, D17, D34, C38, D70, D72,
D74, D76, D78]**

FACILITY PERMIT TO OPERATE TST, INC.

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 TST, INC.

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 : D2, D3, D4, D30, D31, D32, D33, D35, D36, C37,
D44, D45, D46, D47, D48, D49, D50, D51, D58, D90]

FACILITY PERMIT TO OPERATE TST, INC.

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.
In addition, the operator shall 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 72 hours of conversion to fuel oil firing and on a weekly basis thereafter, until the equipment stops firing fuel oil.

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

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

- 4). All visible emission observation records by operator or a certified smoke reader.

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

[Devices subject to this condition : D66, D68]

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 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 : C20, C22, C24, C39, C79]

FACILITY PERMIT TO OPERATE TST, INC.

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 an annual basis, at least, unless the equipment did not operate during the entire annual 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 : C91]

E. Equipment Operation/Construction Requirements

E51.1 The following condition number(s) shall not apply if all of the requirements stated below are met:

Condition Number B 59- 3

Requirement number 1: When Melting Furnace No. 2 (D68) is not in operation.

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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

[Devices subject to this condition : D66]

E57.1 The operator shall vent this equipment to the air pollution control equipment which is in full use whenever dross loading or unloading occurs.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 401, 9-11-1998; RULE 401, 11-9-2001**]

[Devices subject to this condition : D90]

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

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

[Devices subject to this condition : C20, C22, C24, C39, C79, C91]

E147.1 The operator shall not conduct inoculation of metal in this equipment.

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

[Devices subject to this condition : D18]

E147.2 The operator shall not conduct fluxing or refining in this equipment.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 401, 3-2-1984; RULE 401, 11-9-2001**]

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D78]

E147.3 The operator shall not conduct metal melting operations in this equipment.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 401, 3-2-1984; RULE 401, 11-9-2001**]

[Devices subject to this condition : D78]

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

FACILITY PERMIT TO OPERATE TST, INC.

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 1" and 6" 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 at least once a day.

For the purpose of this condition, a deviation shall be defined as when the pressure differential across the filters is less than 1" of water column or more than 6" 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 1" and 6" 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 TST, INC.

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 : C39]

E440.1 The operator shall operate and maintain this equipment according to the following specifications:

Install and maintain solid, tight-fitting sliding doors for the entry and exit openings of the dross building.

Doors are to remain completely closed except during the ingress and egress of dross transport equipment.

Inspect the structural integrity of the dross building monthly and make necessary repairs to prevent uncontrolled emissions from going to the atmosphere.

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

[Devices subject to this condition : D90]

H. Applicable Rules

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

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1122

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[RULE 1122, 10-1-2004; RULE 1122, 5-1-2009]

[Devices subject to this condition : E59]

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

Contaminant	Rule	Rule/Subpart
ROG	District Rule	464

[RULE 464, 12-7-1990]

[Devices subject to this condition : E82]

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

Contaminant	Rule	Rule/Subpart
ROG	District Rule	1176

[RULE 1176, 9-13-1996]

[Devices subject to this condition : E82]

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1155

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[RULE 1155, 12-4-2009]

[Devices subject to this condition : C20, C22, C24, C39, C79]

K. Record Keeping/Reporting

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

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 : E60]

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

FACILITY PERMIT TO OPERATE TST, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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 : C20, C22, C24, C39, C79, C91]

FACILITY PERMIT TO OPERATE TST, INC.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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 2: SECONDARY ALUMINIUM PRODUCTION (TANDEM)					
FURNACE, HEAT TREATING, NATURAL GAS, ALUMINUM, WITH LOW NOX BURNER, 13.152 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, NORTH AMERICAN MANUFACTURING COMPANY, MODEL 4575-8B, WITH LOW NOX BURNER, 2 TOTAL; 6.576 MMBTU/HR	D92		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 45 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005; RULE 2005, 6-3-2011]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.5, C1.11, D12.3, D29.1, I296.1

* (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
TST, INC.**

SECTION H: 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
TST, INC.**

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D92	1	2	0

FACILITY PERMIT TO OPERATE TST, INC.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

FACILITY CONDITIONS

F24.1 Accidental release prevention requirements of Section 112(r)(7):

a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).

b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[40CFR 68 - Accidental Release Prevention, 5-24-1996]

DEVICE CONDITIONS

B. Material/Fuel Type Limits

B59.5 The operator shall not use the following material(s) in this device :

Metal contaminated with rubber, plastic, paper, rags, oil, grease

Fluorides, Chlorine, or Aluminum Chloride

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 401, 3-2-1984; RULE 401, 11-9-2001]

[Devices subject to this condition : D92]

C. Throughput or Operating Parameter Limits

C1.11 The operator shall limit the natural gas fuel usage to no more than 1.64 MM cubic feet per month.

FACILITY PERMIT TO OPERATE TST, INC.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

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 : D92]

D. Monitoring/Testing Requirements

D12.3 The operator shall install and maintain a(n) non-resettable totalizing fuel flow meter to accurately indicate the fuel usage of the furnace.

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

[Devices subject to this condition : D92]

D29.1 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	Approved District method	District-approved averaging time	Outlet

The test shall be conducted at the furnace maximum operating temperature to determine NOx concentrations, in terms of ppmv on a dry basis corrected to 3% oxygen, at the outlet.

The test shall determine/document the exhaust flow rate, in acfm; the moisture content, in %; the furnace temperature, in degree F; the exhaust temperature, in degree F; the oxygen content, in %; and the fuel rate, in scfh.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

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

FACILITY PERMIT TO OPERATE TST, INC.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[Devices subject to this condition : D92]

I. Administrative

1296.1 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 1141 lbs. of NO_x

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 NO_x RTCs of 1,141 lbs/yr. This condition shall apply during the 1st 12 months of operation, commencing with the initial operation of the furnace.

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 1,141 lbs/yr of NO_x RTCs for operation of the furnace. 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 : D92]