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

July 16, 2010

Mr. Gerardo C. Rios
Chief, Permits Office
U. S. EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Mr. Rios:

Subject: Press Forge Co. (I.D. 136) Title V Permit Revision

Press Forge Co. (ID# 136) has proposed to revise their Title V by adding four forging furnaces (A/N's 510440, 510441, 510442 and 510443) and removing one forging furnace (D3). This is a metal forging facility located at 7700 Jackson Street, Paramount, CA 90723. This proposed permit revision is considered as a "de minimis significant permit revision" to the Title V permit issued on September 23, 2003. Enclosed for your review are the permit evaluation and the proposed permit. With your receipt of the proposed Title V permit revision today, we will note that the EPA 45-day review period begins on July 16, 2010.

If you have any questions or need additional information regarding the proposed permit revision, please call Manuel Quizon at (909) 396-2639.

Sincerely,

Brian L. Yeh
Senior Manager
Chemical/Mechanical Operations

BLY:mvq
Attachments

PERMIT TO CONSTRUCT

PRESS FORGE CO.
7700 JACKSON ST.
PARAMOUNT, CA 90723

EQUIPMENT DESCRIPTION

APPLICATION NO. 510440

DEVICE NO. D27, FURNACE, FORGE, NO. 1302, NATURAL GAS, 9.0 MMBTU/HR, WITH 6 LOW NOX BURNERS, 1.5 MMBTU/HR EACH, ECLIPSE, MODEL NO. FN150.

APPLICATION NO. 510441

DEVICE NO. D29, FURNACE, FORGE, NO. 1304, NATURAL GAS, 9.0 MMBTU/HR, WITH 6 LOW NOX BURNERS, 1.5 MMBTU/HR EACH, ECLIPSE, MODEL NO. FN150.

APPLICATION NO. 510442

DEVICE NO. D31, FURNACE, FORGE, NO. 1305, NATURAL GAS, 9.0 MMBTU/HR, WITH 6 LOW NOX BURNERS, 1.5 MMBTU/HR EACH, ECLIPSE, MODEL NO. FN150.

APPLICATION NO. 510443

DEVICE NO. D33, FURNACE, FORGE, NO. 1306, NATURAL GAS, 9.0 MMBTU/HR, WITH 6 LOW NOX BURNERS, 1.5 MMBTU/HR EACH, ECLIPSE, MODEL NO. FN150.

APPLICATION NO. 510444

TITLE V/RECLAIM FACILITY PERMIT REVISION APPLICATION.

HISTORY

Application No. 510440 was filed on 5/4/10 for permit to construct and operate a new forging furnace (Device No. D27).

Application No. 510441 was filed on 5/4/10 for permit to construct and operate a new forging furnace (Device No. D29).

Application No. 510442 was filed on 5/4/10 for permit to construct and operate a new forging furnace (Device No. D31).

Application No. 510443 was filed on 5/4/10 for permit to construct and operate a new forging furnace (Device No. D33). This new forging furnace will replace an existing forging furnace (Device D3) operating under permit to operate F34460 (A/N 374844). The new furnace rating is 9.0 MMBTU/hr with NOX emissions of 50 ppmv @ 3% O_2 and existing furnace rating is 8.0 MMBTU/hr with NOX emissions of 100 ppmv @ 3% O_2.

Application No. 510444 was filed on 5/4/10 for a TITLE V/RECLAIM facility permit revision.

PROCESS DESCRIPTION

For process description, see the supplemental information submitted by the company's consultant.

CALCULATION

The installation of the four new forging furnaces will result in net emission increase for all criteria pollutants. For offset purposes, emissions will be calculated based on the monthly natural gas fuel limit of 5.0 mmcf per forging furnace.

Given:

1) Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/year
2) Furnace rating = 9.0 MMBTU/hr
3) Furnace's fuel usage = 6,944.45 ft^3/hr, 166,667 ft^3/day, 5,000,000 ft^3/month

The only emissions in this process are from the combustion of natural gas. Except for NOX emissions, emission factor from District Form B1 will be used to calculate

emissions. NOX emissions will be calculated using the BACT and company's requested RECLAIM concentration limit of 50 ppmv @ 3% O_2 (64.1 lbs/10^6- ft^3). The company will be required to perform source test as required by Rule 2012.

NOX = 64.1 lbs/10^6- ft^3 x 6,944.45 ft^3/hr = 0.45 lb/hr
= 0.45 lb/hr x 24 hrs/day = 10.8 lbs/day
= 10.8 lbs/day x 7 days/wk x 52 wks/yr = 3,931 lbs/yr
ROG = 7 lbs/10^6- ft^3 x 6,944.45 ft^3/hr = 0.05 lb/hr
= 0.05 lb/hr x 24 hrs/day = 1.2 lbs/day
= 1.2 lbs/day x 7 days/wk x 52 wks/yr = 437 lbs/yr
CO = 35 lbs/10^6- ft^3 x 6,944.45 ft^3/hr = 0.24 lb/hr
= 0.24 lb/hr x 24 hrs/day = 5.76 lbs/day
= 5.76 lbs/day x 7 days/wk x 52 wks/yr = 2,097 lbs/yr
PM10 = 7.5 lbs/10^6- ft^3 x 6,944.45 ft^3/hr = 0.05 lb/hr
= 0.05 lb/hr x 24 hrs/day = 1.2 lbs/day
= 1.2 lbs/day x 7 days/wk x 52 wks/yr = 437 lbs/yr
SOX = 0.6 lb/10^6- ft^3 x 6,944.45 ft^3/hr = 0.0 lb/hr

MODELING:

Modeling requirements are based on maximum hourly emissions. The maximum hourly emissions will be calculated to show compliance with modeling.

Given:

1) Furnace rating = 9.0 MMBTU/hr
2) Maximum fuel usage = 8,571.43 ft^3/hr

CO = 35 lbs/10^6- ft^3 x 8,571.43 ft^3/hr = 0.3 lb/hr
NOX = 64.1 lbs/10^6- ft^3 x 8,571.43 ft^3/hr = 0.55 lb/hr
PM10 = 7.5 lbs/10^6- ft^3 x 8,571.43 ft^3/hr = 0.06 lb/hr

FURNACE D3 EMISSIONS:

Given:

1) Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/year
2) Furnace rating = 8.0 MMBTU/hr
3) Furnace's fuel usage = 7,619.05 ft^3/hr

The only emissions in this process are from the combustion of natural gas. Except for NOX emissions, emission factor from District Form B1 will be used to calculate emissions. NOX emissions will be calculated using the company's RECLAIM concentration limit of 100 ppmv @ 3% O_2 (128.2 lbs/10^6- ft^3).

NOX = 128.2 lbs/10^6- ft^3 x 7,619.05 ft^3/hr = 0.98 lb/hr
= 0.98 lb/hr x 24 hrs/day = 23.52 lbs/day
= 23.52 lbs/day x 7 days/wk x 52 wks/yr = 8,561 lbs/yr
ROG = 7 lbs/10^6- ft^3 x 7,619.05 ft^3/hr = 0.05 lb/hr
= 0.05 lb/hr x 24 hrs/day = 1.2 lbs/day
= 1.2 lbs/day x 7 days/wk x 52 wks/yr = 437 lbs/yr
CO = 35 lbs/10^6- ft^3 x 7,619.05 ft^3/hr = 0.27 lb/hr
= 0.27 lb/hr x 24 hrs/day = 6.48 lbs/day
= 6.48 lbs/day x 7 days/wk x 52 wks/yr = 2,359 lbs/yr
PM10 = 7.5 lbs/10^6- ft^3 x 7,619.05 ft^3/hr = 0.05 lb/hr
= 0.05 lb/hr x 24 hrs/day = 1.2 lbs/day
= 1.2 lbs/day x 7 days/wk x 52 wks/yr = 437 lbs/yr
SOX = 0.6 lb/10^6- ft^3 x 7,619.05 ft^3/hr = 0.0 lb/hr

NET FACILITY EMISSION INCREASE:

CRITERIA POLLUTANT	CO (lbs/day)	NOX (lbs/day)	PM10 (lbs/day)	ROG (lbs/day)
NEW FURNACES TOTAL EMISSIONS	23.04	43.20	4.8	4.8
FURNACE D3 EMISSIONS (REMOVED)	6.48	23.52	1.2	1.2
NET EMISSION INCREASE (DAILY)	16.56	19.68	3.6	3.6

RULE EVALUATION

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

No public notice is required since the nearest school from this facility is approximately 1,584 feet.

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

The proposed project will result in emission increase for the entire facility. A Rule 212(c) (2) notice will not be triggered since the emission increase from this facility is below the daily maximum specified in Rule 212(g).

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

The proposed project will result in a minimal emission increase of toxic emissions associated with the operation. Therefore Public Notice is not required under this section of the rule.

(g): Project emissions < threshold.

RULE 219 No exempt equipment in this project.

RULE 401 No visible emission is expected with proper operation of the equipment.

RULE 402 No nuisance is expected with proper operation of the equipment.

RULE 404 Equipment is expected to operate in compliance.

RULE 405 Equipment is expected to operate in compliance.

REG XIII/XX The revised version of Reg. XIII (eff. 4/20/01) is applicable.

OFFSET: The installation of the furnaces will result in net emission increase for all criteria pollutants. The facility's PM10, ROG and SOX emissions are less than 4 tons/yr and therefore no emission offset is required. The facility's CO emissions are less than 29 tons/yr and therefore no offset is required. The increase in NOX emissions will be offset through the company's RECLAIM NOX allocation.

BACT: The furnaces have LOW NOX burners with concentration limit of 50 ppmv at 3% O_2 which is BACT for this type of equipment.

MODELING: The CO emission of 0.3 lb/hr is less than the allowable emission of 25.9 lbs/hr and PM10 emission of 0.06 lb/hr is less than the allowable emission of 2.8 lbs/hr for combustion sources on Table A-1 of Rule 1303. As shown on the attached Tier 3 Screening Analysis for NOX, the NOX emissions passes the Screen 3 modeling.

RULE 3000 As shown on the above evaluation, the installation of the furnaces will result in total emission increases of 16.56 lbs/day of CO, 3.6 lbs/day of PM10 and 3.6 lbs/day of ROG and 7,164 lbs/yr of NOX which is below the facility's starting allocation of 15,886 lbs/yr, therefore, the modification to the Title V permit is a deminimis significant permit revision.

RECOMMENDATION

Issue a permit to construct with conditions.

FACILITY PERMIT TO OPERATE
PRESS FORGE CO

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 1: FORGING/HEAT TREATING OPERATION					
FURNACE, FORGE, NO. 1302, NATURAL GAS, WITH LOW NOX BURNER, 9 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, ECLIPSE, MODEL FN150, WITH LOW NOX BURNER, 6 TOTAL; 1.5 MMBTU/HR	D27		NOX: PROCESS UNIT**	**CO**: 2000 PPMV NATURAL GAS (5) **[RULE 407, 4-2-1982]**; **NOX**: 50 PPMV NATURAL GAS (3) **[RULE 2012, 5-6-2005]**; **NOX**: 50 PPMV NATURAL GAS (4) **[RULE 2005, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **PM**: 0.1 GRAINS/SCF (5) **[RULE 409, 8-7-1981]**	B59.1, C1.5, D28.4, D323.1
FURNACE, FORGE, NO. 1304, NATURAL GAS, WITH LOW NOX BURNER, 9 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, ECLIPSE, MODEL FN150, WITH LOW NOX BURNER, 6 TOTAL; 1.5 MMBTU/HR	D29		NOX: PROCESS UNIT**	**CO**: 2000 PPMV NATURAL GAS (5) **[RULE 407, 4-2-1982]**; **NOX**: 50 PPMV NATURAL GAS (3) **[RULE 2012, 5-6-2005]**; **NOX**: 50 PPMV NATURAL GAS (4) **[RULE 2005, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **PM**: 0.1 GRAINS/SCF (5) **[RULE 409, 8-7-1981]**	B59.1, C1.5, D28.4, 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
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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 1: FORGING/HEAT TREATING OPERATION					
FURNACE, FORGE, NO. 1305, NATURAL GAS, WITH LOW NOX BURNER, 9 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, ECLIPSE, MODEL FN150, WITH LOW NOX BURNER, 6 TOTAL; 1.5 MMBTU/HR	D31		NOX: PROCESS UNIT**	**CO**: 2000 PPMV NATURAL GAS (5) **[RULE 407, 4-2-1982]**; **NOX**: 50 PPMV NATURAL GAS (3) **[RULE 2012, 5-6-2005]**; **NOX**: 50 PPMV NATURAL GAS (4) **[RULE 2005, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **PM**: 0.1 GRAINS/SCF (5) **[RULE 409, 8-7-1981]**	B59.1, C1.5, D28.4, D323.1
FURNACE, FORGE, NO. 1306, NATURAL GAS, WITH LOW NOX BURNER, 9 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, ECLIPSE, MODEL FN150, WITH LOW NOX BURNER, 6 TOTAL; 1.5 MMBTU/HR	D33		NOX: PROCESS UNIT**	**CO**: 2000 PPMV NATURAL GAS (5) **[RULE 407, 4-2-1982]**; **NOX**: 50 PPMV NATURAL GAS (3) **[RULE 2012, 5-6-2005]**; **NOX**: 50 PPMV NATURAL GAS (4) **[RULE 2005, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **PM**: 0.1 GRAINS/SCF (5) **[RULE 409, 8-7-1981]**	B59.1, C1.5, D28.4, D323.1, L341.1

* (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
PRESS FORGE CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

DEVICE CONDITIONS

B. Material/Fuel Type Limits

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

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 : D27, D29, D31, D33]

C. Throughput or Operating Parameter Limits

C1.5 The operator shall limit the natural gas fuel usage to no more than 5.0 MM cubic feet per month.

To comply with this condition, the operator shall install and maintain a(n) flow meter to accurately indicate the fuel usage being supplied to the furnace.

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]

[Devices subject to this condition : D27, D29, D31, D33]

D. Monitoring/Testing Requirements

D28.4 The operator shall conduct source test(s) in accordance with the following specifications:

FACILITY PERMIT TO OPERATE
PRESS FORGE CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

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 June 30, 2015.

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

[RULE 2012, 12-5-2003; RULE 2012, 1-7-2005]

[Devices subject to this condition : D27, D29, D31, D33]

FACILITY PERMIT TO OPERATE
PRESS FORGE CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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 daily basis whenever fuel oil is burned. The routine daily 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

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

FACILITY PERMIT TO OPERATE
PRESS FORGE CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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 : D27, D29, D31, D33]

L. Expiration Date

L341.1 Within 90 days after start-up of this equipment, the following device(s) shall be removed from operation:

D3

[Devices subject to this condition : D33]