

Attachment #1
AIR PERMIT
FOLDER LEVEL

AIR PA #: NA00010 NEED NO

File Type: PERMITS

Volume: 001

Inclusive Dates: 1/1/2002 - 12/31/2004
2002

Media Code/ Form

- ☐ Microfiche
☒ Roll Microfilm
☒ Electronic Image

Files appearing on this roll of microfilm/ electronic image were filmed/ scanned as received and per instructions from the Texas Commission on Environmental Quality's Records Managemgent Coordinator, Kate Fitzpatrick.

Box Barcode:

NSR Permit/Registration Application Processing Checklist

Phase 1:

- ☐ Application/Permitting Request date stamped on Team received date.
- ☒ Verified appropriate and current application PI form or letter.
- ☒ Application Entered into IMS on Received Date, no later than Noon and PSDB the same day (see NSR guidance information for mandatory entry fields for IMS and PSDB)
 - ☒ researched site specific account number to complete entry
 - ☒ researched applications to ensure not duplicate entry (call tech staff or applicant if necessary to confirm)
 - ☒ logged new permit number in paradox permit number log (as needed) (requests for changes to issued or denied PBR's, use the same registration number).
 - ☒ PSDB entry not applicable for SB1126(SB26), Alterations (CRVN or PRVN), X Letters (XLTR), ESOC, etc.
- ☐ Prepared and faxed Account Request Form (if applicable).
 - ☐ placed copy of fax confirmation and ARF in application file
 - ☐ updated IMS tracking element code to indicate date ARF sent
 - ☒ made sure the Account Number request indicates the appropriate contact for returning the number
 - ☒ updated the Account Number in IMS and PSDB
 - ☒ ARF not applicable
- ☒ Prepared file folder (Applies to all application types to ensure the complete package with Mikey stays together in transit.)
- ☒ Used appropriate labels for specified for PBR, Permitting and Confidential folders
- ☒ Printed File label contains the:
 - Name
 - County
 - Account Number
 - Registration/Permit No.
- ☐ Prepared Confidential file folder
 - ☐ stamped folder with confidential stamp and cross-reference confidential materials in open file
 - ☒ prepared file label to indicate confidential documents
 - ☒ confidential file not applicable
- ☐ Point Source data base (PSDB) Permit Summary has been placed in file
 - ☒ PSDB not applicable
- ☒ Mikey has been placed in file.
- ☐ Problems for Phase 2 to address as noted above. Notes: _____
- ☐ Multiple Project Records (Mikies) Included. (Make sure each project record is updated throughout the process.) (Account Nos. starting with "9" for portable facilities usually have the multiple projects)

Phase 2 not required for: ☒ Misc. Mikey Requests (no folder required)
☒ Non-Registered PBR (Xltr),
☐ Extension of Construction, and
☐ Start of Operation
☐ Other _____

Place project in chronologic date by project type to begin phase 2; or,
If phase 2 is not required place with outgoing projects.

Phase 2:

- ☐ Prepared and faxed Site Review/Request for Comment (see processing chart)
 - ☐ placed copy of fax confirmation and SR/RFC in application file
 - ☐ made sure the SR/RFC request indicated the appropriate contact for returning the review
 - ☐ sent SR/RFC to appropriate local program if applicable
 - ☐ Entered IMS SR/RFC and local program tracking elements and date sent in IMS
 - ☐ SR/RFC not applicable
- ☐ Applicant indicated copies of application were sent to appropriate regional office and other entities as required on application.
 - ☐ If no, called applicant to request copies be sent as required and document phone call on attached phone memo.
- ☐ Verified original signature on application. Applies only to PI-1 forms (Faxed PBRs are acceptable.)
- ☐ Verified fee Payment and updated amount and date in IMS (see processing chart for applicability)
 - ☐ placed fee receipt in application folder
 - ☐ fee not applicable
- ☐ Verified Applicants' Legal Name as needed (using guidance document & check name on log in our team directory file named Secretary of State)
 - ☐ Spelling of applicants' legal name is correct on application
 - ☐ For Individuals, complete name of individual has been provided.
 - ☐ For Companies, complete legal name as registered with SOS have been provided.
 - ☐ Charter number as provided by SOS _____
 - ☐ Status confirmed as Active with SOS
 - ☐ If charter number not provided and name does not match with SOS filing:
 - ☐ Called applicant to confirm correct information
 - ☐ Documented information provided by SOS on phone memo in file.
 - ☐ Governmental Agency (City, County, Federal etc.) (no verification required but use consistent entry of full name in IMS and PSDB)
 - ☐ Documented confirmation from applicant of correct legal name or other information on phone memo in file.

Deficiencies with applications:

- ☐ Noted phone call(s) on attached memo documenting requested information and response (put date by each call).
- ☐ Entered date of phone call in IMS using the admin deficient tracking element, then the A-telcom for additional calls.
- ☐ Entered tracking element and date when applicant responds to request for information
- ☐ Public Notice not Applicable (see processing chart for applicability)

For Amendment Applications where Public Notice is not applicable:

- ☐ Prepared State Rep and Senate Letter (HB2518 requirement)

Continuation of Phase The following items only apply to projects requiring public notice:

- ☐ For Permits with terms, confirmed that the permit has not expired.
 - ☐ Permits expired must be process for a new permit
 - ☐ Referral to Enforcement for submitting a renewal after permit expiration date has been initiated.
- ☐ Verified appropriate notice information has been provided (if applicable). (Ensure the applicant provides any corrections or updates to the application in writing (fax or hard copy). Do not fill in any part of the application yourself)
 - ☐ public place for viewing and copying application in county where located is provided
 - ☐ person representing applicant identified as contact in public notice
 - ☐ person responsible for publishing notice identified
- ☐ Prepared public notice package as checked off below:
 - ☐ right side of folder in following order included:
 - ☐ Legislative notification letters and envelopes
 - ☐ Public Notice Cover Letter to Applicant
 - ☐ Public Notice and Sign Postings (Examples)
 - ☐ Instructions & Affidavits
 - ☐ Address Labels
 - ☐ Contacts Sheet (Blue paper)
 - ☐ Spanish Shell provided (if applicable)
 - ☐ left side of folder in following order included:
 - ☐ Application Routing information (Blue paper)
 - ☐ fax confirmation sheet
 - ☐ written note on fax confirmation indicating person you spoke with confirming fax as received, date and time of call
 - ☐ copy of fax to review draft notice
 - ☐ copy of Bilingual Notice Determination sheet fax with draft notice language (for CCO to know to expect bilingual notice)
- ☐ Prepared fax with draft public notice and sent to applicant for confirmation.
 - ☐ called applicant to ensure receipt of fax and need to follow up (stress sense of urgency-give 24 hour due date)
 - ☐ placed copy of confirmation fax in the permit application folder
 - ☐ faxed spanish notice shell to applicant if confirmation fax indicates required. If other language, indicate applicant's responsibility to have translated.

☐ **Confirmed IMS updates and tracking elements with dates as indicated (as applicable):**

- ☐ Enter tracking element in IMS for Site Review using A-Site Review and date sent
- ☐ Enter tracking element in IMS for Request for Comment using A-RFC and date sent
- ☐ Enter Local Program Site Review/RFC using appropriate local program tracking element in IMS and date sent
- ☐ Enter Account Number (ARF) tracking element in IMS
- ☐ Entered Account number assigned by Region & Portable assigned by Team
- ☐ Admin Def. date/phone calls for information or clarification - tracking element A-Admin Def Ltr Sent
- ☐ Additional phone calls date using A-TELCOM
- ☐ Enter date of response received from applicant using tracking element A-Admin Def Ltr Reply
- ☐ Verified Applicant and Contact information for accuracy
- ☐ Verified entry of applicant's legal name, to be correct spelling, in IMS & PSDB
- ☐ PAR transfer date

The following tracking elements in IMS are only required when Public notice is required:

- ☐ Enter A-Comp History RFC for Compliance History request and enter date sent
- ☐ Enter A-ADMIN Comp w/Notice and admin complete date
- ☐ Enter A-Admincomp tracking element and Admin Complete date
- ☐ Entered A-PN Draft when draft public notice was faxed
- ☐ Entered A-PN Draft Approved when you receive approval of the draft from applicant

Documentation of Requests for Additional Information
Telephone Memo to the File

Call To: _____

Call From: _____

File No: _____

Applicant Name: _____

Phone number : _____

ATB

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Kathleen Hartnett White, *Commissioner*
Jeffrey A. Saitas, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

March 1, 2002

RECORD 86306

Mr. Garth Taylor
Acme Brick Company
2821 West 7th Street
Fort Worth, Texas 76107

Re: Permit by Rule Registration
Garrison Plant
Garrison, Nacogdoches County
Account Number: NA-0001-O

Dear Mr. Taylor:

This is in response to your Form PI-7 (Permit by Rule) concerning the proposed installation of a 5,000,000 btu/hr supplemental hear burner (Facility Identification No. 47) in the facility holding room at 257 Brickyard Road, Garrison, Nacogdoches County. We understand that emissions from this project are estimated at 2.15 tons per year (tpy) of nitrogen oxides, 0.12 tpy of volatile organic compounds, 1.8 tpy of carbon monoxide, 0.01 tpy of sulfur dioxide, and 0.16 tpy of particulate matter.

After evaluation of the information which you have furnished, we have determined that your proposed installation is authorized under Title 30 Texas Administrative Code (TAC) Section 106.183 if constructed and operated as described in your registration request. This permit by rule was authorized by the Texas Natural Resource Conservation Commission (TNRCC) pursuant to 30 TAC Chapter 106.

A copy of the permit by rule in effect at the time of this registration is enclosed. You must construct, install, or modify facilities in accordance with the version of the permit(s) by rule in effect when construction, installation, or modification actually begins (see 30 TAC § 106.4[a][5]). After completion of construction, installation, or modification, the facility shall be operated in compliance with all the applicable conditions of the claimed permits by rule and 30 TAC § 106.4.

You are reminded that regardless of whether a permit is required, these facilities must be in compliance with all rules and regulations of the TNRCC and of the U.S. Environmental Protection Agency at all times.

Mr. Garth Taylor

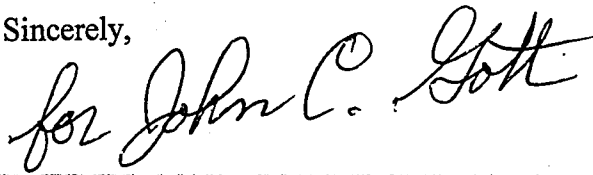
Page 2

March 1, 2002

Re: Permit by Rule Registration

Your cooperation in this matter is appreciated. If you have any questions concerning this permit by rule, please call Ms. Helen Tewolde-Berhan at (713) 422-8915 or write to the Texas Natural Resource Conservation Commission, Office of Permitting, Remediation, and Registration, Air Permits Division (MC-162), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

A handwritten signature in cursive script, appearing to read "for John C. Gott".

Duncan F. Stewart, P.E., Manager
Permit By Rule/General Operating Permits Section
Air Permits Division
Texas Natural Resource Conservation Commission

DS/HT/pl

Enclosure

cc: Mr. Marion Everhart, Air Program Manager, Region 10 - Beaumont

AIR PERMIT BY RULE REVIEW

Reg. No. X Record No. 86306 Account No. NA-0001-O Date Rec'd [PAR] 1/8/02
Company: ACME Brick Company County: Nacogdoches Date Rec'd [ENG] 1/18/02
Contact Name: Mr. Garth Taylor Phone/Fax Nos.: (817)332-4101/(817)390-2483

General Rules Check:

- * Project Emissions Acceptable? Y
- * PSD/Non-attainment Netting Req'd? N
- * Sitewide PBR Emissions Acceptable? Y
- * Limits on use of PBRs at this site? N
- * NSPS/NESHAPS/MACT Standards Apply? N
- * Compliance with all other applicable rules and regulations? Y

Overall Site/Unit Description: Registration of the Garrison Plant under §106.183.

Project Sources/Facilities, PBRs Claimed, Applicable Standards, Emissions and Control Summary:

ACME Brick Company is proposing to install a 5,000,000 btu/hr supplemental hear burner (FIN 47) in the facility holding room at 257 Brickyard Road, Garrison, Nacogdoches County. This burner will heat the ambient air to a maximum temperature of 130 degrees Fahrenheit. There are two vent stacks associated with the holding room (EPN's 17B and 17C). The only pollutants are products of combustion from sweet natural gas. Emissions were quantified using AP-42 (Tables 1.4-1 and 1.4-2).

1. The facility is not a stationary IC engine or turbine.
2. The only emissions from this unit will be products of combustion.
3. The burner has a maximum heat input of 40 million BTU/hour or less (5 MMBtu/hr) with the fuel being sweet natural gas.
3. N/A. The burner does not use distillate fuel oil as backup fuel.

Site Review Required? N

Public Notice Required? N

PSD/Non-attainment Netting Required? N: The emissions associated with this project are estimated at 2.18 tpy of NO_x, 0.12 tpy of VOC, 1.8 tpy of CO, 0.01 tpy of SO₂ and 0.16 tpy of PM.

Emissions Savings / Reductions due to rule compliance: None

Are all general and specific applicable rule conditions satisfied? Y

Does this registration require a 30 TAC Chapter 60 Compliance History review? NA

If yes, should the PBR claim be denied on the basis of the compliance history review results?

Yes _____ No _____

Reviewer: Helen Tewolde-Berhan
Date: February 20th, 2002

Team Leader/Backup Engineer: Emmanuel Ukandu

04/11/2002 ----- NSR PERMITS IMS- PROJECT RECORD -----

PROJECT#: 86306

PERMIT#: X

STATUS: X

DISP CODE: _____

RECEIVED: 01/08/2002

PROJTYPE: XLTR

ISSUED DATE:

03/01/2002

FEE DATE:

FEE AMT: \$ 0

STDY1/SP: 183

SUP-DISP DATE: 03/01/2002

GROUP: PAR

PARSTAFF1 : OFARRELL, JOHN

GROUP: HRT

TECHENGR : TEWOLDE-BERHAN, HELEN

ADMIN REVIEW

A - PAR RECEIVED :

01/08/2002 A - PARTRANS :

01/09/2002

ISSUED TO: ACME BRICK COMPANY

CUSTOMER REGISTRY ID:

PRIMARY CONTACT INFORMATION

CONTACT TYPE: RESPONSIBLE OFFICIAL

NAME: MR GARTH TAYLOR

TITLE: NA

PHONE: 817-332-4101 ext

FAX: 817-390-2483 ext

STREET: 2821 W 7TH STREET

CITY/STATE, ZIP: FORT WORTH, TX , 76107-

PROJECT INFORMATION

UNIT: GARRISON PLANT

SIC: 0

REGION: 10

ACCOUNT: NA00010

REG ENTITY ID:

COUNTY:

NACOGDOCHES

CAPUNITS:

UNITTYPE:

CAPACITY:

CITY: GARRISON

LOCATION: 257 BRICKYARD RD

PUBLIC NOTICE

PUBLIC NOTICE REQUIRED?: N PN1 ALT LANGUAGE: NO PN2 ALT LANGUAGE: NO

**EMISSION
RATES****PROJECT NOTES****TECHNICAL ACTIVITY HISTORY**

PBR - REMOTE REC : 01/11/2002 PBR - ASSIGNED : 01/18/2002 PBR - ENGINEER REC : 01/18/2002

PBR - TO AUSTIN : 01/22/2002 PBR - TO TEAM LDR : 02/20/2002 SUP - PROJECT ISSUED : 03/01/2002

PROJECT ATTRIBUTES**PROJECT LINK****PROJECTS/PERMITS VOIDANCE**

**TEXAS NATURAL RESOURCE CONSERVATION COMMISSION
FORM PI-7, REGISTRATION FOR PERMITS BY RULE**

a hard copy of the registration must be sent to the appropriate TNRCC regional office.

Other written inquiries may be addressed to: TNRCC, Air Permits Division, MC 162, P.O. Box 13087, Austin TX 78711-3087.

Customers may use the TNRCC web site to determine registration receipt and status throughout the process, as well as obtain guidance and additional documents relating to air permitting:

<http://www.tnrcc.state.tx.us/permitting/airperm/index.html>. For questions relating to the initial receipt and administrative review of the registration, please contact the Air & Waste Applications Team at (512) 239-5160, Fax: (512) 239- 2123. For questions relating to the technical review or any other questions relating to air permitting, please contact the Air Permits Division at (512) 239-1240, Fax: (512) 239-1300.

I. REGISTRANT INFORMATION			
A. Registrant Company Name: Acme Brick Company			
B. Technical Contact Name & Title: Mike O'Connor - Environmental Manager			
Company (if different from above):			
Mailing Address: 2821 West 7 th Street			
City: Ft Worth	State: TX	Zip Code: 76107	
Telephone: 817-332-4101	Fax: 817-390-2483	E-mail:	
C. TNRCC Customer Reference Number (if known):			
D. TNRCC Regulated Entity Reference Number (if known):			
E. TNRCC Account Identification Number (if known): NA-0001-O			
F. Is a TNRCC Core Data Form #10400 Attached? (Optional at this time)		X Yes <input type="checkbox"/> No	
II. ADDITIONAL REGISTRANT INFORMATION (this Section not needed if Core Data Form attached)			
A. Registrant Official Contact Name & Title: Garth Tayler			
Mailing Address: 2821 West 7 th Street			
City: Ft Worth	State: TX	Zip Code: 76107	
Telephone: 817-332-4101	Fax: 817-390-2483	E-mail:	
B. Principle Company Product or Business: Brick Mfg.		Plant Standard Industrial Classification Code: 3251	
III. FACILITY LOCATION INFORMATION (this Section not needed if Core Data Form attached)			
A. Business Name of Plant or Site: Acme Brick - Garrison Plant			
B. Street Address or Physical Description of Site: 257 Brickyard Rd			
City: Garrison	State: TX	Zip Code: 75946	
C. Latitude & Longitude: 31°50'21"N94°30'32"W			
IV. FACILITY AND SOURCE INFORMATION			
A. Name of Facility: Garrison Plant			
B. Type of Facility:		X Permanent <input type="checkbox"/> Portable	

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FORM PI-7, REGISTRATION FOR PERMIT BY RULE

C. Operating Schedule: 24 Hours/Day 7 Days/Week 52 Weeks/Year	
Seasonal Operation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If section IV C is "Yes", please describe:	
D. Start of Construction Date: January 2002	Start of Operation Date: February 2002
E. Permit by Rule (PBR) Claimed at this time: 106.183	
F. Previous Exemption or PBR Registration Number(s):	
G. Does this action result in the permitting of any grandfathered facilities?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H. Is this facility, group of facilities, or account subject to 30 TAC Chapter 101, Subchapter H, Division 3 (relating to Mass Emissions Cap and Trade)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If "Yes", does this action require the site to obtain additional emissions allowances?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
I. Is this facility located at a major source as defined in 30 TAC Chapter 122?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is a Site Operating Permit or General Operating Permit (SOP or GOP) review pending for this source or area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is a SOP or GOP issued for this source or area?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If you answered "Yes" to any in Section IV- I, list SOP or GOP number(s): O-01179 (Title V); 41418 (NSR)	
V. IMPORTANT GENERAL INFORMATION	
A. Is confidential information submitted with this registration?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If section V- A is "Yes", is each "confidential" page marked "confidential" in big red letters?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
B. Is this application in response to a notice of violation (NOV) at this location?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If section V- B is "Yes", enter the date of the NOV:	
C. Please estimate the net number of new jobs which will be created as a result of this registration: 0	
D. Does the company (subsidiaries and parent companies) employ 100 or fewer persons?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
VI. TECHNICAL INFORMATION (do not complete this section if claiming §106.436)	
A. A current area map is attached:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. A plot plan of the plant property is attached:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C. Emissions data and calculations for this claim are attached	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D. A process flow diagram [§] and process description are attached:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E. A completed 30 TAC §106.4 checklist is attached (optional)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
F. A completed checklist for the applicable PBR is attached (optional)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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Air & Waste Applications Team

TNRCC - ***** (Rev. 9/5/01)

PI-7 Form and Instructions - This form is for use by facilities subject to Air New Source Review preconstruction permit by rule requirements and is subject to revision. For further information or clarification of an application item, please refer to the Specific Instructions.

FORM PI-7, REGISTRATION FOR PERMIT BY RULE

VIII. INFORMATION FOR 30 TAC § 106.436 ONLY

Will the facility comply with all applicable requirements of permit by rule,
Title 30 Texas Administration Code § 106.436?

☐ Yes ☐ No

IX. STATE AND FEDERAL REGULATORY REQUIREMENTS (do not complete this section if claiming § 106.436)

Registrations must be in compliance with all applicable standards to meet the requirements for authorization under 30 TAC Chapter 106

A. Does a 40 CFR Part 60, New Source Performance Standard (NSPS) apply to a facility in this registration?

☐ Yes ☒ No

If Yes, attach compliance demonstration information and list which Subpart(s) are applicable:

B. Does 40 CFR Part 61, National Emissions Standard for Hazardous Air Pollutants (NESHAP) or Title 40 CFR Part 63, Maximum Achievable Control Technology (MACT) standard apply to a facility in this registration?

☐ Yes ☒ No

If Yes, attach compliance demonstration information and list which Subpart(s) are applicable:

C. Is this facility a new major source, major modification, or major reconstruction according to Prevention of Significant Deterioration (PSD), nonattainment, or Federal Clean Air Act Hazardous Air Pollutants (HAP), permit requirements? If so, a permit by rule **cannot be used**.

☐ Yes ☒ No

X. COPIES OF THIS REGISTRATION

A. A Core Data Form and an extra copy of the PI-7 Form (without attachments) was sent, along with the original registration to the TNRCC in Austin:

☒ Yes ☐ No

B. A copy of the registration was sent to the appropriate TNRCC Regional Office

☒ Yes ☐ No

C. A copy of the registration was sent to the appropriate local program(s)

☐ Yes ☐ No

List Local Program(s) N/A

XI. SIGNATURE FOR REGISTRATION :

I, GARTH LILIAN ASQUITH TAYLER

state that I have knowledge of the facts herein set forth and that the same are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project will satisfy the conditions and limitations of the indicated exemption. The facility will operate in compliance with all regulations of the Texas Natural Resource Conservation Commission and with federal U.S. Environmental Protection Agency regulations governing air pollution.

SIGNATURE:

03/01/02.

XII. SIGNATURE FOR CERTIFICATION

I,

state that I have knowledge of the facts herein set forth and that the same are true and correct to the best of my knowledge and belief. I also certify that the maximum emission rates listed on this certification reflect the maximum anticipated emissions due to the operation of this facility. To the best of my knowledge and belief, the project will satisfy the conditions and limitations of the indicated exemption or standard permit. The facility will operate in compliance with all regulations of the Texas Natural Resource Conservation Commission and with federal U.S. Environmental Protection Agency regulations governing air pollution.

SIGNATURE:

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Air & Waste Applications Team

TNRCC Core Data Form

TNRCC Use Only

SECTION I: General Information

1. Reason for Submission *Example: new wastewater permit; IHW registration; change in customer information; etc.*

PBR 106.183 Install single burner for holding room

2. Attachments

☐ Yes ☒ No

Describe Any Attachments: (ex: Title V Application, Waste Transporter Application, etc.)

Permit By Rule 106.183 application and attachments

3. Customer Reference Number-if issued

CN

(9 digits)

4. Regulated Entity Reference Number-if issued

RN

(9 digits)

SECTION II: Customer Information

5. Customer Role (Proposed or Actual) – As It Relates to the Regulated Entity Listed on This Form

Please check one of the following: ☐ Owner ☐ Operator ☒ Owner and Operator

☐ Occupational Licensee ☐ Volunteer Cleanup Applicant ☐ Other

TNRCC Use Only

☐ Superfund

☐ PST

☐ Respondent

6. General Customer Information

☐ New Customer ☐ Change to Customer Information ☐ Change in Regulated Entity Ownership ☒ No Change*

*If "No Change" and Section I is complete, skip to Section III - Regulated Entity Information.

7. Type of Customer: ☐ Individual ☐ Sole Proprietorship - D.B.A. ☐ Partnership ☐ Corporation

☐ Federal Government ☐ State Government ☐ County Government ☐ City Government

☐ Other Government ☐ Other

8. Customer Name (If an individual, please print last name first)

9. Mailing Address:

City

State

ZIP

ZIP + 4

10. Country Mailing Information if outside USA

11. E-Mail Address if applicable

12. Telephone Number

()

13. Extension or Code

14. Fax Number if applicable

()

15. Federal Tax ID (9 digits)

16. State Franchise Tax ID Number if applicable

17. DUNS Number if applicable (9 digits)

18. Number of Employees

☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

19. Independently Owned and Operated?

☐ Yes ☐ No

SECTION III: Regulated Entity Information

20. General Regulated Entity Information

☐ New Regulated Entity ☒ Change to Regulated Entity Information ☐ No Change*

*If "No Change" and Section I is complete, skip to Section IV - Preparer Information.

21. Regulated Entity Name (If an individual, please print last name first)

Acme Brick Company - Garrison Plant

Move cursor to page 2 to continue.

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22. Street Address: _____					
(No P.O. Boxes) 257 Brickyard Rd					
City Garrison			State TX	ZIP 75946	ZIP + 4
23. Mailing Address 2821 West 7th Street					
City Ft Worth			State Tx	ZIP 76107	ZIP + 4
24. E-Mail Address: _____					
25. Telephone Number (817) 332-4101		26. Extension or Code		27. Fax Number if applicable (817) 390-2483	
28. Primary SIC Code (4 digits) 3251	29. Secondary SIC Code (4 digits)	30. Primary NAICS Code (5 or 6 digits)		31. Secondary NAICS Code (5 or 6 digits)	
32. What is the Primary Business of this entity? (Please do not repeat the SIC or NAICS description.) Brick Manufacturing					
<i>Questions 33 - 37 address geographic location. Please refer to the instructions for applicability.</i>					
33. County: Nacogdoches					
34. Description of Physical Location 257 Brickyard Road Garrison, TX 75946					
35. Nearest City Garrison			State TX	Nearest ZIP 75946	
36. Latitude (N) Degrees Minutes Seconds 31 50 21			37. Longitude (W) Degrees Minutes Seconds 94 30 32		
38. TNRCC Programs In Which This Regulated Entity Participates <i>Not all programs have been listed. Please add to this list as needed. If you don't know or are unsure, please mark "unknown."</i>					
<input type="checkbox"/> Animal Feeding Operation		<input type="checkbox"/> Petroleum Storage Tank		<input type="checkbox"/> Water Rights	
<input checked="" type="checkbox"/> Title V - Air		<input checked="" type="checkbox"/> Wastewater Permit		<input type="checkbox"/> _____	
<input type="checkbox"/> Industrial & Hazardous Waste		<input type="checkbox"/> Water Districts		<input type="checkbox"/> _____	
<input type="checkbox"/> Municipal Solid Waste		<input type="checkbox"/> Water Utilities		<input type="checkbox"/> Unknown	
<input checked="" type="checkbox"/> New Source Review - Air		<input type="checkbox"/> Licensing - TYPE(s) _____			

SECTION IV: Preparer Information

39. Name Mike O'Connor			40. Title Environmental Manager		
41. Telephone Number (817) 332-4101		42. Extension or Code		43. Fax Number if applicable (817) 390-2483	
44. E-Mail Address: moconnor@acmebuildingbrands.com					

JAN 08 2002

Air & Waste Applications Team



Building
Brands



January 3, 2002

TNRCC
Air Permits Division - Review Section (MC-161)
12100 Park 35 Circle
Building F, First Floor, Rm 1206
Austin, TX 78753

Fed Ex # 8292 2089 4828

Re: Acme Brick - Garrison Plant
Acct # NA-0001-O
Holding Room Burner Installation
Permit By rule Filing 106.183 (PBR)

To Whom It May Concern:

Enclosed is the above referenced PBR. If you have any questions, please call me at 817-332-4101.

Sincerely,

A handwritten signature in cursive script that reads "Mike O'Connor".

Mike O'Connor

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Cc: John Decker
Ronnie Jack Keith
Greg Sublett
Garth Tayler

TNRCC Region 10 (Fed Ex # 8292 2089 4839)
Air Permits
3870 Eastex Freeway
Beaumont, TX 77703-1892

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**Exemption §106.183 Checklist
(Previously Standard Exemption 7)**

Drying, Curing Ovens, and Furnaces

The following checklist has been developed so the Texas Natural Resource Conservation Commission (TNRCC) can confirm that you meet exemption requirements. The questions are derived from §106.4 and the exemption list. Please read all questions and check YES or NO (equivalent to True or False), or give specific information as applicable to your facility. If you do not meet all conditions of a specific exemption, you will not be allowed to operate the facility under exemption and you must apply for a construction permit as required under §116.110(a).

<u>Part</u>	<u>YES</u>	<u>NO</u>	<u>Description</u>
7	<u>X</u>	_____	The facility is not a stationary IC engine or turbine
(a)	<u>X</u>	_____	The only emissions from this unit are products of combustion
	<u>X</u>	_____	A Table 6 "Boilers and Heaters" or a Table 4 "Combustion Units" is attached
(b)	<u>X</u>	_____	The unit is gas fired and has maximum heat input of 40 million BTU per hour or less <i>5MMBtu/hr</i>
(1)	<u>X</u>	_____	The fuel for this unit will be sweet natural gas
(2)	<u>n/a</u>	_____	The fuel for this unit will be liquid petroleum gas
(3)	<u>n/a</u>	_____	The fuel for this unit will be fuel gas containing no more than 0.1 grain of total sulfur compounds, calculated as sulfur, per dry standard cubic foot
(4)	<u>n/a</u>	_____	The fuel for this unit will be a combination of the above
(5)	<u>n/a</u>	_____	The backup fuel is distillate fuel oil and limited to 720 hours or less
	<u>n/a</u>	_____	The oil used for this unit contains less than 0.3% sulfur
	<u>n/a</u>	_____	The oil used for this unit is a petroleum distillate oil that is not a blend containing waste oils or solvents
(c)	<u>n/a</u>	_____	This is a heater or boiler with a heat input greater than 10 million Btu/hr and is designed such that NOx emissions shall not exceed 0.1 lb/MMBtu.
(d)	<u>n/a</u>	_____	Record of hours of fuel oil firing and fuel oil purchases will be kept.
	<u>n/a</u>	_____	This facility complies with NSPS Subpart Dc (see attached) If no, why not? _____

NAME: Mike O'Connor

COMPANY NAME: Acme Brick TITLE: Environmental Manager

FACILITY NAME: Garrison Plant

PHONE # (817)332-4101 ACCOUNT ID #: NA-0001-O

FAX #: (817)390-2483

LOCATION: Garrison, TX, Nacogdoches County

SIGNATURE OF COMPANY OFFICER

Date

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Garrison Plant Holding Room Burner Project Description

Acme Brick will be installing a 5,000,000 btu/hr supplemental heat burner (FIN 47) in the facility holding room. This burner will heat the ambient air to a maximum temperature of 130 °F. There are two vent sacks associated with the holding room (EPN's 17B and 17C).

The only pollutants are products of combustion from sweet natural gas (Refer to Emission Calculations and Table 4 – Combustion Units).

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Garrison Plant Process Description

Highlighted parts are the only change from the original 2001 permitted facility (permit 41418).

The Acme built primary crusher (EPN 18) is located in the clay pit and is the first point of crushing. The primary crusher feeds a conveyor that leads to clay storage area #1. The conveyor has three-drop points (EPN's 19-21) and two stockpile drop points (22-23).

The proposed new grinding building consists of a Handle Disintegrator (Primary Grinder) Model WSL 480C, a Handle Fine Roller Mill (smooth roll) Model WF 1080C, a Handle Double Shaft Screen Mixer Model MDG 1015A, and a series of six Handle Box Feeders (five of six are clay processing, the sixth is storage). A baghouse (EPN 99) is integrated into the design of the grinding operation and controls the disintegrator, smooth roll, and double shaft mixer.

The new grinding will have red and buff clay's (EPN's 22-23) stored in clay storage area #1. Clay from this area will be taken by front-end loader and deposited in two of the five processed clay box feeders (Red and Buff Box Feeders - EPN's 38,38a,39,39a) at the grinding room.

Grog and saw-dust will also be deposited by front-end loader in designated box feeders (Grog and Sawdust Box Feeders - EPN's 40,41,41a) in the grinding room. The sixth box feeder (EPN 45) is a storage area after mixing.

Clay is brought to storage area #2 by transport vehicle. A Gleason Shredder Model No.5' portable shredder (EPN 24) processes the Mayfield clay material in clay storage area #2 which has one drop point (EPN 22a). A front-end loader transports the clay from clay storage area #2 to a box feeder (Mayfield Box Feeder - EPN's 37,37a) in the grinding room.

The material is moved from the grinding building to the proposed new manufacturing operations (EPN's 25, 25a-o) which is located in an enclosed building. Movement from grinding to manufacturing is by means of conveyance.

In manufacturing, clay is mixed in the pugmill/extruder. Slurry and dry additives (EPN 46) are added to the extruded column. The clay and additives are extruded into long "slugs," coated with sand and/or oxide slurries and then cut into units. The units are sent to the tumbler conveyance then to the holding room and dryer.

The holding room temperature is slightly above ambient ranging from 100-130 °F by means of a single supplemental burner. Two vent stacks are associated with the holding room (EPN's 17B and 17C). The dryer operation (EPN's 13-17, 17a) is heated using a supplemental heat system, with two 4988-6000H burners and five dryer stacks (EPN's 13-17). A proposed new dryer will have 3 tracks and will be heated by the same supplemental burners. A new dryer emission point will be created (EPN 17a).

There are six existing periodic kilns (EPN's 1-6) each with twenty burners. Each kiln has a

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lighting and cool down vent (EPN's 7-12).

A new periodic Kiln #7 (EPN 7a) is proposed. The kiln will be equipped with a lighting and cool down vent (EPN 12a). The new kiln will be equipped with 6 low Nox and CO burners opposed to 20 burners.

Since the kilns are periodic or batch, the brick remains in the kilns for a specific time cycle. The bricks become vitrified and are removed from the kilns and transported to the packaging station (EPN 26), banded and stacked outside the building.

There is a Gauandler Type "A," 10" x 16" jaw (grog) crusher (EPN 31)) at the end of the packaging process which feeds a hopper (EPN 32). The hopper conveys to a grog box feeder (Grog Box feeder #1 - EPN 33) that feeds the grog hammer mill (EPN 34) then screens (EPN 35). The ground material is then stockpiled (EPN 36) and transported by front-end loader to the grinding operations (EPN's 40-46).

There are four storage tanks: one - 1,000 gallon gasoline fuel tank (EPN 27), one - 6,000 gallon red diesel tank (EPN 28), one - 4,000 gallon green diesel tank (EPN 29), and one 6,600 gallon additive A tank (EPN 30).

EPN's 7-12, 12a are kiln vents and only used during burner lighting and cool down.

EPN's 42, 43, and 44 are reserved.

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Garrison Holding Room Burner Emission Calculations

Source	Pollutant	lbs/hr	TPY
FIN 47	NOx	0.490	2.147
	VOC	0.027	0.118
	CO	0.412	1.804
	SO2	0.003	0.013
	PM	0.037	0.163

Note(s):

- (1) Natural gas estimated at 1,020 btu/cf
- (2) Maximum burner btu input 5,000,000 btu/hr
- (3) Estimated maximum fuel consumption = $5,000,000 \text{ btu/hr} / 1,020 \text{ btu/cf} = 4,902 \text{ cf/hr}$
- (4) AP-42 Natural Gas Combustion factors used (Tables 1.4-1 and 1.4-2)
- (5) FIN 47 is the source for EPN's 17B and 17C. Each EPN will receive 50% of the calculated emission rate (refer to process flow)

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TABLE 4

Acme Brick Garrison Plant

COMBUSTION UNITS

OPERATIONAL DATA				
Number from flow diagram: FIN 47		Model Number(if available): PBG 5000		
Name of device: Holding Rom Burner		Manufacturer: Hauck		
CHARACTERISTICS OF INPUT				
Waste Material*	Chemical Composition			
	Material	Min. Value Expected lb/hr	Ave. Value Expected lb/hr	Design Maximum lb/hr
	1. N/A			
	2.			
	3.			
	4.			
Gross Heating Value of Waste Material (Wet basis if applicable)	Btu/lb	Air Supplied for Waste Material	Minimum SCFM (70°F & 14.7 psia)	Maximum SCFM(70°F & 14.7 psia)
Waste Material of Contaminated Gas	Total Flow Rate lb/hr		Inlet Temperature °F	
	Minimum Expected	Design Maximum	Minimum Expected	Design Maximum
Fuel	Chemical Composition			
	Material	Min. Value Expected	Ave. Value Expected	Design Maximum
	1. Sweet Natural Gas		2,451 cf/hr	4,902 cf/hr
	2.			
	3.			
Gross Heating Value of Fuel	Btu/cf	Air Supplied for Fuel	Minimum ACFM (70°F & 14.7 psia)	Maximum ACFM(70°F & 14.7 psia)
	1,020			30,000

*Describe how waste material is introduced into combustion unit on an attached sheet. Supply drawings, dimensioned and to scale to show clearly the design and operation of the unit.

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TABLE 4
(continued)**COMBUSTION UNITS**

CHARACTERISTICS OF OUTPUT				
Flue Gas Released	Chemical Composition			
	Material	Min. Value Expected lb/hr	Ave. Value Expected lb/hr	Design Maximum lb/hr
	1. NO _x		0.49	
	2. VOC		0.027	
	3. CO		0.412	
	4. SO ₂		0.003	
	5. PM		0.037	
Temperature at Stack Exit °F <u>130</u>	Total Flow Rate lb/hr		Velocity at Stack Exit ft/sec	
	Minimum Expected	Maximum Expected	Minimum Expected	Maximum Expected 20-30 ft/sec
COMBUSTION UNIT CHARACTERISTICS				
Chamber Volume from Drawing ft ³ REFER TO ATTACHED DIAGRAM	Chamber Velocity at Average Chamber Temperature ft/sec		Average Chamber Temperature °F	
Average Residence Time sec	Exhaust Stack Height ft		Exhaust Stack Diameter ft	
ADDITIONAL INFORMATION FOR CATALYTIC COMBUSTION UNITS				
Number and Type of Catalyst Elements	Catalyst Bed Velocity ft/sec		Max. Flow Rate per Catalytic Unit (Manufacturer's Specifications) Specify Units	

Attach separate sheets as necessary providing a description of the combustion unit, including details regarding principle of operation and the basis for calculating its efficiency. Supply an assembly drawing, dimensioned and to scale, to show clearly the design and operation of the equipment. If the device has bypasses, safety valves, etc., specify when such bypasses are to be used and under what conditions. Submit explanations on control for temperature, air flow rates, fuel rates, and other operating variables.10/93

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TEXAS COMPTROLLER OF PUBLIC ACCOUNTS
CAROLE KEETON RYLANDER • COMPTROLLER • AUSTIN, TEXAS 78774

December 20, 2001

CERTIFICATE OF ACCOUNT STATUS

THE STATE OF TEXAS
COUNTY OF TRAVIS

I, Carole Keeton Rylander, Comptroller of Public Accounts of the State of Texas
DO HEREBY CERTIFY that according to the records of this office

ACME BRICK COMPANY

is, as of this date, in good standing with this office having no franchise
tax reports or payments due at this time. This certificate is valid through
the date that the next franchise tax report will be due May 15, 2002.

This certificate is valid for the purpose of conversion when the converted
entity is subject to franchise tax as required by law. This certificate is
not valid for the purpose of dissolution, merger or withdrawal.

GIVEN UNDER MY HAND AND
SEAL OF OFFICE in the City of
Austin, this 20th day of
December, 2001 A.D.

A handwritten signature in cursive script that reads "Carole Keeton Rylander".

CAROLE KEETON RYLANDER
Comptroller of Public Accounts

Taxpayer number: 17524033366
File number: 0008985106

Form 05-304 (Rev. 5-99/4)

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[<<Prev Rule](#)**Texas Administrative Code**[Next Rule>>](#)**TITLE 30****ENVIRONMENTAL QUALITY****PART 1****TEXAS NATURAL RESOURCE CONSERVATION
COMMISSION****CHAPTER 106****PERMITS BY RULE****SUBCHAPTER G****COMBUSTION****RULE §106.183****Boilers, Heaters, and Other Combustion Devices**

Boilers, heaters, drying or curing ovens, furnaces, or other combustion units, but not including stationary internal combustion engines or turbines are permitted by rule, provided that the following conditions are met.

- (1) The only emissions shall be products of combustion of the fuel.
- (2) The maximum heat input shall be 40 million British thermal unit (Btu) per hour with the fuel being:
 - (A) sweet natural gas;
 - (B) liquid petroleum gas;
 - (C) fuel gas containing no more than 0.1 grain of total sulfur compounds, calculated as sulfur, per dry standard cubic foot; or
 - (D) combinations of the fuels in subparagraphs (A) - (C) of this paragraph.
- (3) Distillate fuel oil shall be fired as a backup fuel only. Firing shall be limited to 720 hours per year. The fuel oil shall contain less than 0.3% sulfur by weight and shall not be blended with waste oils or solvents.
- (4) All gas fired heaters and boilers with a heat input greater than ten million Btu per hour (higher heating value) shall be designed such that the emissions of nitrogen oxides shall not exceed 0.1 pounds per million Btu heat input.
- (5) Records of hours of fuel oil firing and fuel oil purchases shall be maintained on-site on a two-year rolling retention period and made available upon request to the commission or any local air pollution control agency having jurisdiction.

Source Note: The provisions of this §106.183 adopted to be effective June 18, 1997, 22 TexReg 5668; amended to be effective September 4, 2000, 25 TexReg 8653

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TABLE 1.4-2. EMISSION FACTORS FOR CRITERIA POLLUTANTS AND GREENHOUSE GASES FROM NATURAL GAS COMBUSTION^a

Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
CO ₂ ^b	120,000	A
Lead	0.0005	D
N ₂ O (Uncontrolled)	2.2	E
N ₂ O (Controlled-low-NO _x burner)	0.64	E
PM (Total) ^c	7.6	D
PM (Condensable) ^c	5.7	D
PM (Filterable) ^c	1.9	B
SO ₂ ^d	0.6	A
TOC	11	B
Methane	2.3	B
VOC	5.5	C

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. To convert from lb/10⁶ scf to lb/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds.

VOC = Volatile Organic Compounds.

^b Based on approximately 100% conversion of fuel carbon to CO₂. $CO_2[lb/10^6 scf] = (3.67) (CON) (C)(D)$, where CON = fractional conversion of fuel carbon to CO₂, C = carbon content of fuel by weight (0.76), and D = density of fuel, $4.2 \times 10^4 lb/10^6 scf$.

^c All PM (total, condensable, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM₁₀, PM_{2.5} or PM₁ emissions. Total PM is the sum of the filterable PM and condensable PM. Condensable PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.

^d Based on 100% conversion of fuel sulfur to SO₂.

Assumes sulfur content is natural gas of 2,000 grains/10⁶ scf. The SO₂ emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO₂ emission factor by the ratio of the site-specific sulfur content (grains/10⁶ scf) to 2,000 grains/10⁶ scf.

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Table 1.4-1. EMISSION FACTORS FOR NITROGEN OXIDES (NO_x) AND CARBON MONOXIDE (CO)
FROM NATURAL GAS COMBUSTION^a

Combustor Type (MMBtu/hr Heat Input) [SCC]	NO _x ^b		CO	
	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
Large Wall-Fired Boilers (>100) [1-01-006-01, 1-02-006-01, 1-03-006-01]				
Uncontrolled (Pre-NSPS) ^c	280	A	84	B
Uncontrolled (Post-NSPS) ^c	190	A	84	B
Controlled - Low NO _x burners	140	A	84	B
Controlled - Flue gas recirculation	100	D	84	B
Small Boilers (<100) [1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03]				
Uncontrolled	100	B	84	B
Controlled - Low NO _x burners	50	D	84	B
Controlled - Low NO _x burners/Flue gas recirculation	32	C	84	B
Tangential-Fired Boilers (All Sizes) [1-01-006-04]				
Uncontrolled	170	A	24	C
Controlled - Flue gas recirculation	76	D	98	D
Residential Furnaces (<0.3) [No SCC]				
Uncontrolled	94	B	40	B

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16.

^b Emission factors are based on an average natural gas higher heating value of 1,020 Btu/scf. To convert from lb/10⁶ scf to lb/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. SCC = Source Classification Code. ND = no data. NA = not applicable.

^c Expressed as NO₂. For large and small wall fired boilers with SNCR control, apply a 24 percent reduction to the appropriate NO_x emission factor. For tangential-fired boilers with SNCR control, apply a 13 percent reduction to the appropriate NO_x emission factor.

^d NSPS=New Source Performance Standard as defined in 40 CFR 60 Subparts D and Db. Post-NSPS units are boilers with greater than 250 MMBtu/hr of heat input that commenced construction modification, or reconstruction after August 17, 1971, and units with heat input capacities between 100 and 250 MMBtu/hr that commenced construction modification, or reconstruction after June 19, 1984.

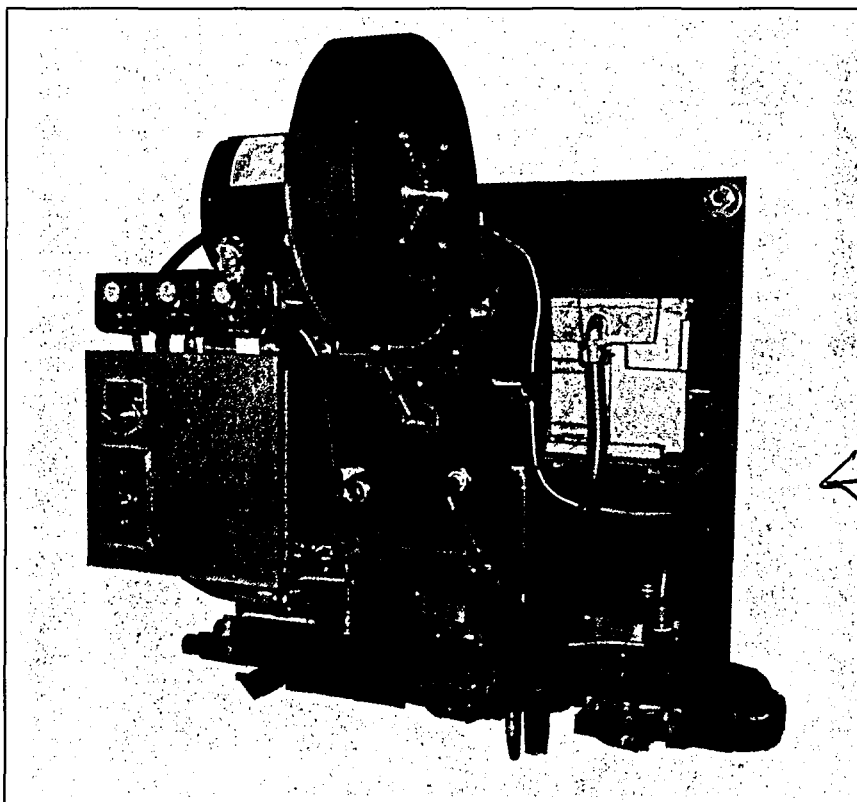
- **SELF-CLEANING FAN BLADE KEEPS MAINTENANCE COSTS TO A MINIMUM**
- **GAS CONTROLLER AUTOMATICALLY COMPENSATES FOR VARYING COMBUSTION CHAMBER PRESSURES**
- **LOW CO AND NO_x PRODUCTION**
- **FOUR STYLES OF FIRING TUBES AVAILABLE; STRAIGHT, HIGH TEMPERATURE, ELBOW AND REFRACTORY LINED**

- **CUSTOMIZED PACKAGES AVAILABLE TO COMPLY WITH CODES AND CONTROL REQUIREMENTS**
- **CAN BE DIRECT SPARK IGNITED NO PILOT VALVES REQUIRED**
- **ALL COMPONENTS THAT ARE EXPOSED TO THE FLAME ARE OF HEAT RESISTANT ALLOY**

The Hauck PBG Packaged Burner was designed for process heating applications such as paint baking ovens, indirect heat exchangers, meat smokehouses, paper drying systems, textile dryers and many other heat processes. It can be used in an inert non airflow environment or an all fresh airstream.

The PBG Burner can be operated with any clean gas that has a calorific value of 2500 Btu/cu. ft. or less.

The burner is designed to accommodate either a flame rod or an ultraviolet flame monitoring system.



The PBG Burner design is based on over 100 years of Hauck's combustion experience.

Typical customized package assembly.

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HAUCK

HAUCK MANUFACTURING COMPANY

P.O. Box 90, Lebanon, PA 17042

717-272-3051 Fax: 717-273-9882

In Canada: Thermix, Inc.

Phone: 514-695-0681 Fax: 514-695-1513 (Montreal)

Phone: 519-753-7608 Fax: 519-756-1043 (Brantford)



CAPACITIES

PBG PACKAGED GAS BURNERS

PBG MODEL			PBG 300	PBG 500	PBG 750	PBG 1000	PBG 2000	PBG 3000	PBG 5000
MAXIMUM INPUT ^{1,2} (MULTIPLY BY 1000 TO OBTAIN BTU/HR)	COMBUSTION CHAMBER PRESSURE	-0.5” wc	315	525	790	1050	2100	3150	5250
		0.0” wc	300	500	750	1000	2000	3000	5000
		+2.0” wc	230	390	580	775	1550	2320	3850
MINIMUM INPUT ¹ (MULTIPLY BY 1000 TO OBTAIN BTU/HR)			6	10	15	20	40	60	100
MAXIMUM FLAME LENGTH ³			4”	6”	8”	14”	32”	48”	60”
MOTOR HORSEPOWER			1/3	1/3	3/4	3/4	3/4	3/4	3
FUEL SUPPLY PRESSURE ¹			14"-21" wc at the inlet of the burner gas regulator.						
BURNER NET WEIGHT (lbs) ⁴			81	84	90	91	172	172	210

Notes:

1. Based on natural gas HHV of 1000 Btu/Cu. Ft. and 0.6 S.G.
2. For blowers utilizing 50Hz frequency, multiply maximum input by 0.83.
For altitudes above sea level, consult Hauck for exact heat input reduction.
3. Based on PBG-L-XXXX model burners and measured from the end of the low temperature straight alloy firing tube, refractory tile, or elbow tube in a zero air flow condition. The high temperature straight firing tube will be 30% less than above.
4. Based on standard burner package with straight alloy firing tube and no accessories.

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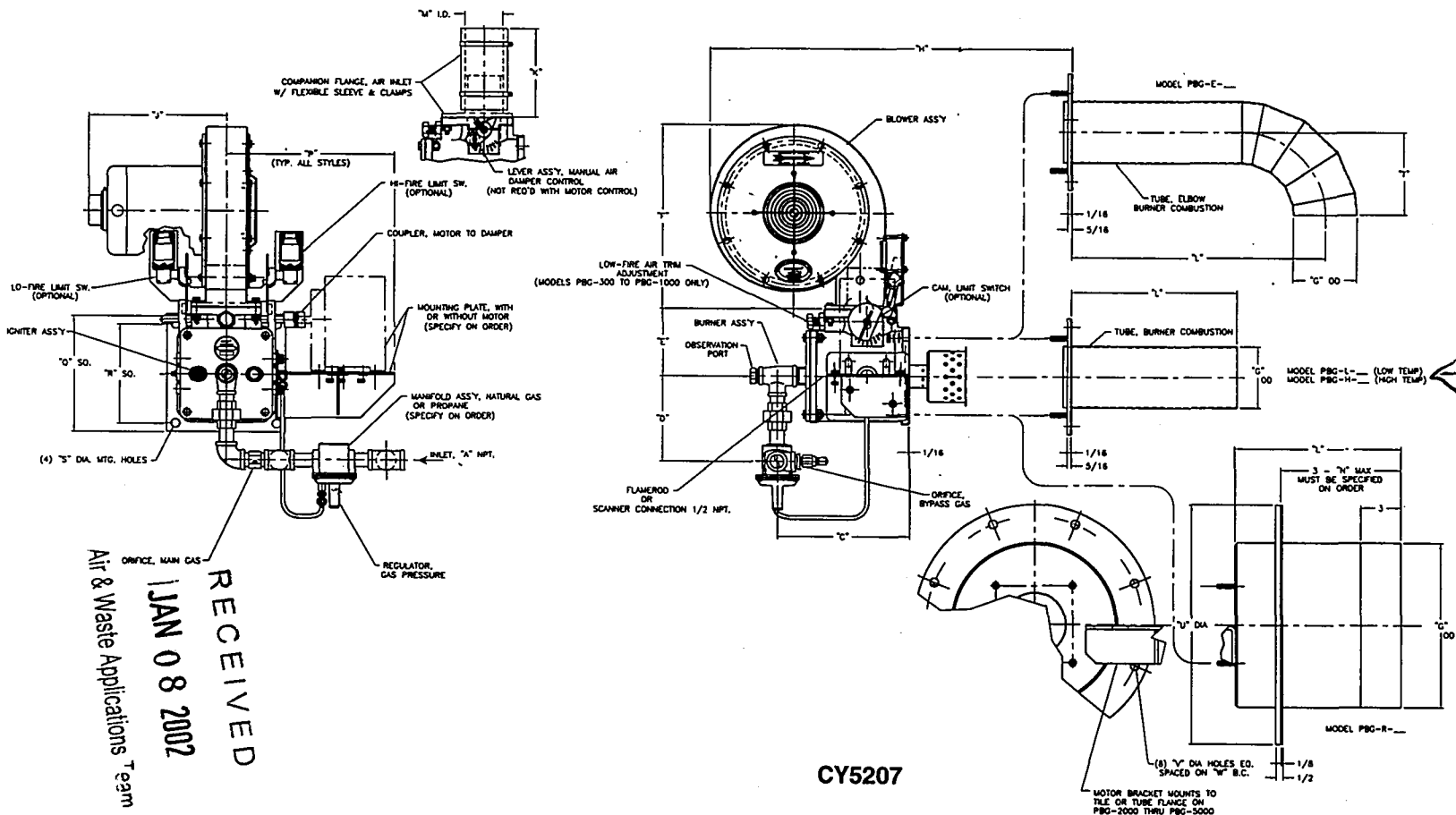
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PBG PACKAGED GAS BURNERS

DIMENSIONS



CY5207

MODEL	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"J"	"K"	"L"	"M"	"N"	"P"	"Q"	"R"	"S"	"T"	"U"	"V"	"W"
PBG-L-300B	3/4 NPT.	11-1/2	9-3/4	6-7/16	4-15/16	13-7/16	3-3/4	15	9-7/8	6-1/2	14	2-7/8	—	12-3/16	8-1/2	7-1/4	5/8	—	—	—	—
PBG-H-300B							10				10							6			
PBG-E-300B							12				17							—			
PBG-R-300B							12				10							—			
PBG-L-500B	3/4 NPT.	11-1/2	9-7/8	6-7/16	4-15/16	13-7/16	4-1/2	15	9-7/8	6-1/2	18	2-7/8	—	12-3/16	8-1/2	7-1/4	5/8	—	—	—	—
PBG-H-500B							12				12							6			
PBG-E-500B							12				19							—			
PBG-R-500B							12				12							—			
PBG-L-750B	1 NPT.	13 3/4	10-11/16	7-11/16	4-15/16	13-7/16	4-7/8	15	10-1/4	6-1/2	18	3-1/2	—	12-3/16	8-1/2	7-1/4	5/8	—	—	—	—
PBG-H-750B							14				14							9			
PBG-E-750B							13				24							—			
PBG-R-750B							13				14							—			
PBG-L-1000B	1 NPT.	13 3/4	10-11/16	7-11/16	4-15/16	13-7/16	5-9/16	15	10-1/4	6 1/2	20	3-1/2	—	12-3/16	8-1/2	7-1/4	5/8	—	—	—	—
PBG-H-1000B							14				14							9-3/4			
PBG-E-1000B							13				24							—			
PBG-R-1000B							13				14							—			
PBG-L-2000B/3000	1-1/2 NPT.	10	16-3/4	10-5/16	6-1/16	16-9/16	8-1/4	17-7/8	12-11/16	9	20	4-1/2	—	13-1/2	16	14	3/4	—	—	—	—
PBG-H-2000B/3000							32-1/2				32-1/2							11-1/2			
PBG-E-2000B/3000							16				18							—			
PBG-R-2000B/3000							16				18							—			
PBG-L-5000	2 NPT.	12 3/4	16-3/4	10 5/8	6-1/16	19 1/2	8 3/4	22-5/16	13 5/8	9	20	4-1/2	—	13-1/2	16	14	3/4	—	—	—	—
PBG-H-5000							32-1/2				32-1/2							11-1/2			
PBG-E-5000							18				20							—			
PBG-R-5000							18				20							—			

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