Item Barcode: **69135947**

Attachment #1

AIR PERMIT

FOLDER LEVEL

AIR PA #: 101467058 000000X

File Type: PERMITS

Volume: 001

Inclusive Dates: ~~10/16/2000 - 12/31/2004~~ 2000-2001

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:

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

January 29, 2001

RECORD 76902

Mr. Sheldon T. Fields
Site Environmental Coordinator
Kimberly-Clark Corporation
6625 Industrial Park Boulevard
Fort Worth, Texas 76180

Re: Permit by Rule Registration
Adhesive Parts Cleaner
Fort Worth, Tarrant County

Dear Mr. Fields:

This is in response to your request to register a heat cleaning device unit under 30 Texas Administrative Code (TAC) Section 106.181 at your facility near Fort Worth in Tarrant County. The information submitted in support of your request has been evaluated and found to be insufficient to determine whether all the requirements of the permit by rule claimed in your registration request and/or 30 TAC Chapter 106 have been met. Therefore, we cannot confirm your claim of this permit by rule at this time.

Deficiencies are summarized below:

The permit by rule which you are seeking should be §106.495 for heat cleaning devices. This permit by rule requires registration by using the form PI-7. Please submit this form.

To assist you in your submittal, a copy of 30 TAC Chapter 106, Subchapter A, and applicable checklists are being provided under separate cover.

You may resubmit, with appropriate corrections, a revised letter and/or a new permit by rule registration request (PI-7). Please include all previously-assigned Texas Natural Resource Conservation Commission Account ID, permit, or permit by rule registration numbers in your new submittal.

You are reminded that Sections 382.0518(a) and 382.057 of the Texas Clean Air Act, Texas Health and Safety Code, Chapter 382, provide that a construction permit must be obtained or a permit by rule fully complied with before work is begun on the construction of a new facility or modification of an existing facility that may emit air contaminants.

Re: Permit by Rule Registration

Your cooperation in this matter is appreciated. If you have any questions concerning this permit by rule, please call Mr. Dario J. Hearns at (713) 767-3740 or write to him at 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,

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

DS/DH/ss

cc: Mr. Tony L. Walker, Air Program Manager, Region 4 - Arlington
Mr. T. C. Michael, Program Manager, Air Pollution Control Program, Department of Environmental Management, Fort Worth

Record No. 76902

AIR PERMIT BY RULE REVIEW

Reg. No. X
Acct. No: NONE

Rec. No. 76902
Date Rec'd: 11/06/00
Date Rec'd Houston 11/20/00

Company: Kimberly-Clarke
Contact Name: Dick Dansereau

County: Tarrant
Phone: (817) 577-6409
Fax:

General Rules Check:

* Project Emissions Acceptable? Yes
* PSD/Nonattainment Netting Req'd? NO
* Sitewide PBR Emissions Acceptable? Yes
* Limits on use of PBRs at this site? No
* NSPS/NESHAPS/MACT Standards Apply? No
* Compliance with all other applicable rules and regulations? Yes

Overall Site / Unit Description:

The company represents that the site is not major.

Project Sources / Facilities, PBRs Claimed, Applicable Standards, Emissions and Control Summary:106.181.

The applicant plans to add an additional process to its existing facility. Existing operations at this facility involve the manufacture and fabrication of disposable medical supplies and related products for sale and use by consumers. This facility does not manufacture any raw components or product packaging materials. The proposed process to be added to the facility is the installation of an adhesive part-cleaning furnace.

Controlled Pyrolysis Cleaning Furnaces are specially designed process ovens used for cleaning metal parts by removing limited amounts of organic hydrocarbon contaminants such as cured paint coatings, charred plastic residues, oil, grease, or other similar organic residues. The furnaces are designed to safely process metal parts with less than 10 percent by weight combustibles. The furnace input is 300,000 BTU/hr. Facility roof has a slight slope. The stack extends more than three feet higher than the highest point on the roof (as represented by applicant).

The estimated emissions associated with this facility are less than 1 tpy for any pollutant.

Site Review required? NO
Public Notice Required? No

Date Approved:
Date Completed Satisfactorily:N/A

Emissions Savings / Reductions due to rule compliance:

NO_X	CO	VOC	PM	SO_2	TPY

Are all general and specific applicable rule conditions satisfied? Yes/~~No~~

Dario J. Hearns 11/18/00
Reviewer/Date

Emmanuel Ukandu
Team Leader/Section Manager/Backup Date

106.495 needs to be claimed.
106.181 does not apply. DH 1/25/01

AIR PERMIT BY RULE REVIEW

Reg. No. X
Acct. No: NONE

Rec. No. 76902
Date Rec'd: 11/06/00
Date Rec'd Houston 11/20/00

Company: Kimberly-Clarke
Contact Name: Dick Dansereau

County: Tarrant
Phone: (817) 577-6409
Fax:

General Rules Check:

* Project Emissions Acceptable? Yes
* PSD/Nonattainment Netting Req'd? NO
* Sitewide PBR Emissions Acceptable? Yes
* Limits on use of PBRs at this site? No
* NSPS/NESHAPS/MACT Standards Apply? No
* Compliance with all other applicable rules and regulations? Yes

Overall Site / Unit Description:

The company represents that the site is not major.

Project Sources / Facilities, PBRs Claimed, Applicable Standards, Emissions and Control Summary:106.181.

The applicant plans to add an additional process to its existing facility. Existing operations at this facility involve the manufacture and fabrication of disposable medical supplies and related products for sale and use by consumers. This facility does not manufacture any raw components or product packaging materials. The proposed process to be added to the facility is the installation of an adhesive part-cleaning furnace.

Controlled Pyrolysis Cleaning Furnaces are specially designed process ovens used for cleaning metal parts by removing limited amounts of organic hydrocarbon contaminants such as cured paint coatings, charred plastic residues, oil, grease, or other similar organic residues. The furnaces are designed to safely process metal parts with less than 10 percent by weight combustibles. The furnace input is 300,000 BTU/hr. Facility roof has a slight slope. The stack extends more than three feet higher than the highest point on the roof (as represented by applicant).

The estimated emissions associated with this facility are less than 1 tpy for any pollutant.

Site Review required? NO
Public Notice Required? No

Date Approved:
Date Completed Satisfactorily:N/A

Emissions Savings / Reductions due to rule compliance:

NO_x	CO	VOC	PM	SO_2	TPY

Are all general and specific applicable rule conditions satisfied? Yes ~~No~~

Dario J. Hearns 11/18/00
Reviewer/Date

Emmanuel Ukandu
Team Leader/Section Manager/Backup Date

106.495 needs to be claimed.
106.181 does not apply. DH 1/25/01

11/09/2000 **NSR PERMITS IMS - PROJECT RECORD** 13:19:31

PROJECT#: 76902 | PREPERM: | GROUP: PBRT | PERMIT #: X
RECEIVED: 11/06/2000 | REG6NOV: | TECHENGR: ~~BOU1~~ DSH1 | PROJTYPE: XLTR
FEE DATE: | DATE BO: | Emmanuel O. Ukandu | STDX1/SP: 181
FEE AMT.: $ 0 | BD-ORD#: - - | NEWJOBS: 0 | 182(F): N/F
| | | PSD-TX #: <NONE>
ISSUED TO: Kimberly-Clark Corporation | PROJLINK: <NONE>

<PRIMARY CONTACT INFORMATION>

NAME: Mr. Dick Dansereau | TITLE: Director-Operations, Tecnol
BUILDING: 6625 Industrial Park Blvd. | PHONE: (817) 577-6409
STREET: 6625 Industrial Park Blvd. | FAX: ( ) -
CITY, STATE, ZIP: Fort Worth, Texas, 76180 | COUNTRY: US

<PROJECT INFORMATION>

UNIT: Installation of Adhesive Part-Cleaning | SIC: | REGION: 4
ACCOUNT: - - | SCC: | COUNTY: TARRANT
UNITTYPE: | CAPACITY: | LAT: | CITY: Fort Worth
LOCATION: 6625 Industrial Park Blvd. | CAPUNITS: | LONG:
DETAIL:

PAR RECD: 11/06/2000 | DEFICIENT LETTER: | RFC-SR:
PAR TRANS: 11/10/00 | TECH. COMPLETE: 12/18/00 | RFC-DSC:
PAR STAFF: RRR1 | COMPLETE LETTER: 12/18/00 | ADMIN DEFICIENT:
ADMINCOMP: | ED AGENDA POST: | ESOC:
TRANSENGR:

<TONS/YR REDUCTION>	NOX	CO	VOC	PM	SO2
NSRP REDUCTIONS	0.0	0.0	0.0	0.0	0.0

STATUS:

<PROJECT ACTIVITY HISTORY>

NO	DATE	CODE	NO	DATE	CODE	TELCONS	NO	MISC.	MIS CODE
1	/ /		1	/ /		/ /	1	/ /	
2	/ /		2	/ /		/ /	2	/ /	
3	/ /		3	/ /		/ /	3	/ /	
4	/ /		4	/ /		/ /	4	/ /	
5	/ /		5	/ /		/ /	5	/ /	
6	/ /		6	/ /		/ /	6	/ /	
7	/ /		7	/ /		/ /	7	/ /	
8	/ /		8	/ /		/ /	8	/ /	
9	/ /		9	/ /		/ /	9	/ /	
10	/ /		10	/ /		/ /	10	/ /	

<CODES: E=ENGINEER, C=COMPANY, O=OTHER, ?=PARTIAL, *=COMPLETE>

NSPS CODE:	N.A. COUNTY: YES	NON-PSD-MAJOR: ???	<LOCAL PROGRAMS>
NESHAP CODE:	N.A.NET.REQ: ???	PSD NET. REQ: ???	COUNTY: NO
MACT CODE: ???	N.A.REV.REQ: ???	PSD REV. REQ: ???	CITY: NO

<PROJECT DISPOSAL>

CHIEF SIGN: | BY:
DATE ISSUED: | CODE:

PROCESSING DAYS & RESPONSIBILITY 11/09/2000
>> ENG: 3 COMP: 0 OTHER: 0
WARN: 42 Days till BACKLOG.

RECEIVED
NOV 20 2000
REGION 12

AIR:\ALNSRVFP\ZIMS\RPTS\MIKIEW1.FRX 14DEC00 PAGE 1

Date: 11/09/2000

NSRP IMS - PUBLIC NOTICE

PROJECT#: 76902 PERMIT #: X ACCOUNT: - - TECHENGR: EOU1

ISSUED TO: Kimberly-Clark Corporation

<Public Notice>

Public Notice Required?: ???

<Public Notice One>

Authorization Date:
Publication Date:
End of Notice Period:
Alternative Language Required:

<Public Notice Two>

Authorization Date:
Publication Date:
End of Notice Period:
Alternative Language Required:

<Public Meeting>

Date First Requested:
Date of Meeting:
Disposal Code (PM,PH,W):
Number of Requests: 0

<Public Hearing>

Date First Requested:
Date of Meeting:
Disposal Code (PM,PH,W):
Number of Requests: 0

<Response to Comments>

Start of RTC Draft Period:
End of RTC Draft Period:
Date RTC Sent to Legal:
Date RTC Filed with OCC:
Start of Comment Period:
End of Comment Period:

<Miscellaneous>

No. of Mailing List Requests: 0
Number of Comments: 0

11/09/2000 **NSR PERMITS IMS - RELATED PROJECTS** 13:19:32

PROJECT#: 76902 GROUP: PBRT PERMIT #: X STDX1/SP: 181
RECEIVED: 11/06/2000 TECHENGR: EOU1 PROJTYPE: XLTR PSD-TX #: <NONE>
ISSUEDTO: Kimberly-Clark Corporation PROJLINK: <NONE>
UNITNAME: Installation of Adhesive ACCOUNT: - -

** NOTE1 (TECH): NONE

** NOTE2 (PROV): NONE

EMISSION RATES: No Emission Rates to report for this project.

<No Valid Relations Exist>

REC#	ENGR	PERMIT#	TYPE	COMPANY	UNIT	RECEIVED	DISPOSED	CODE	PSDTX#
0						/ /	/ /		

Mr. Dick Dansereau
Director-Operations.
Kimberly-Clarke Corporation
6625 Industrial Park Blvd
Fort Worth, Texas 77030

Tech says 106.181
X1-Letter says 106.182
What is company claiming?

Re: Permit by Rule Registration No. X
Adhesive Part Cleaner
Fort Worth, Tarrant County
Account ID No.

Dear Mr. Dansereau:

This is in response to your letter dated October 16, 2000, concerning the installation of a natural gas Controlled Pyrolysis cleaning furnace model number IGG-71. We understand that this unit is rated at 300,000 Btu/Hr

After evaluation of the information which you have furnished, we have determined that your proposed installation is authorized under 30 Texas Administrative Code (TAC) Section(s) 106.182 if constructed and operated as described in your registration request. This permit(s) by rule(s) was authorized by the Texas Natural Resource Conservation Commission (TNRCC) pursuant to 30 TAC Chapter 106.

A copy of the permit(s) 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.

Re: Permit by Rule Registration No. X

Your cooperation in this matter is appreciated. If you have any questions concerning this permit(s) by rule(s), please call Mr. Dario J. Hearns at 713-767-3740 or write to him at 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,

Duncan F. Stewart, P.E., Manger
Permits By Rule/General Operating Permits Section

DH/DS

Enclosure

cc: Mr. Tony Walker, Air Program Manager, Arlington

AIR PERMIT BY RULE REVIEW

Reg. No. X
Acct. No: NONE

Rec. No. 76902
Date Rec'd: 11/06/00
Date Rec'd Houston 11/20/00

Company: Kimberly-Clarke
Contact Name: Dick Dansereau

County: Tarrant
Phone: (817) 577-6409
Fax:

General Rules Check:

* Project Emissions Acceptable? Yes
* PSD/Nonattainment Netting Req'd? NO
* Sitewide PBR Emissions Acceptable? Yes
* Limits on use of PBRs at this site? No
* NSPS/NESHAPS/MACT Standards Apply? No
* Compliance with all other applicable rules and regulations? Yes

Overall Site / Unit Description:

The company represents that the site is not major.

Project Sources / Facilities, PBRs Claimed, Applicable Standards, Emissions and Control Summary:106.181.

The applicant plans to add an additional process to its existing facility. Existing operations at this facility involve the manufacture and fabrication of disposable medical supplies and related products for sale and use by consumers. This facility does not manufacture any raw components or product packaging materials. The proposed process to be added to the facility is the installation of an adhesive part-cleaning furnace.

Controlled Pyrolysis Cleaning Furnaces are specially designed process ovens used for cleaning metal parts by removing limited amounts of organic hydrocarbon contaminants such as cured paint coatings, charred plastic residues, oil, grease, or other similar organic residues. The furnaces are designed to safely process metal parts with less than 10 percent by weight combustibles. The furnace input is 300,000 BTU/hr. Facility roof has a slight slope. The stack extends more than three feet higher than the highest point on the roof (as represented by applicant).

The estimated emissions associated with this facility are less than 1 tpy for any pollutant.

Site Review required? NO
Public Notice Required? No

Date Approved:
Date Completed Satisfactorily:N/A

Emissions Savings / Reductions due to rule compliance:

NO_X	CO	VOC	PM	SO_2	TPY

Are all general and specific applicable rule conditions satisfied? Yes

Dario J. Hearns 11/18/00
Reviewer/Date

Emmanuel Ukandu
Team Leader/Section Manager/Backup Date

October 16, 2000

Texas Natural Resource Conservation Commission
Office of Air Quality
NSR Division (MC-162)
P.O. Box 13807
Austin, TX 78711-3087

Re: Kimberly-Clark Corporation
Tecnol Operations
Fort Worth, Texas
Title 30 TAC 106.4 Exemption from Permitting Notification

Dear Sir or Madam:

Kimberly-Clark Corporation, Tecnol Operations plans to add an additional process to its existing facility located at 6625 Industrial Park Blvd, Fort Worth, Texas. Existing operations at this facility involve the manufacture and fabrication of disposable medical supplies and related products for sale and use by consumers. This facility does not manufacture any raw component or product packaging materials. The proposed process to be added to our facility is the installation of an adhesive part-cleaning furnace.
In support of this permit by rule notification, the following information is attached for your review:

- Section 106.4 "Quick Check" Applicability Checklist
- Process Description
- Copy of the Applicable TAC Title 30 Rule 106.181
- Vendor Supplied Equipment Specification Sheet
- Copy of the Applicable Chapter of the Unit Installation, Operation and Maintenance Manual Outlining Stack Installation and Venting.

Should there be any questions regarding this submittal, please contact Sheldon T. Fields, Site Environmental Coordinator, at 817-577-6409.

Sincerely,

Dick Dansereau
Director of Operations, Tecnol

Cc: TNRCC Region 4 Office
Fort Worth Department of Environmental Management Office
Elizabeth Allen – Roswell E&E
Sheldon T. Fields – Tecnol Environmental Coordinator

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION
AIR PERMITS DIVISION

TITLE 30 TAC § 106.4 "QUICK-CHECK" APPLICABILITY CHECKLIST

Company Name: KIMBERLY-CLARK/TECNOL CORPORATION
Checklist completed by: SHELDON T. FIELDS-ENVIRONMENTAL COORD. Date: 11 OCT 00
Facility Type: DISPOSIBLE MEDICAL PRODUCTS MANUFACTURING FACILITY
Permit(s) by rule claimed: 30 TAC Chapter §106: 181
Project Description (including equipment, materials, and brief process description): PLEASE SEE ATTATCHED PROCESS DISC.
*FURNACE INPUT, (BTU/HR): 300,000 - PLEASE SEE ATTATCHED, VENDOR SUPPLIED SPEC SHEET
*FACILITY ROOF HAS A SLIGHT SLOPE. STACK OUT EXTENDS MORE THAN (3)THREE FEET HIGHER THAN THE HIGHEST POINT OF THE ROOF. STACK WAS INSTALLED IN ACCORDANCE WITH CHAPTER 3.10 OF FURNACE MANUAL (ATTATCHED).

List the maximum annual emission rates, in TONS PER YEAR (TPY), for this project:

CO	0.104	NO_x	0.056	VOC	0
PM	0.028	SO_2	0.0038	Other HYDROCARBONS	0.036

The following questions require a "Yes" or "No" answer to be indicated for this permit by rule claim:

A. Title 30 TAC § 106.4(a)(5): Current Permit by Rule Requirements

Yes ~~No~~ Have you checked to determine if this exempt project is being claimed under the current version of 30 TAC 106?
If "Yes", continue to next question
If "No", please contact the TNRCC Air Permits Division for a copy of the current permit by rule to be claimed.

B. Title 30 TAC § 106.4(a)(7): Permit by rule prohibition check

~~Yes~~ No Are there any air permits under the same account containing permit conditions which prohibit or restrict the use of permits by rule?
If "No", continue to next question
If "Yes", permits by rule may not be used or their use must meet the restrictions of the permit.
A new permit or permit amendment may be required.
List permit number(s): _____

C. Title 30 TAC § 106.4(b): Circumvention check

Title 30 TAC § 106.4(b) states "No person shall circumvent by artificial limitations the requirements of §116.110 of this title (covering permitting)." Circumvention by artificial limitations may include but is not limited to:

A. dividing a complete project into separate segments to circumvent §106.4(a)(1) limits;
B. claiming feed or production rates below the physical capacity of the project's equipment in order to begin constructing facilities before a permit or permit amendment is approved for full scale operations, particularly when the unit will not be economically viable at less than permitted capacity;
C. claiming a limited chemical list in order to begin constructing facilities before a permit or permit amendment is approved for additional chemicals, particularly when the unit will not be economically viable until the additional chemicals are authorized.

~~Yes~~ No Does your project meet any of the criteria listed above?
If "No", continue to next rule question
If "Yes", a permit by rule may not be claimed

RECEIVED
NOV 06 2000
PAR SECTION

D. Title 30 TAC § 106.4(c) and (d): Compliance with all Rules

Yes ~~No~~ Will the facility comply with all rules and regulations of the TNRCC, the intent of the Texas Clean Air Act, and any local permitting or registration requirements?
If "Yes", continue to next rule question
If "No", a permit by rule may not be claimed.

E. Title 30 TAC § 106.4(a)(1): Emission limits check

Yes ~~No~~ The maximum emissions from all facilities at the site, including this permit by rule claim, are less than 25 tpy of any contaminant.
If the answer to this questions is "Yes", no further review is needed to complete this checklist.
Forward all information needed to verify your permit by rule claim to the TNRCC.
If "No", this checklist cannot be used. Please complete the standard 30 TAC § 106.4 Applicability Checklist

d:\easywrit\gary\misc/22

PROCESS DESCRIPTION FOR OPERATION OF "CONTROLLED PYROLYSIS"

CLEANING FURNACES

Basic Uses Of The Furnaces:

Controlled Pyrolysis^{tm} Cleaning Furnaces are specially designed process ovens used for cleaning metal parts by removing limited amounts of organic hydrocarbon contaminants such as cured paint coatings, charred plastic residues, oil, grease, or other similar organic residues. The furnaces are designed to safely process metal parts with less than 10 percent by weight combustibles. Typically, most loads are significantly less than this, usually in the range of 2 to 5 percent, or less of combustibles on metal. Controlled Pyrolysis Cleaning Furnaces are not incinerators, thus metal parts with combustible loadings of greater than 10 percent by weight must not be processed in these units. Typically, the metal load to the furnace is 95-98 %.

Limitations:

Combustible material that contains halogenated elements such as chlorine or fluorine must not be processed in these furnaces as they will form dangerous toxic and corrosive products. PVC (polyvinyl chloride) and Teflon are the most common examples of these materials. Both the instruction manual and a WARNING sign on the front door instruct that halogenated materials must not be processed in these heat cleaning furnaces.

Pollution Control:

All cleaning furnace models manufactured by Pollution Control Products Co. have integral afterburners built into the process, with all models sizes operating with a minimum of 0.5 seconds total residence time in the afterburner with a minimum of 1400 degrees F. Actual control set-point is 1500 degrees F for the patented "Controlled Pyrolysis" operating system.

INSTRUCTIONS:

A copy of the Installation, Operation, and Maintenance Manual is located on all models in a special bracket labeled "Instruction Manual".

FUELS:

All models manufactured by Pollution Control Products Co. utilize heat input and afterburners which operate only on natural gas, propane, or No. 2 fuel oil.

EMISSIONS:

The high efficiency afterburner ensures that no visible smoke or odor is produced from the stack emissions. The combination of the high efficiency afterburner coupled with inherently small amounts of combustible material processed results in very low emissions for this type of process oven.

PLEASE SEE ATTACHED INSTRUCTION MANUAL FOR MORE DETAILED INFORMATION.

<<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 §106.181 **Small Boilers, Heaters, and Other Combustion Devices**

(a) Small 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 all the conditions of this section are met.

(b) Combustion units may burn used oil as a fuel as long as the used oil has not been mixed with hazardous waste and the combustion unit meets the following conditions:

(1) the combustion unit or combination of combustion units at the same account have a maximum capacity of 1.0 million Btu per hour (MMBtu/hr) and each individual combustion unit is not greater than 0.5 MMBtu/hr;

(2) the combustion gases from the combustion unit(s) are vented to the ambient air in accordance with the following requirements:

(A) through an unobstructed vent; or

(B) through a vertical vent with a cap; and

(i) a flat roof, through a minimum of a three-foot stack; or

(ii) a sloped roof, through a stack that is at least three feet higher than the highest point on the roof or three feet higher than a point extending ten feet horizontally from the roof; and

(3) the combustion unit(s) burns only used oil the owner or operator generates on-site or used oil received from household do-it-yourself used oil generators.

Source Note: The provisions of this §106.181 adopted to be effective December 27, 1996, 21 TexReg 12123; amended to be effective September 4, 2000, 25 TexReg 8653

Next Page Previous Page

List of Titles Back to List

HOME | TEXAS REGISTER | TEXAS ADMINISTRATIVE CODE | OPEN MEETINGS | HELP |

INSTALLATION, OPERATION, AND MAINTENANCE MANUAL

CONTROLLED PYROLYSIS ®

CLEANING FURNACE

Model No: IGG-71

Serial No.: 4865

Type of Gas: NAT

Input, (Btu/Hr): 300,000

Date Manufactured: 8-30-00

Special Features (As Marked): ___ Rapid Heat Afterburner; ___Additional Flame Safeguards

✓ Audible/Visual Alarm; ✓ Purge Timer; ___Battery Back-Up,

✓ Electric Door Lock; ___ Chart Recorder; ✓ Other (Describe): SHIELD AROUND TOP RELIEF DOORS ; FISHER TYPE S102 GAS PRESSURE REGULATOR WITH 3/4" BODY, 8"-15" W.C. SPRING, & 1/4" ORIFICE

Please read and follow these instructions very carefully. The Safety of your employees and your shop, as well as the success of this process, depend absolutely on the Operator observing all precautions outlined in these instructions and any other common sense measures of safety that may be indicated. Do not allow anyone to operate this equipment until he understands fully how it works and what it is supposed to do. The manufacturer assumes no responsibility for uncontrollable fires, damages to the premises, to the furnace, its contents, or to individuals.

Manufactured by

POLLUTION CONTROL PRODUCTS CO.

2677 Freewood Drive
Dallas, Texas 75220
214-358-1539
U.S.A

Unit 33, Hobbs Industrial Estate, Newchapel, Surrey England RH7 6HN
(1342) 834659
ENGLAND

3.10. Stack Installation And Venting

Going straight up through the roof above the furnace is the simplest and safest method of installing the insulated chimney exhaust stack of the furnace. The furnace must be installed on a non-combustible floor (no wood) with both the furnace and the exhaust stack clear of any combustible material. *Follow clearances for the furnace and chimney stack as shown on the drawings at the end of this chapter.*

The cleaning furnace is supplied with three sections of insulated chimney which are included in the cost of the furnace (furnaces with J-121 burners are supplied with 5 sections). These sections snap together and must be fastened with screws. The Factory Test Sheet located at the end of Chapter 11 should indicate the type of burners supplied with your furnace. Necessary

accessories for installing the stack such as an adjustable flashing, a rain cap, a storm collar, a length of sealant to seal the storm collar around the chimney, and a tube of fire-clay mortar to seal chimney joints are included, plus screws to fasten the chimneys together. Refer to the drawings at the end of this Chapter for proper furnace and stack installation. Depending on the height of the furnace model and the height of your roof, it may be necessary to purchase additional sections of insulated chimney from the Factory to go through the roof and have adequate clearance. **The top of the stack must end five feet or more above a flat roof, or above the peak of a pitched roof if the stack is near the peak. Combustible roofs, ceilings, and walls will require a sheet metal stack thimble available from the factory.** Local or city codes may have additional or different requirements. Consult the Factory with any questions.

The first three-foot section of stack over the furnace contains a hole for the stack thermocouple. This section must always be installed first!

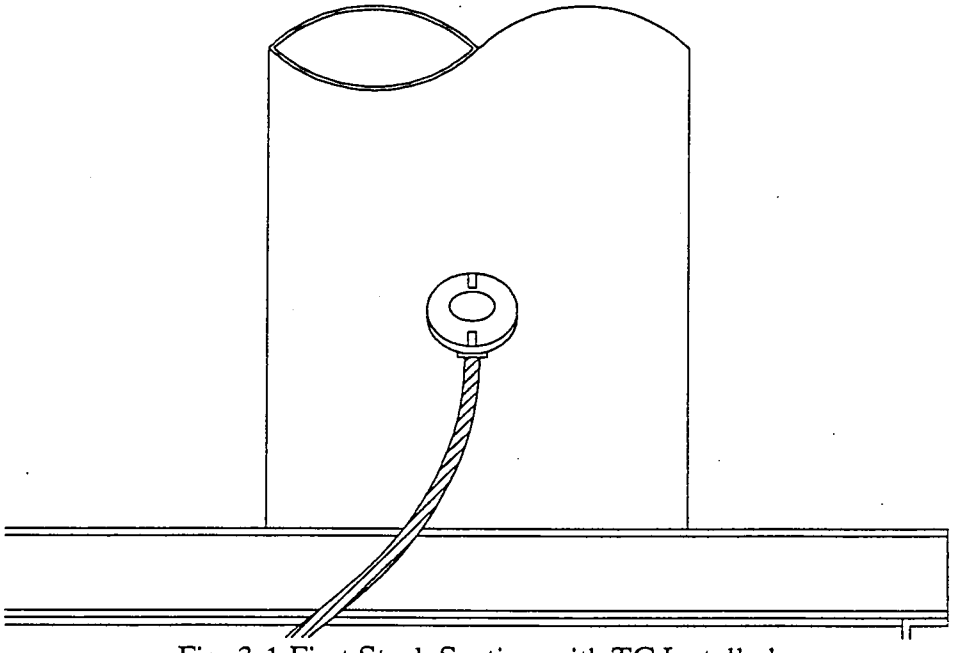

Fig. 3-1 First Stack Section with TC Installed

When installing the furnace and chimney, please use common sense to preclude any danger from either the furnace or the exhaust stack; keep away from this equipment anything flammable or combustible that may cause a fire. Do not add additional insulation to any part of the furnace, or to any part of the chimney stack; clear it away at least 12 inches from the walls, the roof, or wherever it may be touching or near the stack. Such insulation interferes with the natural heat flow and dispersal through the walls of the furnace and the walls of the chimney and may cause overheating problems

and even a fire. **Caution! Do not enclose the exhaust stack or the furnace in any type of enclosure without consulting the Factory.**

You must install at least 3 sections (9 feet) of stack on the furnace in order to provide the required retention time at temperature in the afterburner to meet EPA guidelines. If your furnace is equipped with J-121 burners, you must install a minimum of 5 sections (15 feet of stack) on the furnace. The EPA requires that the exhaust gases be maintained at about 1400°F for a minimum of 1/2 second before being exhausted to atmosphere in order to insure complete destruction of the smoke and Pyrolysis gases.

WARNING

You must maintain required clearances (air spaces) to combustible materials. Do not place any type of insulation or combustible material in the required clearances surrounding the chimney at any point.

Warning: Use only PCPC factory-supplied insulated chimney sections and accessories. These chimneys are not available from other sources. Use of other than factory-supplied chimneys will void the warranty on your furnace and can be a dangerous fire hazard. Do not use any other exhaust stack, insulated or not, without consulting the Factory.

The chimneys furnished by the Factory are designed to operate continuously at exhaust gas temperatures of 1400° to 1600°F (760° to 871°C), and can withstand temperatures of up to 2300°F. Surface temperatures *on the outside of the chimney will then be about 210°F when 1400°F on the inside and 250°F when 1600°F on the inside:* ***Do Not Touch!***

Insulated chimneys are 35 3/4 inches long with a diameter depending on the size of the furnace. The outer shell is roll-formed stainless steel and the male (upper) end of the shell has a corrugated end and a series of catches punched into that corrugated end. The female (lower) end of the shell has an edge turned in and flattened for 1/4 inch which snaps over the catches on the male end. This feature locks the two pieces together when they are installed one above the other. The female end also has four (4) punched holes to accept screws and four (4) #10 x 5/8" self-drilling hex headed screws are provided for each exhaust stack. These screws will either be placed in a plastic bag and attached to the exhaust stack, or they can be found in the tool box which is shipped with each furnace. Use these screws to permanently fasten two

sections together. You will also need to use these screws to secure the first section of chimney to the top outlet of the furnace.

Each chimney section is insulated with two inches of Kaowool® ceramic fiber blanket insulation wrapped around 3 hard sleeves also made of Kaowool® but hardened to hold their shape as cylinders with a fixed inside dimension. The insulation-wrapped 3-foot section is trimmed to length, compressed, and inserted into the outer shell until the end of the insert reaches the male end of the shell. The length of the insert leaves a 1 3/4" void of insulation at the female end that accepts the male end so that the insulation in each section will contact each other when the chimneys are installed one on top of the other. *Kaowool is a registered trademark of Thermal Ceramics Inc.*

When you receive and unpack your insulated chimney and/or insulated elbow sections, visually check them for damage before installation. If any of the insulation inside of a chimney or elbow is missing or broken, contact the Factory before installation to determine if it needs to be replaced. Check that all of the screws for fastening the stack together have been shipped and also check to be sure that a tube of fire-clay mortar is in the shipment. The screws and fire-clay mortar are normally packed in the tool box which is shipped with each furnace. Any slight cracks in the sleeves can be repaired by use of the fire-clay mortar to fill the cracks.

The tube of fire clay mortar which is packed in the tool box shipped with the furnace is provided to seal the seams between the insulated chimneys and/or elbow sections. To use, run a 1/2" bead of mortar around the top of the hard sleeve of each section before installing the next section on top of the first one. Seat each section firmly, making sure the sections latch together. Use an electric drill to install the 4 screws to make a secure connection between each section.

If the vent stack must be offset for some reason, 45- and 90-degree insulated elbows are available from the Factory. Insulated elbows are assembled in the same manner as the straight insulated chimneys and are secured using the 4 screws supplied. See the drawings at the end of this Chapter which show the dimensions of the insulated elbow sections. **Do not install a 45- or 90-degree elbow directly on top of the furnace. The first three foot section of stack on top of the furnace must be a straight section.** One of the stack sections shipped with your furnace will have a 7/8" diameter hole pre-drilled in the side about 10" from the female end in order to accept the stack thermocouple. This section must be installed first. Use an electric drill to install the 4 screws to secure the first section to the top outlet of the furnace. When using 45 or 90 degree elbows, non-combustible supports must be

provided under the elbows themselves and under any long horizontal runs in order to provide adequate support for the exhaust stack. If you are using 90 degree elbows in your installation, do not run more than 3 sections (9 feet) of horizontal run without consulting the Factory. The reason for this is that horizontal runs of exhaust stack typically result in a pressure drop and long horizontal runs can cause a positive pressure condition inside the furnace. This can cause smoke to leak out of the furnace around the door gaskets and other openings during periods of water spray. ***The exhaust stack must end in a vertical position,*** not facing horizontally in order to prevent wind from blowing in the open end and affecting the operation of the furnace.

Depending on the total height and weight of your chimney stack, it may be necessary to provide lateral support and/or vertical support for the stack sections. If properly secured with screws at the furnace and at each chimney joint, up to 5 straight-up chimneys will be supported laterally both at the furnace and at the roof flashing , and the furnace itself can vertically support the weight of up to 10 chimney sections. Chimney stacks using elbows must be supported both vertically and laterally. The easiest way to provide lateral support is to fabricate a 3" wide metal band which can be clamped around the stack and attach guy wires or rigid supports to this band. See the drawing at the end of this chapter which shows how this band is made. If you choose to make your own band, you may make one according to this drawing, or you may purchase one from the Factory. ***All stack supports must be non-combustible.*** Remember that when using 45- or 90-degree elbows, non-combustible supports must be provided under the elbows themselves and under any long horizontal runs in order to provide adequate support for the exhaust stack.

Other stack accessories included with the furnace are 1) a galvanized roof flashing adjustable for a flat roof or a pitched roof up to a 1-in-12 pitch, 2) a rain cap, 3) a storm collar to seal the chimney where it goes thru the roof flashing , and 4) a piece of sealant tape to go on top of the flashing and under the storm collar to make a waterproof seal around the chimney. The outer edges of the roof flashing must be sealed to the roof with silicone rubber or other heat-resistant sealant. **Combustible material must be kept away from the chimney.**

3.11. Stack Installations Requiring a Draft Damper

With stack heights of 9 to 15 feet, the furnace chamber will normally achieve small negative drafts of -0.08 to -0.15 inches of water column. If the total stack height on the furnace is 24 feet or more above the floor (30 feet for furnaces with Incinomite J-121 burners), a special section of stack with a

draft damper installed should be installed. The purpose of the draft damper is to limit the stack draft to an acceptable value. If you are unable install the draft damper in the recommended location, please contact the factory to discuss other possible locations.

DO NOT INSTALL THE DRAFT DAMPER SECTION IN THE FIRST NINE FEET OF STACK (FIFTEEN FOR J121 BURNERS)!

Installation of Draft Damper

In order to provide proper control, the damper must be installed in the 4th or 5th section of stack (6th or 7th section for furnaces with J-121 burners) above the furnace and must be in the same room as the furnace. If your furnace requires a draft damper, it should be shipped with the furnace along with an installation collar which must be installed first. Follow the instructions below, and refer to Figure 3.3 to install the collar.

1. Bend the two ears at the front corners of each collar half outward to 90 degrees, 1/4" behind the single hole in the strap.

2. Insert clamping screws in the ears on the collar, and bolt the remainder of the collar halves together to form a complete collar.

3. If your installation requires a draft damper, one of the stack sections should already have a hole cut in the side for installation of the collar. Strap the collar to this stack section at the location of this opening.

4. Bend the tabs on the stack section outward against the inside of the collar to make a tight joint.

Once the collar has been installed, you are ready to install the draft damper. For installation in the furnace stack, the damper must be set up as Single-Acting in order to prevent the possibility of any stack gases entering the room. follow the instructions below and refer to figure 3.1 to install the damper.

1. Insert the draft control into the collar. The front face of the control **must be plumb.** The bearing surfaces **must be level** whether the control is on a horizontal, vertical, or sloping stack. Use a spirit level, plumb and level accurately.

2. Secure the draft control in the collar by tightening the clamping screws. If the control has any tendency to sag, support it from the ceiling by wire or by strapping.

3. The control is shipped for installation in a vertical stack. If the control is installed in a horizontal stack, remove the screw from the upper hole in the weight lever and insert it in the lower hole.

4. With the damper installed, adjust the furnace draft to the proper level (-0.08 to -0.15 inches water column) by adding or removing the washer type weights supported by the two chains. **Do not remove the large weights attached directly to the gate,** as they are use only for factory adjustment. In order to obtain the correct draft setting, the furnace and stack temperatures must be above certain levels. See the additional instructions below for the correct temperatures to be used for setting the draft control.

The draft inside the furnace should be about -0.10 inches of water column, but may range from -0.08 to -0.15 inches water column. If the draft is less than this, the furnace chamber pressure might go positive during periods of water spray, causing some smoke to seep out around the gaskets. At higher negative drafts excess air is pulled into the furnace. This is detrimental for two reasons: First, the furnace will be slower to heat up and maintain temperature. Secondly, a large amount of excess air leakage into the furnace dilutes the partially-inerted combustion gases from the primary burner and thus raises the oxygen level of the furnace atmosphere. Insufficient inerting of the chamber could cause difficulty in controlling the Pyrolysis process and even possibly lead to a fire. Large amounts of excess air leakage into the furnace can also lower the idling temperature of the afterburner below the optimum 1400 °F (760 °C) required for complete combustion of the Pyrolysis products.

When a Draft Damper section of stack is installed, the draft inside the furnace is controlled by adjusting the number of washers (weight) on the draft control. This should be done when the furnace temperature is 800-900°F (427-482°C)and the stack temperature is about 1400°F (760°C). The simplest method of measuring the draft for adjustment is to loosen the manual high limit temperature switch which goes through the wall of the furnace next to the furnace thermocouple. Pull the temperature switch out of the furnace temporarily. A piece of 1/4 inch copper or stainless steel tubing can be pushed inside the furnace and connected to a draft gauge (manometer). If you do not have a draft gauge, an inexpensive manometer can be purchased from the Factory, or you may purchase a manometer direct from Grainger Industrial Supply (Dwyer Mark II Molded Plastic Manometer, Grainger stock No. 2T650). Once the draft damper washers are adjusted to give the proper draft, be sure to replace the high limit temperature switch and re-tighten its set screw.