TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 5, 2009

MR ERICK KIIHNE
PLANT MANAGER
CHAMPION TECHNOLOGIES INC
PO BOX 450499
HOUSTON TX 77245-0499

Permit by Rule Registration Number:	88068
Location/City/County:	3130 FM 521 Rd, Fresno, Fort Bend County
Project Description/Unit:	Champion Technologies Fresno
Regulated Entity Number:	RN101618882
Customer Reference Number:	CN600361869
New or Existing Site:	Existing
Affected Permit (if applicable):	4005
Renewal Date (if applicable):	None

Champion Technologies Inc has certified the emissions associated with the change of service for Tank T-7967 to a 50% Gluteraldehyde/water solution at the Champion Technologies Fresno under Title 30 Texas Administrative Code § 106.262.

For rule information see: http://www.tceq.state.tx.us/permitting/air/nav/numerical_index.html

No planned MSS emissions have been represented or reviewed for this registration and none will be authorized. The company is also reminded that these facilities may be subject to and must comply with other state and federal air quality requirements.

All analytical data generated by a mobile or stationary laboratory to support the compliance with an air permit must be obtained from a NELAC (National Environmental Laboratory Accreditation Conference) accredited laboratory. For additional information regarding the laboratory accreditation program, please see the following website which includes the accreditation and exemption information:
http://www.tceq.state.tx.us/compliance/compliance_support/qa/env_lab_accreditation.html

This certification is taken under the authority delegated by the Executive Director of the TCEQ. If you have questions, please contact Mr. John Gott, P.E., at (512) 239-1238.

Sincerely,

Certified Emissions:

VOCs	<0.01	tpy

Anne M. Inman, P.E., Manager
Rule Registrations Section
Air Permits Division

cc: Air Section Manager, Region 12 - Houston

Project Number: 146224

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	88068	*Company Name:*	Champion Technologies Inc	*APD Reviewer:*	Mr. John Gott, P.E.
Project No.:	146224	*Unit Name:*	Champion Technologies Fresno	*PBR No(s).:*	106.262

GENERAL INFORMATION			
Regulated Entity No.:	RN101618882	**Project Type:**	Permit by Rule Application
Customer Reference No.:	CN600361869	**Date Received by TCEQ:**	April 22, 2009
Account No.:	FG-0053-G	**Date Received by Reviewer:**	May 4, 2009
City/County:	Fresno, Fort Bend County	**Physical Location:**	3130 Fm 521 Rd

CONTACT INFORMATION					
Responsible Official/ Primary Contact Name and Title:	Erick Kiihne Plant Manager	**Phone No.:** **Fax No.:**	(281) 710-9592 (281) 710-9500	**Email:**	MIKE.NIMS@CHAMP-TECH.COM
Technical Contact/ Consultant Name and Title:	Orlando F Cardoso Sr Project Manager	**Phone No.:** **Fax No.:**	(281) 710-9553 (281) 710-9550	**Email:**	ORLANDO.CARDOSO@CHAMP-TECH.COM

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?		X	
Are there affected NSR or Title V permits for the project?	X		Permit 4005
Is each PBR > 25/250 tpy?		X	
Are PBR sitewide emissions > 25/250 tpy?		X	
Are there permit limits on using PBRs at the site?		X	
Is PSD or Nonattainment netting required?		X	
Do NSPS, NESHAP, or MACT standards apply to this registration?		X	
Does NOx Cap and Trade apply to this registration?		X	
Is the facility in compliance with all other applicable rules and regulations?	X		

DESCRIBE OVERALL PROCESS AT THE SITE

Champion Technologies, Inc. owns and operates an oil field chemicals and solids blending and manufacturing site under Permit 4005.

DESCRIBE PROJECT AND INVOLVED PROCESS

The company is changing the service on Tank T-7967 a vertical fixed roof tank.

A pressure rated tank, T-7967 will change service to 50% Gluteraldehyde/water solution. Gluteraldehyde is a component on an already permitted line of blended products (82798). A vapor equalization line from the tank to the unloading truck will eliminate tank working losses and since the tank pressure relief devise rating is 25 psig and the vapor pressure of gluteraldehyde is 0.0039 psia, no breathing losses will occur. Therefore, the only emissions from this tank will be fugitive.

The fugitive emissions from this process meet all requirements of PBRs 106.4 and 106.262

No planned MSS emissions have been represented or reviewed for this registration and none will be authorized.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES

The company is claiming VOC emissions of 0.000373 lbs/hr and 0.00163 tpy of VOC. The company speciated the emissions and demonstrated that the Gluteraldehyde emissions will meet the PBR 106.262 limits.

COMMUNICATION LOG

Date	Time	Name/Company	Subject of Communication
5/4/2009	1447	Mr. Orlando Cardoso	Left voice message- are there any MSS emissions?
5/4/2009	1458	Mr. Orlando Cardoso	Answer --No to the above question.
5/4/2009	1519	Mr. Orlando Cardoso	What is the permit at the site? The paperwork states no permit. Answer 4005

PBR Emission Limits		Distance = 600', K= 65				
Chemical	**PBR Claimed**	**L, mg/m³**	**Emission Limit (E = L/K), lb/hr**	**Emission Limit tpy**	**Actual Emissions lb/hr**	**Actual Emissions tpy**
Gluteraldehyde	262	0.2	0.0031	0.0135	0.000373	0.00163

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	88068	*Company Name:*	Champion Technologies Inc	*APD Reviewer:*	Mr. John Gott, P.E.
Project No.:	146224	*Unit Name:*	Champion Technologies Fresno	*PBR No(s).:*	106.262

ESTIMATED EMISSIONS

EPN / Emission Source	Specific VOC or Other Pollutants	VOC		NOx		CO		PM_{10}		SO_2		Other	
		lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
T-7967-2/ Tank		0.000373	0.00163										
TOTAL EMISSIONS (TPY):		0.000373	0.00163										
MAXIMUM OPERATING SCHEDULE:		Hours/Day	24	Days/Week	7	Weeks/Year	52	Hours/Year	8760				

SITE REVIEW / DISTANCE LIMIT	Yes	No	Description/Outcome	Date	Reviewed by
Sit52e Review Required?		X			
PBR Distance Limits Met?	X		The company claims that there is 600' to the nearest receptor.	May 4, 2009	John C. Gott, P.E.

	TECHNICAL REVIEWER	PEER REVIEWER	FINAL REVIEWER
SIGNATURE:	John C. Gott	Jon Edwards	See Hard Copy.
PRINTED NAME:	Mr. John Gott, P.E.	Jon Edwards, P.E.	Ms. Anne M. Inman, P.E., Manager
DATE:	May 5, 2009	May 5, 2009	

BASIS OF PROJECT POINTS	POINTS
Base Points:	1.5
Project Complexity Description and Points: Communications, completion < 14 days	0.25 1.0
Technical Reviewer Project Points Assessment:	2.75
Final Reviewer Project Points Confirmation:	

05/05/2009 ----------NSR IMS - PROJECT RECORD ----------

PROJECT#: 146224 **PERMIT#:** 88068 **STATUS:** PENDING **DISP CODE:** C
RECEIVED: 04/22/2009 **PROJTYPE:** INITIAL **AUTHTYPE:** PBR **ISSUED DT:** 5/5/09
RENEWAL:
PROJECT ADMIN NAME: CHANGE OF SERVICE T-7967
PROJECT TECH NAME: CHAMPION TECHNOLOGIES FRESNO

Assigned Team: RULE REG SECTION

2.75
Jw E

STAFF ASSIGNED TO PROJECT:

GLASPIE-FELIX , SHELIA	- REVIEWR1_2 -	AP INITIAL REVIEW
GOTT , JOHN	- REVIEW ENG -	RR TEAM

CUSTOMER INFORMATION (OWNER/OPERATOR DATA)
ISSUED TO: CHAMPION TECHNOLOGIES INC
COMPANY NAME: CHAMPION TECHNOLOGIES INC
CUSTOMER REFERENCE NUMBER: **CN600361869**

REGULATED ENTITY/SITE INFORMATION
REGULATED ENTITY NUMBER: **RN101618882** ACCOUNT: FG0053G
SITE NAME: CHAMPION TECHNOLOGIES FRESNO

REGULATED ENTITY LOCATION: 3130 FM 521 RD
REGION 12 - HOUSTON NEAR CITY: FRESNO COUNTY: FORT BEND

CONTACT DATA

CONTACT NAME: MR ERICK KIIHNE CONTACT ROLE: RESPONSIBLE OFFICIAL
JOB TITLE: PLANT MANAGER ORGANIZATION: CHAMPION TECHNOLOGIES INC
MAILING ADDRESS: PO BOX 450499 , HOUSTON, TX, 77245-0499
PHONE: (281) 710-9592 Ext: 0
FAX: (281) 710-9500 Ext: 0
EMAIL:MIKE.NIMS@CHAMP-TECH.COM

CONTACT NAME: MR ORLANDO F CARDOSO CONTACT ROLE: TECHNICAL CONTACT
JOB TITLE: SR PROJECT MANAGER ORGANIZATION: CHAMPION TECHNOLOGIES INC
MAILING ADDRESS: PO BOX 450499 , HOUSTON, TX, 77245-0499
PHONE: (281) 710-9553 Ext: 0
FAX: (281) 710-9550 Ext: 0
EMAIL:ORLANDO.CARDOSO@CHAMP-TECH.COM

PROJECT NOTES:
04/28/2009 REQUESTED UPDATED PI-7 CERT AND ORIGINALS TO BE MAILED IN
PERMIT NOTES:
05/04/2009 PBR SHOULD BE INCORPORATED INTO PERMIT 4005 WHEN NEXT AMENDED OR RENEWED.

FEE:

Reference	Fee Receipt Number	Amount	Fee Receipt Date	Fee Payment Type
619362		450.00		CHECK

TRACKING ELEMENTS:

TE Name	Start Date	Complete Date
APIRT RECEIVED PROJECT (DATE)	04/22/2009	
ADMIN DEFICIENCY CYCLE	04/24/2009	04/28/2009
APIRT TRANSFERRED PROJECT TO TECHNICAL STAFF (DATE)	04/28/2009	
DEFICIENCY CYCLE	05/04/2009	05/04/2009
ENGINEER INITIAL REVIEW COMPLETED (DATE)	05/04/2009	
PEER / MANAGER REVIEW PERIOD	05/04/2009	05/05/2009
PROJECT RECEIVED BY ENGINEER (DATE)	05/04/2009	
CENTRAL REGISTRY UPDATED		

Cindy, I could not remove.

UNIT TYPES:
Project Unit Type:

PROJECT RULES:

Rule Desc	Request Type	On Application	Approve
106.262 FACILITIES (EMISSION AND DISTANCE LIMITATI -	ADD	Y	APPROVE

PERMIT RULES:

Rule Desc	Start Date	End Date

PROJECT ATTRIBUTES:

Attributes	Value
CERT_PI_7	
MSS- 101.222(H)(1)	B

FIND ENTITY NAME SEARCH

This search was performed on with the following search parameter:
ENTITY NAME : CHAMPION TECHNOLOGIES INC

Mark	Filing Number	Name	Entity Type	Entity Status	Name Type	Name Status
◉	11637300	CHAMPION TECHNOLOGIES, INC.	Domestic For-Profit Corporation	In existence	Legal	In use
○	142936900	CHAMPION TECH, INC.	Domestic For-Profit Corporation	Merged	Legal	Inactive
○	800828116	Champion Technical Resources, Limited Liability Company	Domestic Limited Liability Company (LLC)	In existence	Legal	In use
○	801104954	Champion Technology Services, Inc.	Foreign For-Profit Corporation	In existence	Legal	In use
○	74326100	CHAMPION HI-TECH MANUFACTURING, INC.	Domestic For-Profit Corporation	In existence	Legal	In use
○	79038000	CHAMPION HI-TECH MANUFACTURING, INC.	Domestic For-Profit Corporation	Voluntarily dissolved	Legal	Inactive
○	105405600	CHAMPIONS ENVIRONMENTAL TECHNOLOGIES, INC.	Domestic For-Profit Corporation	Forfeited existence	Legal	Inactive

Return to Order | New Search

Instructions:
- To view additional information pertaining to a particular filing select the number associated with the name.
- To place an order for additional information about a filing select the radial button listed under 'Mark' that is associated with the entity and press the 'Order' button.

From: Shelia Glaspie-Felix
To: orlando.cardoso@champ-tech.com
Date: 4/24/2009 3:58 PM
Subject: Permit By Rule Application
Attachments: PI-7 CERT (05 2008).doc

Our office has received your Permit By Rule Application for Champion Technologies, Inc. (CN600361869), Champion Technologies Fresno (RN101618882) located in Fresno, TX.

Please submit a current PI-7 CERT (revised 5/08). The form we received is outdated.

Upon receipt of the current PI-7 CERT, we can complete the administrative review of the application. The form may be submitted via fax (512-239-4500) or as an email attachment. Please forward all original documents with original signatures.

I have attached a current copy of the form along with the instructions for your convenience.

SHELIA GLASPIE-FELIX
AIR PERMITS INITIAL REVIEW TEAM
PHONE (512) 239-1210
FAX (512) 239-4500

Message Id: 49F1E1AC.654 : 160 : 25922
Subject: Permit By Rule [illegible]lication
Created By: SGlaspie@tceq.[illegible]e.tx.us
Scheduled Date:
Creation Date: 4/24/2009 3:58 PM
From: Shelia Glaspie-Felix

Recipients

Recipient	Action	Date & Time	Comment
champ-tech.com	Transferred	4/24/2009 3:58 PM	

To: orlando.cardoso@champ-tech.com (orlando.cardoso@champ-tech.com)

Post Offices

Post Office	Delivered	Route
champ-tech.com		champ-tech.com

Files

File	Size	Date & Time
MESSAGE	1335	4/24/2009 3:58 PM
PI-7 CERT (05 2008).doc	241664	9/9/2008 9:06 AM

Options

Auto Delete: No
Concealed Subject: No
Expiration Date: None
Notify Recipients: Yes
Priority: Standard
Reply requested by None
Security: Standard
Send Notification when Opened
Send Notification when Deleted
To Be Delivered: Immediate

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

TCEQ

I. REGISTRANT INFORMATION			1016188882 (SGF)
A. TCEQ Customer Reference Number:	CN- 600361869	TCEQ Regulated Entity Number:	RN- ~~1016118882~~
Note: If "NO," CN or RN number was entered above; please fill out the required Core Data Form, which will be available in Step II of the submittal process.			
B. Company or Other Legal Customer Name: Champion Technologies, Inc.			
Company Official Contact Name: Erick Kiihne		Title: Plant Manager	
Mailing Address: P.O. Box 450499			
City: Houston		State: Texas	Zip Code: 77245
Phone No.: 281 710-9592	Fax No.: 281 710-9500	E-mail Address: Mike.Nims@champ-tech.com	
C. Technical Contact Name: Orlando F. Cardoso			
Company: Champion Technologies, Inc.			
Mailing Address: P.O. Box 450499			
City: Houston		State: Texas	Zip Code: 77245
Phone No. : 281 710-9553	Fax No.: 281 710-9550	E-mail Address: orlando.cardoso@champ-tech.com	
D. Facility Location Information - Street Address: 3130 FM 521 RD. (SGF)			
If "NO," street address, provide written driving directions to the site: (attach description if additional space is needed)			
City: Fresno ✓	County: Fort Bend ✓		Zip Code: 77545 ✓

II. FACILITY AND SITE INFORMATION		
A. Name and Type of Facility: Change of service T-7967		x☐ Permanent ☐ Portable
B. PBR claimed under **30 TAC § 106** *(List all)*:		
§ 106. 262	§ 106.	
§ 106.	§ 106.	
§ 106.	§ 106.	
Are you claiming a **historical standard exemption or PBR**?		☐ YES x☐ NO
If "YES," enter effective date and Rule Number:		
C. Is there a previous Standard Exemption or PBR for the facility in this registration? (Attach details regarding changes)		☐ YES x☐ NO
If "YES," enter Registration Number and Rule Number:		
D. Are there any **other facilities** at this **site** which are **authorized by an Air Standard Exemption or PBR**?		x☐ YES ☐ NO
If "YES," enter Registration Number and Rule Number:	*Several*	*51,53,118,261,262,472*
E. Are there any **other air preconstruction permits** at this site?		☐ YES x☐ NO
If "YES," enter Permit Numbers:		
F. Is this site required to obtain an **air federal operating permit**?		☐ YES x☐ NO
If "YES," enter Permit Number:		
G. TCEQ Account Identification Number *(if known)*:	FG-0053-G	

APIRT
APR 22 2009

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

III. FEE INFORMATION

To determine if a fee is required answer the following question. If "YES," to question III. A., a fee is not required, skip to Section IV. If "NO," to answer II. A., then go to Section III. B. See Section VI. for address to send fee or go to www.2.tceq.state.tx.us/epay to pay online.

A. Is this registration an update to a previously registered facility and accompanied by a Certification Form solely to establish a federally enforceable emission limit?		☐ YES x☐ NO
B. What is the fee amount? *If "YES," to any of the following three questions, a **$100** fee is require. Otherwise, a **$450** fee is required.*		
Does this business have less than 100 employees?		☐ YES x☐ NO
Does this business have less than 6 million dollars in annual gross receipts?		☐ YES x☐ NO
Is this registration submitted by a governmental entity with a population of less than 10,000?		☐ YES x☐ NO
C. Check/Money Order or Transaction Number *(Payable to TCEQ)*: 604279 6193602	*Was fee **Paid** online?*	☐ YES x☐ NO
Company name of check: Champion Technologies, Inc.	Fee amount:	$450.00

IV. SELECTED FACILITY REVIEWS ONLY—TECHNICAL INFORMATION

Note: If claiming one of the following PBRs, complete this section, then skip to Section VI., "Submitting your registration" below:

Animal Feeding Operations § 106.161 ***Livestock Auction Facilities § 106.162*** ***Saw Mills § 106.223***

Grain Handling, Storage and Drying § 106.283 ***Auto Body Refinishing Facilities §106.436*** ***Air Curtain Incinerator § 106.496***

A. Is the applicable PBR checklist attached which shows the facility meets all general and specific requirements of the PBR(s) being claimed? *(If submitting electronically, click "YES".)*		☐ YES ☐ NO
B. Distance from this facility's emission release point to the nearest property line:		feet
Distance from this facility's emission release point to the nearest off-property structure:		feet

V. TECHNICAL INFORMATION INCLUDING STATE AND FEDERAL REGULATORY REQUIREMENTS

Registrants must be in compliance with all applicable state and federal regulations and standards to claim a PBR.

A. Is Confidential information submitted and properly marked "CONFIDENTIAL" with this registration?	x☐ YES ☐ NO
B. Is a process flow diagram or a process description attached?	x☐ YES ☐ NO
C. Are emissions data and calculations for this claim attached?	x☐ YES ☐ NO
D. Is information attached showing how the **general** requirements **(30 TAC § 106.4)** of the PBR is met for this Registration? **(PBR checklists** may be used, but are optional)	x☐ YES ☐ NO

*Note: Please be reminded that if the facilities listed in this registration are subject to the Mass Emissions Cap & Trade program under **30 TAC Chapter 101, Subchapter H, Division 3**, the owner/operator of these facilities must possess NO_x allowances equivalent to the actual NO_x emissions from these facilities.*

E. Is information attached showing how the **specific PBR** requirements are met for this registration? (***PBR checklist** may be used, but are optional*)		x☐ YES ☐ NO
F. Distance from this facility's emission release point to the nearest property line:	660	feet
Distance from this facility's emission release point to the nearest off-property structure:	720	feet

APR 22 2009

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

TCEQ

VI. SIGNATURE FOR CERTIFICATION AND REGISTRATION	
The signature below indicates that the Responsible Official has knowledge of the facts herein set forth and that the same are true, accurate, and complete to the best of my knowledge and belief. By this signature, the maximum emission rates listed on this certification reflect the maximum anticipated emissions due to the operation of this facility and all representations in this certification of emissions are conditions upon which the facilities and sources will operate. It is understood that it is unlawful to vary from these representations unless the certification is first revised. The signature certifies that to the best of the Responsible Official's knowledge and belief, the project will satisfy the conditions and limitations of the indicated exemption or permit by rule and the facility will operated in compliance with all regulations of the Texas Commission on Environmental Quality and with Federal U.S. Environmental Protection Agency regulations governing air pollution. The signature below certifies that, based on information and belief formed after reasonable inquiry, the statements and information above and contained in the attached document(s) are true, accurate, and complete. **If you questions on how to fill out this form or about air quality permits. Please call 512/239-1250.** *Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call 512/239-3282.*	
SIGNATURE: [signature] ***(ORIGINAL SIGNATURE REQUIRED)***	DATE: 4/20/09

VII. SUBMITTING COPIES OF THE CERTIFICATION AND REGISTRATION

Copies must be sent as listed below:
Processing delays may occur if copies are not sent as noted.

Who	***Where***	***What***
Air Permits Initial Review Team (APIRT)	Regular, Certified, Priority Mail MC161, P.O. Box 13087 Austin, Texas 78711-3087 Hand Delivery, Overnight Mail MC 161, 12100 Park 35 Circle, Building C, Third Floor Austin, Texas 78753 Fax No.: (512) 239-2123 *(do not follow fax with paper copies)*	Originals Form PI-7, Core Data Form. and all attachments
Revenue Section, TCEQ	Regular, Certified, Priority Mail MC 214, P.O. Box 13088 Austin, Texas 78711-3088 Hand Delivery, Overnight Mail MC 214, 12100 Park 35 Circle, Building A, Third Floor Austin, Texas 78753	Original Money Order or Check Copy of Form PI-7 and Core Data Form
Appropriate TCEQ Regional Office	To find your Regional Office address, go to the TCEQ Web site at www.tceq.state.tx.us, or call (512) 239-1250.	Copy of Form PI-7, Core Data Form, and all attachments.
Appropriate Local Air Pollution Control Program(s)	To Find your local or Regional Air Pollution Control Programs go to the TCEQ, APD Website at www.tceq.state.tx.us/nav/permits/air_permits.html or call (512) 239-1250	Copy of Form PI-7, Core Data Form, and all attachments.

APIRT
APR 22 2009

CHAMPION TECHNOLOGIES, INC.

FRESNO PLANT

PBR REGISTRATION

Tank Change of Service

4/2009

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

Note: In limited cases, a map or drawing of the site and surrounding land use may be requested during the technical review or at the request of the TCEQ Regional Office or local air pollution control program during an investigation.

CONTENTS

4/20/09

TCEQ Air Permits Division
Permits Administrative Review Section
Mail Code 161
P.O. Box 13087
Austin, Texas 78711-3087

REFERENCE: Request for Registration under PBR 106.262 for Champion Technologies, Inc., Fresno Plant, Acc. No. FG-0053-G

Dear TCEQ Personnel:

The enclosed forms, checklists and documentation are being submitted for your review to register under Permit by Rule 106.262 the change of service of an existing tank for a permitted raw material.

A copy of check No. 619362 for $450 sent to the TCEQ Revenue Section is also enclosed.

Should you need any additional information, please, contact me at 281 710-9553 or via email at Orlando.Cardoso@Champ-tech.com.

Sincerely,

Orlando F. Cardoso
Sr. Project Manager
Champion Technologies, Inc.
P.O. Box 450499
Houston, Texas 77245-0499

c. TCEQ Region 12
5425 Polk St. Suite H
Houston, Texas 77023-1452

4/20/09

TCEQ Revenue Section
Mail Code 214
P.O. Box 13088
Austin, Texas 78711-3088

Enclosed is check Number 619362 for $450 to cover the required fee for Permit by Rule, PBR 106.262 requested by Champion Technologies, Inc. for the Fresno Plant.

Also enclosed is a copy of Form PI-7 Cert. that is being submitted to the TCEQ Air Permits Division.

Should you need any additional information, please, call me at 281 710-9553 or via email at, Orlando.Cardoso@champ-tech.com.

Sincerely,

Orlando F. Cardoso
Sr. Project Manager
Champion Technologies, Inc.
P.O. Box 450499
Houston, Texas 77245-0499

4/20/09

TCEQ
Region 12
5425 Polk St. Ste. H
Houston, Texas 77023-1452

Enclosed find a copy of documentation submitted to the PAR Section of TCEQ to register the change of service of an existing permitted tank for additional storage of a permitted raw material

.

This process meets all general requirements of PBR 106.4 and specific requirements of 106. 262.

Should you need additional information, please, call me or contact me via email.
Sincerely,

Orlando F. Cardoso
Manager, MFG Improvement Projects
Champion Technologies, Inc.
P.O. Box 450499
Houston, Texas 77245
281 710-9553
Orlando.Cardoso@champ-tech.com

Detailed §106.4 Requirements

F. §106.4(a)(1): Emission limits check continued....

1. Yes_x_ No__ Are SO_x, PM, VOC, and other emissions shown above each less than 25 TPY?
2. Yes_x_ No___ Are the NO_x and CO emissions shown above each less than 250 TPY?
   If the answer to either question is "No", an exemption cannot be claimed.
   If the answer to both questions is "Yes", continue to next rule question

G. §106.4(a)(4): Site exemption emissions *(For all exemptions at the property and/or under the same Account ID No.)*

1. Yes_x_ No___ Are total NO_x and CO emissions each less than 250 TPY?
2. Yes_x__ No__ Are total emissions of all other contaminants each less than 25 TPY?
   If the answer to both questions is "Yes", continue to next rule question
   If either question is answered "No" please answer the following:

3. Yes_x_ No___ Has any facility at the property had public notification and comment as required in 30 TAC 116 (or applicable procedures of Chapter 116 in effect at the time)?
   If "Yes", please describe the associated permit action and when notice occurred:
   If "No", an exemption may not be claimed.

This facility has several permits that have gone through public notice.

H. §106.4(a)(6): Federal Requirements for NSPS & NESHAPs

1. Yes___ No_x__ Are any EPA New Source Performance Standards (NSPS) applicable to the facilities for which the exemption is being claimed?

2. Yes___ No_x_ Are any EPA National Emissions Standards for Hazardous Air Pollutants (NESHAPs) applicable to the facilities for which the exemption is being claimed?
   If "No", continue to next rule question
   *If "Yes", **Please list the applicable SubPart(s):***
   Please attach a discussion of how the facilities will meet applicable standards.

I. §106.4(a)(2): Nonattainment checklists

1. Yes_x_ No__ The facility to be exempted is located in a nonattainment county? (See list pages 1 & 2)
   If "Yes", complete applicable pages of this checklist, then answer the next question
   If "No", continue to the PSD questions below
2. Yes___ No_x__ For any regulated nonattainment contaminant, has this project triggered a nonattainment review?
   If "No",continue to the PSD questions below
   *If "Yes", the project is a major source or a major modification **and an exemption may not be used.***
   A Nonattainment Permit review must be completed to authorize the project.

J. §106.4(a)(3): Prevention of Significant Deterioration (PSD) checklist

Yes___ No_x_ For any regulated National Ambient Air Quality Standard (NAAQS) contaminant, has this project triggered a PSD review? *(Please complete the last page of this checklist, then answer:)*
If "No",no further review is needed to complete the checklist for Chapter 106. Forward all information needed to verify your exemption claim to the TNRCC.
*If "Yes", the project is a major source **and an exemption may not be used.** A PSD Permit review must be completed to authorize the project.*

Houston/Galveston Nonattainment Applicability Checklist

If the facility to be exempted is located in Brazoria, Chambers, Ft. Bend, Galveston, Harris, Liberty, Montgomery or Waller County and has the potential for VOC or NO_x emissions, please complete the following

For this project only:		**VOC**	**NO_x**
New allowable rate	+	_____	_____
Old actual rate**	-	_____	_____
Project Increase	=	0.0023	_____

not correct. see emission summary

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

K. VOCs

1. Yes_x__ No___ The facility to be exempted has the potential for VOC emissions.
   If "No", continue to the NO_x questions (Section L) below
   If "Yes", please answer the following
2. Yes___ No_x__ Are site-wide VOC emissions from all sources * greater than 25 TPY? (i.e. Is this site an existing major source?)
   If "No", continue to the NO_x questions below
   If "Yes", please complete the following :
3. Yes___ No___ Is the project increase of VOCs greater than 5 TPY? (i.e. Does this action trigger netting?) *If*
   If "No", continue to the NO_x questions below
   If "Yes", please provide contemporaneous netting calculations (attach) and answer the following question
4. Yes___ No___ Is the contemporaneous net increase of VOCs greater than 25 TPY? (i.e. Is this project a major modification?)*If "No", continue to the NO_x questions below*
   *If "Yes", this project will be a major modification and **an exemption may not be used.** A Nonattainment permit review must be completed.*

L. NO_x

1. Yes___ No_x__ The facility to be exempted has the potential for NO_x emissions.
   If "No", continue to the PSD questions
   If "Yes", please answer the following

2. Yes___ No___ Are site-wide NO_x emissions from all sources * greater than 25 TPY? (i.e. Is this site an existing major source?)
   If "No", continue to question 3
   If "Yes", please complete the following :
   A. Yes___ No___Is the project increase of NO_x greater than 5 TPY? (i.e. Does this action trigger netting?)
   If "No", continue to the PSD questions
   If "Yes", please provide contemporaneous netting calculations (attach) and answer the following question
   B. Yes___ No___Is the contemporaneous net increase of NO_x greater than 25 TPY? (i.e. Is this project a major modification?)
   If "No", continue to the PSD questions
   *If "Yes", this project will be a major modification and **an exemption may not be used.** A Nonattainment permit review must be completed.*

3. Yes___ No___ For new or existing minor sources, are project increases greater than 25 TPY?
   If "No", continue to the PSD questions
   *If "Yes", this project will be major in itself and **an exemption may not be used.** A Nonattainment permit review must be completed.*

* *"all sources" and "site-wide" should include facilities which are permitted, exempted, or grandfathered, excluding this project*

** *Actual emission rates are based on the average emissions from all existing facilities affected by this exemption claim (project) for the previous 2 years*

§106.4(a)(3): Prevention of Significant Deterioration (PSD) checklist

Please note that If the facility is located in a non-attainment area for VOCs, CO or PM10, you do not have to be reviewed again for PSD Applicability for that contaminant.

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

S. PSD Applicability check

Named Sources

1. Yes___ No_x__ Is the SITE a **named** PSD source? (See list on page 2 of checklist)
   If "No", continue to the un-named source questions (#4) below
   If "Yes", please answer the following:
2. Yes___ No_x__ Prior to this action, are site-wide emissions of any NAAQS regulated pollutant (including fugitives) greater than 100 TPY? (i.e. Is this site an existing major source?)
   If "Yes", the site is a major source. Please answer questions #6-8 below (PSD "Significance")
   If "No", answer the next question
3. Yes___ No_x__ For any regulated NAAQS contaminant (except as noted above), will the project's increases be greater than 100 TPY? (i.e. Is this project major?)
   If "No", no further review is needed to complete the checklist for Chapter 106.
   *If "Yes", the project is a major source **and an exemption may not be used** and a PSD Permit review must be completed to authorize the project.*

Un-named Sources

4. Yes___ No_x__ Is the SITE an **un-named** PSD source? (See list on page 2 of checklist)
   If "No", the above questions regarding named sources should be completed
   If "Yes", please answer the following:
5. Yes___ No___ Prior to this action, are site-wide emissions of any NAAQS regulated pollutant (point sources only) greater than 250 TPY? (i.e. Is this site an existing major source?)
   If "Yes", the site is a major source. Please answer questions #6-8 below (PSD "Significance")
   If "No", no further review is required. Please send this checklist and all additional documentation to the TNRCC NSRP Division and the applicable Regional office.

6. **PSD "Significance" check:**
   If the existing site is a major source, Complete the following chart and attach calculations to determine the project's emission increases for all regulated NAAQS compounds (in TPY).

		NO_x	PM_{10}	CO	VOCs	SO_2	*Other:* _____	*Other:*
New allowable rate	+							
Old actual rate**	-							
Project Increase	=							

7. Yes___ No___ For any regulated NAAQS contaminant, will the project's increases be greater than the PSD 'significant' rates? (i.e. Does this action trigger netting?) (See list on page 2 of checklist)
   If "No", no further review is needed to complete the checklist for Chapter 106.
   If "Yes", PSD Applicability review and netting calculations must be completed (attach).
   These netting calculations should be used to answer the following:
8. Yes___ No___ For any regulated NAAQS contaminant, are the contemporaneous net increases greater than the PSD 'significant' rates? (i.e. Is this project a major modification?)
   If "No", no further review is needed to complete the checklist for Chapter 106. Please attach all netting calculations and documentation for review by TNRCC NSRP staff.
   *If "Yes", the project is a major modification **and an exemption may not be used.***
   A PSD Permit review must be completed to authorize the project.

Title 30 Texas Administrative Code § 106.262
Permit By Rule (PBR) Checklist
Facilities (Emission and Distance Limitations)

Hard-Copy Submittal - Print and complete the following checklist.

The following checklist is designed to help you confirm that you meet Title 30 Texas Administrative Code § 106.262 (30 TAC § 106.262) requirements. If you do not meet all the requirements, you may alter the project design or operation in such a way that all the requirements of the PBR are met or you may obtain a construction permit. The PBR forms, tables, checklists and guidance documents are available from the Texas Commission on Environmental Quality (TCEQ), Air Permits Division Web site at, www.tnrcc.state.tx.us/permitting/airperm.

CHECK THE MOST APPROPRIATE ANSWER		
	Is a description or checklist of how this claim meets the general requirements for the use of PBRs in 30 TAC § 106.4 attached?	x YES ☐ NO ☐ N/A
b1	Is this claim for construction of a facility authorized in another section of this chapter or for which a standard permit is in effect? *If "YES," this PBR cannot be used to authorize emissions from the project*	☐ YES x NO ☐ N/A
b2	Is this claim for any change to any facility authorized under another section of this chapter or authorized under a standard permit? *If "YES," this PBR cannot be used to authorize emissions from the project*	☐ YES x NO ☐ N/A
c	Is the facility authorized under another section of this chapter or under a standard permit? *If "YES," subsection (a)(2) and (3) of this section may be used to qualify the use of other chemicals at the facility.*	☐ YES x NO ☐ N/A
a1	Are facilities or changes located at least 100 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located?	x YES ☐ NO ☐ N/A
a2	Are new or increased emissions, including fugitives, of chemicals shall not be emitted in a quantity greater than five tons per year nor in a quantity greater than E as determined using the equation E = L/K and the attached tables? *If "YES," List or attach the following information and emissions calculations for all emissions being claimed under this PBR:*	x YES ☐ NO ☐ N/A **The requested information is included in the attached calculations**
	Chemical:_____ L value:_____ D:_____ K:_____	
a3	Is this checklist attached to a Form PI-7 within ten days following the installation or modification of the facilities? *If "YES," the notification shall include a description of the project, calculations, and data identifying specific chemical names, L values, D values, and a description of pollution control equipment, if any.*	x YES ☐ NO ☐ N/A
a4	Are one or more of the following chemicals is handled for this registration? (Check all that apply)? *If "YES," answer the following four questions*	☐ YES x NO ☐ N/A

☐ acrolein	☐ diazomethane	☐ hydrogen sulfide	☐ ozone
☐ allyl chloride	☐ diborane	☐ ketene	☐ pentaborane
☐ ammonia (anhydrous)	☐ diglycidyl ether	☐ methylamine	☐ perchloromethyl mercaptan
☐ arsine	☐ dimethylhydrazine	☐ methyl bromide	☐ perchloryl fluoride
☐ boron trifluoride	☐ ethyleneimine	☐ methyl hydrazine	☐ phosgene
☐ bromine	☐ ethyl mercaptan	☐ methyl isocyanate	☐ phosphine
☐ carbon disulfide	☐ fluorine	☐ methyl mercaptan	☐ phosphorus trichloride
☐ chlorine	☐ formaldehyde (anhydrous)	☐ nickel carbonyl	☐ selenium
☐ chlorine dioxide	☐ hydrogen bromide	☐ nitric acid	☐ hexafluoride, stibine
☐ chlorine trifluoride	☐ hydrogen chloride	☐ nitric oxide	☐ liquified sulfur dioxide
☐ chloroacetaldehyde	☐ hydrogen cyanide	☐ nitrogen dioxide	☐ sulfur pentafluorid
☐ chloropicrin	☐ hydrogen fluoride	☐ oxygen difluoride	☐ tellurium hexafluoride

APD RP
APR 22 2009

☐ chloroprene	☐ hydrogen selenide		

	Are all facilities are located at least 300 feet from the nearest property line and 600 feet from any off-plant receptor ?	☐ YES ☐ NO ☐ N/A
	Are the cumulative amount of any of the following chemicals resulting from one or more authorizations under this section (but not including permit authorizations) less than or equal to 500 pounds on the plant property?	☐ YES ☐ NO ☐ N/A
	Are all listed chemicals handled only in unheated containers operated in compliance with the United States Department of Transportation regulations (49 Code of Federal Regulations, Parts 171-178)?	☐ YES ☐ NO ☐ N/A
	Are any containers of these chemicals vented or opened directly to the atmosphere at any time?	☐ YES ☐ NO ☐ N/A
a5	Are there any changes to or additions of any existing air pollution abatement equipment?	☐ YES x NO ☐ N/A
a6	Will there be any visible emissions, except uncombined water, emitted to the atmosphere from any point or fugitive source in amounts greater than 5.0% opacity in any six-minute period?	☐ YES x NO ☐ N/A

D, Feet	K
100	326
200	200
300	139
400	104
600	65
700	54
800	46
900	39
1,000	34
2,000	14
3,000 or more	8

E = maximum allowable hourly emission, and never to exceed 6 pounds per hour.

262.26250081L = value as listed or referenced in Table 262

K = value from the table on this page. (interpolate intermediate values)

D = distance to the nearest off-plant receptor.

TABLE 262
LIMIT VALUES (L) FOR USE WITH EXEMPTIONS FROM PERMITTING §106.262

The values are not to be interpreted as acceptable health effects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification).

Compound	Limit (L) Milligrams Per Cubic Meter
Acetone	590.
Acetaldehyde	9.
Acetone Cyanohydrin	4.
Acetonitrile	34.
Acetylene	2662.
N-Amyl Acetate	2.7
Sec-Amyl Acetate	1.1
Benzene	3.
Beryllium and Compounds	0.0005
Boron Trifluoride, as HF	0.5
Butyl Alcohol, -	76.
Butyl Acrylate	19.
Butyl Chromate	0.01
Butyl Glycidyl Ether	30.
Butyl Mercaptan	0.3
Butyraldehyde	1.4
Butyric Acid	1.8
Butyronitrile	22.
Carbon Tetrachloride	12.
Chloroform	10.
Chlorophenol	0.2
Chloroprene	3.6
Chromic Acid	0.01
Chromium Metal, Chromium II and III Compounds	0.1
Chromium VI Compounds	0.01
Coal Tar Pitch Volatiles	0.1
Creosote	0.1
Cresol	0.5
Cumene	50.
Dicyclopentadiene	3.1
Diethylaminoethanol	5.5
Diisobutyl Ketone	63.9
Dimethyl Aniline	6.4

Compound	Limit (L) Milligrams Per Cubic Meter
Dioxane	3.6
Dipropylamine	8.4
Ethyl Acrylate	0.5
Ethylene Dibromide	0.38
Ethylene Glycol	26.
Ethylene Glycol Dinitrate	0.1
Ethylidene-2-norbornene, 5-	7.
Ethyl Mercaptan	0.08
Ethyl Sulfide	1.6
Glycolonitrile	5.
Halothane	16
Heptane	350.
Hexanediamine, 1,6-	0.32
Hydrogen Chloride	1.
Hydrogen Fluoride	0.5
Hydrogen Sulfide	1.1
Isoamyl Acetate	133.
Isoamyl Alcohol	15.
Isobutyronitrile	22.
Kepone	0.001
Kerosene	100.
Malononitrile	8.
Mesityl Oxide	40.
Methyl Acrylate	5.8
Methyl Amyl Ketone	9.4
Methyl-t-butyl ether	45.
Methyl Butyl Ketone	4.
Methyl Disulfide	2.2
Methylenebis (2-chloroaniline) (MOCA)	0.003
Methylene Chloride	26.
Methyl Isoamyl Ketone	5.6
Methyl Mercaptan	0.2
Methyl Methacrylate	34.
Methyl Propyl Ketone	530.
Methyl Sulfide	0.3
Mineral Spirits	350.
Naphtha	350.
Nickel, Inorganic Compounds	0.015

Compound	Limit (L) Milligrams Per Cubic Meter
Nitroglycerine	0.1
Nitropropane	5.
Octane	350.
Parathion	0.05
Pentane	350.
Perchloroethylene	33.5
Petroleum Ether	350
Phenyl Mercaptan	0.4
Propionitrile	14.
Propyl Acetate	62.6
Propylene Oxide	20.
Propyl Mercaptan	0.23
Silica-amorphous- precipitated, silica gel	4.
Silicon Carbide	4.
Stoddard Solvent	350.
Styrene	21.
Succinonitrile	20.
Tolidine	0.02
Trichloroethylene	135.
Trimethylamine	0.1
Valeric Acid	0.34
Vinyl Acetate	15.
Vinyl Chloride	2.

NOTE: The time weighted average (TWA) Threshold Limit Value (TLV) published by the American Conference of Governmental Industrial Hygienists (ACGIH), in its TLVs and BEIs guide (1997 Edition) shall be used for compounds not included in the table. The Short Term Exposure Level (STEL) or Ceiling Limit (annotated with a "C") published by the ACGIH shall be used for compounds that do not have a published TWA TLV. This section cannot be used if the compound is not listed in the table or does not have a published TWA TLV, STEL, or Ceiling Limit in the ACGIH TLVs and BEIs guide.

Company Name: Champion Technologies, Inc Checklist completed by: Orlando F. Cardoso
Date: 4/9/09 Facility Type: Chemical Manufacturing Exemption(s) claimed: §106. 262
Project Description: Change of service of an existing tank, T-7967

(including equipment, materials, and brief process description)

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

CO :_____ NO_x: _____ PM :
SO_2:_____ VOCs: 0.0023 Other: _____ _____

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

A. §106.4(a)(5): Current Exemption Requirements

Yes__x_ 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 NSRP Division for a copy of the current exemption to be claimed.

B. §106.4(a)(7): Exemption prohibition check

Yes___ No__x_ Are there any air permits under the same account containing permit conditions which prohibit or restrict the use of standard exemptions?
If "No", continue to next question
If "Yes", exemptions 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. §106.4(b): Circumvention check

§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:

1. *dividing a complete project into separate segments to circumvent §106.4(a)(1) limits;*
2. *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;*
3. *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_x_ Does your project meet any of the criteria listed above?
If "No", continue to next rule question
If "Yes", an exemption may not be claimed

D. §106.4(c) - (d): Compliance with all Rules

Yes_x_ 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", an exemption may not be claimed.

E.§106.4(a)(1): Emission limits check

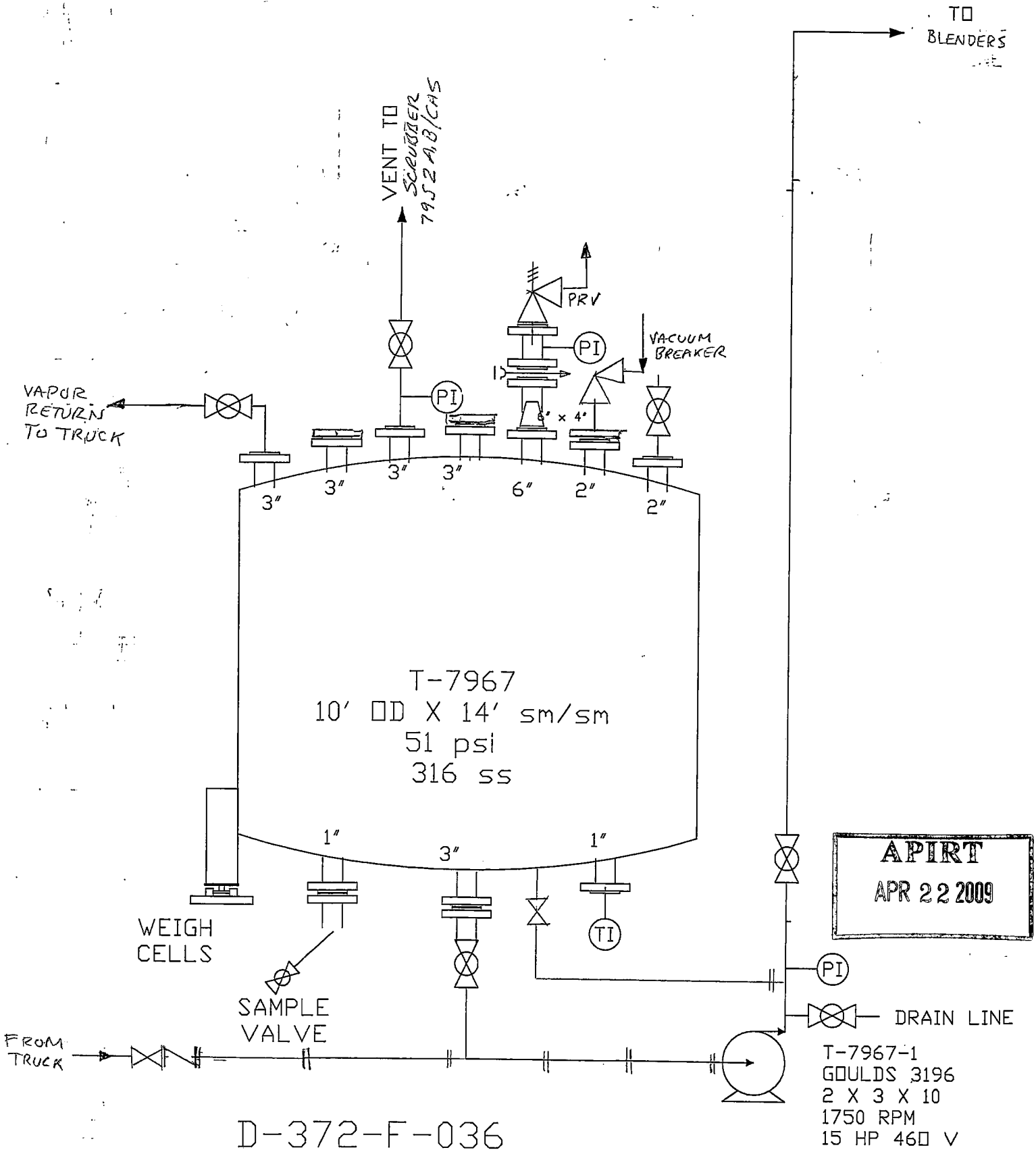
Yes___ No_x_ The maximum emissions from all facilities at the site, including this exemption claim, are less than 25 tpy of any contaminant.
If the answer to this questions is "Yes", no further review is needed to complete this checklist.
Forward all information needed to verify your exemption claim to the TNRCC.
If "No", please continue through the remaining applicable pages of the checklist.

Introduction and Process Description

A pressure rated tank, T7967 will change service to 50% Gluteraldehyde/water solution. Gluteraldehyde is a component on an already permitted line of Blended products (82798). A vapor equalization line from the tank to the unloading truck will eliminate tank working losses and since the tank pressure relief devise rating is 25 psig and the VP of gluteraldehyde is 0.0039 psia, no breathing losses will occur. Therefore, the only emissions from this tank will be fugitive.

The fugitive emissions from this process meet all requirements of PBRs 106.4 and 106.262

$L = 0.2$



D-372-F-036

Emissions Summary						
	Gluteraldehyde	Meets require ments of 106.262?	E =TLV/K, Max allowable emission rate	Distance to nearest receptor	K value	ACGIH TLV mg/m3
Fugitives, lbs/hr	0.000372919	yes	0.0123077	600 ft	65	0.8
			Max Annual Emissions			
Fugitives, TPY	0.001633	yes	5			

correct ns. not 1064 member
phone call 5/4/09 1558

Gluteraldehyde Storage calculations										
Materials	wt %	Mol Wt	Moles	Vapor Pressure psia	Liquid Mol fraction	Partial Pressure, P	Vapor mol fraction	Mol Wt of vapor MV	Mol wt of liquid	Wt fraction vapor
Gluteraldehyde	50	100	0.5000	0.0039	0.1525	0.0005888	0.00168	0.168403	15.25	0.009759
Water	50	18	2.7778	0.3700	0.8475	0.3490566	0.99832	17.08832	16.98	0.990241
			3.2778			0.3496454		17.25672	32.24	
Fugitives calculations										
Gluteraldehyde, Heavy Liquid	0.0039 psia VP									
				VOC Emission Rate						
Equipment	Count	Service	SOCMI w/o C2	lbs/hr	28MID control efficiency	Controlled lbs/hr	Operating Hrs/year	lbs/year	TPY	
Valves	3	Vapor	0.0089	0.0267	0.97	0.000801				
	7	HL	0.0007	0.0049	0	0.0049				
Flanges	12	Vapor	0.0029	0.0348	0.3	0.02436				
	26	HL	0.00007	0.00182	0.3	0.001274				
Relief valve w/rupture disk	1	vapor	0.2293	0.2293	0.97	0.006879				
Pump, double mechanical seal w/pressurized barrier	1	HL	0.0161	0.0161	100	0				
				Speciating	Vapor Wt fraction	0.038214				
				Gluteraldehyde	0.0098	0.0003729	8760	3.266768	0.001633	
				Water	0.9902					

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	T7967-2
City:	
State:	
Company:	
Type of Tank:	Vertical Fixed Roof Tank
Description:	50% Gluteraldehyde Storage

Tank Dimensions

Shell Height (ft):	14.00
Diameter (ft):	10.00
Liquid Height (ft) :	13.00
Avg. Liquid Height (ft):	12.00
Volume (gallons):	7,637.77
Turnovers:	32.73
Net Throughput(gal/yr):	250,000.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	Aluminum/Specular
Shell Condition	Good
Roof Color/Shade:	Aluminum/Specular
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft)	1.00
Slope (ft/ft) (Cone Roof)	0.20

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: Houston, Texas (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

T7967-2 - Vertical Fixed Roof Tank

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis fc Calcula
Gluteraldehyde	All	72.99	65.32	80.67	69.25	0.0040	0.0038	0.0042	100.0000			100.00	Option

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

T7967-2 - Vertical Fixed Roof Tank

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Gluteraldehyde	2.37	0.26	2.63

VAPOR RETURN
WL = 0

PRESSURE VESSEL
BL = 0