

Title V GHG Permitting

April 2, 9 and 10, 2012

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SJVAPCD

Workshop Web Attendees

Can send questions or comments during workshop via e-mail to:

webcast@valleyair.org

Add "Title V" in subject line

- About 5 minute delay before e-mail shows up in our e-mail inbox
- Webcast e-mail available only during workshop webcast

Meeting Agenda

- Basics of Title V
 - Applicability
 - Exemptions
 - Initial Application, Modifications and Renewals
- Timelines
- Discuss Initial Application Forms
- Examples

What is Title V?

- Title V is a federally mandated operating permit program which requires major sources to maintain permits which can be enforced by the EPA or individual citizens.
- District Rule 2520 – Federally Mandated Operating Permits
- There is additional monitoring and reporting compared to the “District Only” permit which you are accustomed to.

What is Title V?

- Title V permits are issued for up to a five-year period.
- Currently ~300 sources in the valley are subject to Title V
- Recently, the US EPA established major source thresholds for Greenhouse Gas (GHG) emissions, potentially subjecting more sources to Title V

Applicability

- Sources with Potential to Emit greater than major source thresholds:
 - NO_x: 10 tpy
 - VOC: 10 tpy
 - PM₁₀: 70 tpy
 - SO_x: 70 tpy
 - CO: 100 tpy
 - GHG: 100 tpy (mass) and 100,000 tpy (CO_{2e})
- Fugitive emissions don't count unless listed in source categories of 40 CFR 70.2

Timeline of regulations

4/07: US Supreme Court ruling

12/09: Endangerment finding

4/10: EPA decision on subject to regulation

5/10: Adopt Light Duty Vehicle Rule

6/10: Adopt Tailoring Rule

1/2/11: LDVR requirements go into effect

Tailoring Rule

- Step 1: 1/2/11 to 6/30/11
 - Anyway sources (already in Title V due to criteria pollutant emissions)
- Step 2: on and after 7/1/11
 - Can trigger Title V solely due to GHG
 - One year to apply for Title V permit

Applicability

- 6 “well mixed” GHG:
 - Carbon dioxide (CO₂)
 - Methane (CH₄)
 - Nitrous oxide (N₂O)
 - Hydrofluorocarbons (HFC)
 - Perfluorocarbons (PFC)
 - Sulfur hexafluoride (SF₆)

Applicability, cont.

- To be a regulated pollutant:
 - Facility potential to emit above 100,000 short tpy (CO_{2e})
- If a regulated pollutant, major source if:
 - Facility potential to emit above 100 short tpy (mass)
- Fugitive emissions don't count unless listed in source categories of 40 CFR 70.2



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Options to avoid Title V

- Restrict your facility potential to emit to below the major source thresholds (GHG: either 100,000 tpy CO_{2e} or 100 tpy mass thresholds)
- Go under Rule 2530 “Federally Enforceable Potential to Emit” and keep your actual emissions less than ½ the major source thresholds – you must request this in writing and keep records of actual emissions (GHG: only applies to 100 tpy mass threshold)



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Title V Timelines

- 7/1/2011: Step 2 of EPA Tailoring Rule takes effect, giving sources 1 year to submit applications
- 6/28/2012: major sources of GHG must submit a complete Initial Title V application.

Types of Title V Applications

- Initial application – to initially apply for a Title V permit
- Modifications – 4 types, to make changes to the Title V permit (including incorporating Authorities to Construct)
- Renewal application – permit is renewed every 5 years, source must submit an application 6 to 18 months before current permit expires



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Modifications at Title V sources

- Administrative Amendment
- Minor Modification
- Significant Modification
- Section 6.4.4 Modification
- Authority to Construct with Certificate of Conformity (ATC w/COC)

What is Title V Monitoring and Reporting?

- More frequent monitoring of operating parameters to demonstrate that adequate operating control equipment is functioning correctly.
- Every six months, a facility submits a Report of Required Monitoring (RRM) demonstrating compliance has been attained.
- Annually a facility submits a report of Annual Compliance Certification (ACC).



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Initial Application Process

- Upon submittal of a Title V application, a determination of completeness will be made. This will be sent in the form of a letter with an estimate of maximum processing hours.
- The District must process the application within 18 months from completeness date.
- An Engineering Evaluation will be prepared with Draft Title V permits sent to the applicant, EPA and ARB. All hourly time spent processing will be invoiced on a calendar quarterly basis.



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Application Process continued

- The applicant, ARB and the public will have 30-days to comment on the draft permits.
- The public may request to have a public hearing.
- The EPA shall have 45-days to comment on the draft permits.
- The District shall make appropriate changes based on comments received.
- The final permit will be sent to the applicant with copies to ARB, EPA, and anyone who commented.



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Application Forms

- Title V application has 5 parts (TVFORM-main through TVFORM-005)
- Responsible Official must sign TVFORM-005
 - Responsible official is the owner, president, general manager, CEO, or a person having overall responsibility for regulatory compliance for the facility.

Application Forms

- Complete TVFORM-main
 - Check Initial Application on the top of the form.
 - Complete the rest of the form as indicated for the facility.

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

- ☐ INITIAL TITLE V PERMIT - First Federal Title V Operating Permit
☐ RENEWAL OF TITLE V PERMIT - Federal Title V Operating Permit Renewal
☐ NEW TITLE V PERMIT - New Stationary Source Commencing Operation After June 15, 1995

1. PERMIT TO BE ISSUED TO:	
2. MAILING ADDRESS: STREET/P.O. BOX: CITY: _____ STATE: _____ 9-DIGIT ZIP CODE: _____	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: _____ CITY: _____ _____/4 SECTION _____ TOWNSHIP _____ RANGE _____	S.I.C. CODE(S) OF FACILITY (if known):
4. GENERAL NATURE OF BUSINESS:	
5. DESCRIPTION OF EQUIPMENT FOR WHICH APPLICATION IS MADE. Include Permit Numbers, a separate CAM plan if applicable and use additional sheets, if necessary.:	
Optional Section 6. CHECK WHETHER YOU ARE A PARTICIPANT IN EITHER OF THESE VOLUNTARY PROGRAMS: "HEALTHY AIR LIVING" ☐ Yes ☐ No ☐ Send info  "INSPECT" ☐ Yes ☐ No ☐ Send info	
7. TYPE OR PRINT NAME OF APPLICANT:	TITLE OF APPLICANT:
8. SIGNATURE OF APPLICANT: _____ DATE: _____	PHONE #: () FAX #: () E-MAIL: _____

FOR APCD USE ONLY:

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK #: _____
	DATE PAID: _____
	PROJECT #: _____ FACILITY ID: _____

TVFORM-main

Central Regional Office * 1990 East Gettysburg Avenue * Fresno, California 93726-0244 * (559) 230-3900 * FAX (559) 230-6061
 Revised: February, 2009



Application Forms

- Complete TVFORM-001 or TVFORM-002
 - Use TVFORM-001 to report actual annual emissions (emission Inventory), or
 - Use TVFORM-002 to report maximum permitted emission levels
 - FORM-001: either submit last approved emission statements for all permit units, or complete the form with actual emission per permit unit
 - FORM-002: state the maximum annual emissions allowed per the operating conditions of the existing permit unit. If HAP emissions are greater than 10 tpy for a single compound (or 25 tpy for combined HAP) they must also be calculated.



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Title V Application - ACTUAL EMISSIONS REPORT

Refer to the attached instructions for more information.

COMPANY NAME:						FACILITY ID: -			
LIST OF EQUIPMENT AND CALCULATED ANNUAL EMISSIONS - In numerical order, list all permitted equipment and describe the emissions (See Instructions). If more space is required, use additional forms. Attach sample calculations. <u>In certain cases (See Instructions), previously approved emissions statements or inventory reports may be attached and submitted in lieu of this form. If this option is chosen, do not list permitted equipment described in those emissions inventory statements or reports on this form.</u>									
<u>Column 1</u> Permit Number	<u>Column 2</u> Specific Source of Emissions (if applicable)	<u>Column 3</u> Actual Annual Pollutant Emissions in tons per year (one pollutant per column) List the pollutant(s) for which the facility is a major source:							
		NO _x	VOC	PM ₁₀	SO _x	CO	Other:	Other:	Other:

Emissions for year ending: _____

TVFORM-001

**San Joaquin Valley
Unified Air Pollution Control District**

Title V Application - ACTUAL GHG EMISSIONS REPORT

Refer to the attached instructions for more information.

COMPANY NAME:							FACILITY ID: -		
LIST OF EQUIPMENT AND ACTUAL ANNUAL EMISSIONS - In numerical order, list all permitted equipment and describe the emissions (See Instructions). If more space is required, use additional forms. Attach sample calculations. <u>In certain cases (See Instructions), actual emissions may be reported in lieu of potential emissions. If this option is chosen report actual emissions on TVFORM-001 and do not list emissions here.</u>									
<u>Column 1</u> Permit Number	<u>Column 2</u> Specific Source of Emissions (if applicable)	<u>Column 3</u> Potential Annual Pollutant Emissions in <u>short</u> tons per year (one pollutant per column) List the pollutant(s) for which the facility is a major source:							
		CO ₂	N ₂ O	CH ₄	HFCs	PFCs	SF ₆	Other:	CO _{2(e)}

TVFORM-001

Revised March 21, 2012

Application Forms

- Complete TVFORM-003
 - Identify insignificant activities that occur at the facility.
 - Place a checkmark for any of the activities listed that occur at the facility.

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Title V Application - INSIGNIFICANT ACTIVITIES**

COMPANY NAME:			FACILITY ID: -		
Check the box next to the exemption category from Rule 2020 which describes any insignificant activity or equipment at your facility not requiring a permit.					
Exemption Category	Rule 2020 Citation	√	Exemption Category	Rule 2020 Citation	√
Structure or incinerator assoc. with a structure designed as a dwelling for 4 families or less	4.1	☐	Containers used to store refined lubricating oils	6.6.8	☐
Locomotives, airplanes, and watercraft used to transport passengers or freight	4.4	☐	Unvented pressure vessels used exclusively to store liquified gases or assoc with exempt equipment	6.6.9 or 6.13	☐
Natural gas or LPG-fired boilers or other indirect heat transfer units of 5 MMBtu/hr or less	6.1.1	☐	Portable tanks used exclusively to store produced fluids for ≤ six months	6.6.10	☐
Piston-type i.e. engine with maximum continuous rating of 50 braking horsepower (bhp) or less	6.1.2	☐	Mobile transport tanks on delivery vehicles of VOCs	6.6.11	☐
Gas turbine engines with maximum heat input rating of 3 MMBtu/hr or less	6.1.3	☐	Loading racks used for the transfer of less than 4,000 gal/day of unheated organic material with initial boiling point ≥ 302 F or of fuel oil with specific gravity ≥ 0.8251	6.7.1.1	☐
Space heating equipment other than boilers	6.1.4	☐	Loading racks used for the transfer of asphalt, crude or residual oil stored in exempt tanks, or crude oil with specific gravity ≥ 0.8762	6.7.1.2	☐
Cooling towers with a circulation rate less than 10,000 gal/min, and that are not used for cooling of process water, or water from barometric jets or condensers ⁺⁺	6.2	☐	Equipment used exclusively for the transfer of refined lubricating oil	6.7.2	☐
Use of less than 2 gal/day of graphic arts materials	6.3	☐	Equipment used to apply architectural coatings	6.8.1	☐
Equipment at retail establishments used to prepare food for human consumption	6.4.1	☐	Unheated, non-conveyORIZED cleaning equipment with < 10 ft ² open area; using solvents with initial boiling point ≥ 248 F; and < 25 gal/yr. evaporative losses	6.9	☐
Ovens at bakeries with total daily production less than 1,000 pounds and exempt by sec. 6.1.1	6.4.3	☐	Brazing, soldering, or welding equipment	6.10	☐
Equipment used exclusively for extruding or compression molding of rubber or plastics, where no plastisizer or blowing agent is used	6.5	☐	Equipment used to compress natural gas	6.11	☐
Containers used to store clean produced water	6.6.1	☐	Fugitive emissions sources assoc. with exempt equipment	6.12	☐
Containers ≤ 100 bbl used to store oil with specific gravity ≥ 0.8762	6.6.2	☐	Pits and Ponds as defined in Rule 1020	6.15	☐
Containers ≤ 100 bbl installed prior to 6/1/89 used to store oil with specific gravity ≥ 0.8762	6.6.3	☐	On-site roadmix manufacturing and the application of roadmix as a road base material	6.17	☐
Containers with a capacity ≤ 250 gallons used to store organic material where the actual storage temperature < 150 F	6.6.4	☐	Emissions less than 2 lb/day from units not included above	6.19	☐
Containers used to store unheated organic material with an initial boiling point ≥ 302 F	6.6.5	☐	Venting PUC quality natural gas from for sole purpose of pipeline and compressor repair and or maintenance	7.2	☐
Containers used to store fuel oils or non-air-blown asphalt with specific gravity ≥ 0.9042	6.6.6	☐	Non-structural repairs & maintenance to permitted equipment	7.3	☐
Containers used to store petroleum distillates used as motor fuel with specific gravity ≥ 0.8251	6.6.7	☐	Detonation of explosives ≤ 100 lb/day and 1,000 lb/year	7.4	☐

☐ No insignificant activities (Check this box if no equipment in the above categories exist at your facility.)

TVFORM-003
(Rev. September 2001)

Application Forms

- Complete TVFORM-004
 - List each permit unit in column 1.
 - Identify rules each permit unit is subject to in column 2.
 - Identify compliance status in column 3.
 - Describe how compliance is achieved in column 4.
 - If there is a future compliance date from an applicable rule state that in column 5.

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Title V Application - COMPLIANCE PLAN

In numerical order list all permitted equipment that are subject to one or more applicable requirements. List all requirements for a permit, each in a separate box, before moving on to the next permit number. Refer to the attached instructions for more information.

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Permit Number	Cite Applicable Requirement(s) Specify the applicable Rule, Regulation, & Section number. See Instructions	Compliance Status: YES NO EXEMPT SUBSUMED	How Will You Comply With The Applicable Requirement? Describe operational requirements and limitations, and/or monitoring, recordkeeping, & reporting protocol to assure compliance with the applicable requirements. See instructions for further details. If SUBSUMED, leave this column blank.	Future Effective Date (List future effective dates of the applicable requirement, if any.)

TVFORM-004

San Joaquin Valley Unified Air Pollution Control District

Title V Application - COMPLIANCE PLAN

In numerical order list all permitted equipment that are subject to one or more applicable requirements. List all requirements for a permit, each in a separate box, before moving on to the next permit number. Refer to the attached instructions for more information.

COLUMN 1 Permit Number	COLUMN 2 Cite Applicable Requirement(s) Specify the applicable Rule, Regulation, & Section number. See Instructions	COLUMN 3 Compliance Status: YES NO EXEMPT SUBSUMED	COLUMN 4 How Will You Comply With The Applicable Requirement? Describe operational requirements and limitations, and/or monitoring, recordkeeping, & reporting protocol to assure compliance with the applicable requirements. See instructions for further details. If SUBSUMED, leave this column blank.	COLUMN 5 Future Effective Date (List future effective dates of the applicable requirement, if any.)
S-1131-73	District Rules 2520, 9.3.2 and 4305, 9.3.2	YES	Existing permit condition #26 : documentation and review of group testing maintenance and tune-up records	N/A
S-1131-73	District Rules 2520, 9.3.2 and 4305, 9.3.2	YES	Existing permit condition #27 : documentation and review of group testing fuel firing records	N/A
S-1131-73	District Rule 2520, 9.3.2	YES	Existing permit condition #28 : documentation and review of source testing records	N/A
S-1131-73	District Rule 2520, 12.2	YES	Existing permit condition #29 : reference condition - no action required	N/A
S-1131-73	District Rule 2520, 12.2	YES	Existing permit condition #30 : reference condition - no action required	N/A
S-1131-77	District Rules 2520, 9.3.2 and 4305	YES	Existing permit condition #1 : documentation and review of monitoring records	N/A
S-1131-77	District Rule 2520, 9.3.2, 9.4.2, and 4305	YES	Existing permit condition #2 : documentation and review of monitoring records	N/A
S-1131-77	District Rules 2520, 9.3.2 and 4305	YES	Existing permit condition #3 : documentation and review of monitoring records	N/A
S-1131-77	District NSR Rule, Rules 4305 and 4351	YES	Existing permit condition #4 : documentation and review of so-42, or monitoring, source testing, analytical, and operational tests	N/A
S-1131-77	District NSR Rule and 4406	YES	Existing permit condition #5 : documentation and review of fuel analyses records	N/A
S-1131-77	District NSR Rule and 4406	YES	Existing permit condition #6 : documentation and review of source testing records	N/A
S-1131-77	District NSR Rule	YES	Existing permit condition #7 : documentation and review of combustion equipment operation records	N/A

Application Forms

- Complete TVFORM-005
 - Initial the circles of each truthful statement
 - Have the Compliance Certification form signed by the **Responsible Official** as described in the instructions.
 - For Initial TV Applications, leave the Compliance Certification dates blank



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TITLE V COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

☐ INITIAL TITLE V PERMIT

☐ PERMIT RENEWAL

☐ NEW TITLE V PERMIT

COMPANY NAME:	FACILITY ID: —
1. Type of Organization: ☐ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility	
2. Owner's Name:	
3. Agent to the Owner:	
4. Compliance Certifications will be submitted on:	
year 1: ____/____/____ year 2: ____/____/____ year 3: ____/____/____ year 4: ____/____/____ year 5: ____/____/____	
Other dates if required by regulations or compliance schedule: _____	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial each circle for confirmation):

- ☐ Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s) which the source is in compliance as identified in the Compliance Plan.
- ☐ Based on information and belief formed after reasonable inquiry, the source identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term as identified in the Compliance Plan, on a timely basis.
- ☐ Based on information and belief formed after reasonable inquiry, the source identified in this application is not in compliance at the time of permit issuance with the applicable federal requirement(s), as identified in the Compliance Plan, and I have attached a compliance schedule.
- ☐ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☐ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the foregoing is correct and true:

Signature of Responsible Official

Date

Name of Responsible Official (please print)

Title of Responsible Official (please print)

Mailing Address: Central Regional Office • 1990 Gettysburg Avenue • Fresno, California 93726-0244 • (559) 230-5900 • FAX (559) 230-6061

TVFORM-005



Application Forms

- Available at:

<http://www.valleyair.org/busind/pto/ptoforms/titlevidx.htm>



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General Permit Templates

- General Permit Templates are permits that have been developed by the District with input from EPA that includes all applicable conditions.
- The District has developed a facility-wide “Umbrella” template to include all administrative requirements.
- A facility will need only to submit a Template Qualification Form (last) page of #SJV-UM-0-3.
- There is a standard set of conditions.
- Public cannot comment on the conditions, only the source’s qualification to use the template.



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Template SJV-UM-0-3

Title V General Permit Template Qualification Form
for
Facility-wide Umbrella General Permit Template

District facility ID # _____

To use this template, remove this sheet and attach to application. The conditions outlined in this template will be placed on your Title V permit.

Any facility may use this facility-wide template as part of its Title V application.

Based on information and belief formed after reasonable inquiry; 1) the information on this form is true and correct and 2) the facility certifies compliance with this template's permit conditions

Signature of Responsible Official

Date

Name of Responsible Official (Please Print)

TQF-1

General Permit Templates

- All other general permit templates have been out-dated because the prohibitory rule requirements have changed frequently. However they may be used as a “guide” to address applicable requirements.

Streamlining Procedure

1. Provide a side-by-side comparison of the applicable requirements to be streamlined by listing key provisions from each requirement.
2. Based on the side-by-side comparison in step 1, select the most stringent emission limit or requirement.
3. Propose one set of permit conditions, called the streamlined requirements, which is to be placed on the Title V permit, assuring compliance with the most stringent emission limit; and contains appropriate monitoring recordkeeping, and reporting requirements.



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Streamlining Example

Type of Requirement	Title of Requirement 1	Title of Requirement 2	Alternative Proposed Requirement
Emission Limit			
Work Practice Standard			
Monitoring			
Recordkeeping			
Reporting			
Test Methods			



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Streamlining Example

Type of Requirement	District Rule 2201	40CFR60 Subpart KKKK & Rule 4702	Alternative Proposed Requirement
Emission Limit	2.5 ppmv NOX @ 15% O2	25 ppmv NOX @ 15% O2	2.5 ppmv NOX @ 15% O2
Work Practice Standard	Fired only on PUC regulated natural gas	Fired on PUC quality natural gas	Fired on PUC regulated natural gas
Monitoring	Continuous Emission Monitoring System (CEMS)	Water-to-fuel ratio and mass flowrate, or CEMS	Continuous Emission Monitoring System (CEMS)
Recordkeeping	Keep records for 5 years	None	Keep records for 5 years
Reporting	None	None	None
Test Methods	EPA Method 7E, 20, ARB Method 100	EPA Method 7E or 20	EPA Method 7E, 20, or ARB Method 100



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Proposed Conditions

- *Emission rates from the CTG, except during startup or shutdown periods, shall not exceed any of the following limits: NO_x (as NO₂) - 8.03 lb/hr and 2.5 ppmvd @ 15% O₂. [Rule 2201 and 4703]*
- *The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NO_x, CO and O₂ concentrations. [Rule 2201, 4703, and 40CFR60.4400(1)(i)]*
- *The owner/operator shall perform a relative accuracy test audit (RATA) for the NO_x, CO, and O₂ CEMs as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. [District Rule 1080]*
- *Results of the CEM system shall be averaged over a one-hour period for NO_x emissions and a three-hour period for CO emissions using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [District Rule 4703, 5.1, 6.4 and 40CFR60.13]*
- *Turbine shall only be fired with PUC regulated natural gas. [District Rule 4102]*



Example – GHG applicability

Source with natural gas-fired boilers and a facility-wide fuel limit of 2,450,000 MMBtu/yr (to stay below the NO_x major source threshold)

Emission factors and global warming potential are:

GHG	EF (lb/MMBtu)	GWP
CO ₂	116.5	1
CH ₄	0.002	21
N ₂ O	0.0002	310

1. Calculate CO_{2e} to see if > 100,000 tpy
2. Calculate GHG (mass) to see if > 100 tpy

Example, cont.

Step 1 – Calculate CO_{2e}:

$$\begin{aligned}\text{CO}_2 &= 2,450,000 * 116.5 * 1/1 * 1/2000 \\ &= 142,712.5 \text{ tons CO}_{2e}\end{aligned}$$

$$\begin{aligned}\text{CH}_4 &= 2,450,000 * 0.002 * 21/1 * 1/2000 \\ &= 51 \text{ tons CO}_{2e}\end{aligned}$$

$$\begin{aligned}\text{N}_2\text{O} &= 2,450,000 * 0.0002 * 310/1 * 1/2000 \\ &= 76 \text{ tons CO}_{2e}\end{aligned}$$

$$\begin{aligned}\text{CO}_{2e} &= 142,712.5 + 51.5 + 76 = 142,840 \text{ tons} \\ &> 100,000 \text{ tons/year, GHG is regulated for} \\ &\text{this facility}\end{aligned}$$



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Example, cont.

Step 2 – Calculate GHG mass:

$$\begin{aligned}\text{CO}_2 &= 2,450,000 * 116.5 * 1/2000 \\ &= 142,712.5 \text{ tons CO}_2\end{aligned}$$

$$\begin{aligned}\text{CH}_4 &= 2,450,000 * 0.002 * 1/2000 \\ &= 2.5 \text{ tons CH}_4\end{aligned}$$

$$\begin{aligned}\text{N}_2\text{O} &= 2,450,000 * 0.0002 * 1/2000 \\ &= 0.3 \text{ tons N}_2\text{O}\end{aligned}$$

$$\begin{aligned}\text{GHG} &= 142,712.5 + 2.5 + 0.3 = 142,715.3 \text{ tons} \\ &> 100 \text{ tons/year, Major Source for GHG}\end{aligned}$$



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Title V Timelines

- 7/1/2011: Step 2 of EPA Tailoring Rule takes effect, giving sources 1 year to submit applications
- 6/28/2012: major sources of GHG must submit a complete Initial Title V application.

Additional Information

Application forms, fact sheet and umbrella template are posted at the following page:

<http://www.valleyair.org/busind/pto/ptoforms/titlevidx.htm>

Additional Information

Please call any of our regional Small Business Assistance (SBA) hotlines:

North: (209) 557-6446

Central: (559) 230-5888

South: (661) 392-5665

Jim Swaney: jim.swaney@valleyair.org

Martin Keast: martin.keast@valleyair.org
(559) 230-5900



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