



FEB 03 2012

Ray Yee  
PPG Industries  
3333 S Peach Ave  
Fresno, CA 93725

**Re: Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)  
District Facility # C-948  
Project # C-1113297**

Dear Mr. Yee:

Enclosed for your review is the District's analysis of your application for Authorities to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The applicant proposes to install a new cullet material handling operation and to replace a cullet crusher in permit C-948-7.

After addressing any EPA comments made during the 45-day comment period, the Authorities to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

David Warner  
Director of Permit Services

Enclosures  
cc: Stanley Tom, Permit Services

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**Northern Region**  
4800 Enterprise Way  
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FEB 03 2012

Gerardo C. Rios, Chief  
Permits Office  
Air Division  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

Re: **Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)**  
**District Facility # C-948**  
**Project # C-1113297**

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authorities to Construct for PPG Industries, located at 3333 S Peach Ave, Fresno, CA, which has been issued a Title V permit. PPG Industries is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The applicant proposes to install a new cullet material handling operation and to replace a cullet crusher in permit C-948-7.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authorities to Construct # C-948-7-5 and '30-0 with Certificate of Conformity. After demonstrating compliance with the Authorities to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

David Warner  
Director of Permit Services

Enclosures  
cc: Stanley Tom, Permit Services

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**San Joaquin Valley Air Pollution Control District**  
**Authority to Construct Application Review**  
Raw Material Handling Glass Manufacturing Facility

|                  |                                      |                |                   |
|------------------|--------------------------------------|----------------|-------------------|
| Facility Name:   | PPG Industries                       | Date:          | December 15, 2011 |
| Mailing Address: | 3333 S Peach Ave<br>Fresno, CA 93725 | Engineer:      | Stanley Tom       |
| Contact Person:  | Ray Yee                              | Lead Engineer: | Joven Refuerzo    |
| Telephone:       | (559) 485-4660                       |                |                   |
| Application #:   | C-948-7-5 and '30-0                  |                |                   |
| Project #:       | C-1113297                            |                |                   |
| Complete:        | November 23, 2011                    |                |                   |

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**I. Proposal**

PPG Industries operates a glass manufacturing facility in Fresno, CA. The applicant proposes the following new equipment at the facility (permit C-948-30-0).

1. Addition of a new cullet tower (hopper) a discharge feeder, and a new belt conveyor/weigher system (3 conveyors)
2. Addition of a cullet screening box. The coarse cullet will be transported to an existing cullet elevator, and transferred through a new closed chute into the new cullet tower.
3. Four additional dust collectors will be added to the new cullet system: a) Dust collector #1 – gallery conveyor #1 at infeed point; b) Dust collector #2 – gallery conveyor #1 at discharge point; c) Dust collector #3 – on cullet bin; d) Dust collector #4 – on Belt Conveyor #3

The facility also proposes to replace an existing cullet crusher (listed in permit C-948-7) with modified design (no impact to cullet throughput). The replacement cullet crusher will exhaust to the existing dust collector.

Finally, the facility proposes to replace a chute to direct mixed batch to the discharge vibrating feeder by adding a mixer discharge vibrating feeder and associated chute (permit C-948-10). These pieces of equipment are not sources of emissions and therefore the replacement does not require an ATC (equipment not listed in the permit).

PPG Industries has received their Title V Permit. This modification can be classified as a Title V minor modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. PPG Industries must apply to administratively amend their Title V permit.

## II. Applicable Rules

**Rule 2201** New and Modified Stationary Source Review Rule (April 21, 2011)  
**Rule 2520** Federally Mandated Operating Permits (June 21, 2001)  
**Rule 4101** Visible Emissions (February 17, 2005)  
**Rule 4102** Nuisance (December 17, 1992)  
**Rule 4201** Particulate Matter – Concentration (December 17, 1992)  
**Rule 4202** Particulate Matter – Emission Rate (December 17, 1992)  
**CH&SC 41700** California Health & Safety Code, Sec 41700, Health Risk Assessment  
**CH&SC 42301** California Health & Safety Code, Sec 42301.6, School Notice  
**Public Resources Code 21000-21177:** California Environmental Quality Act (CEQA)  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

## III. Project Location

The site is located at 3333 S Peach Ave, in Fresno, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

## IV. Process Description

The facility manufactures container glass from the following main ingredients: silica sand, soda ash, limestone, cullet (recycled glass), and salt cake.

This project involves the addition of new material handling equipment that will allow different types of cullet to be processed without being mixed. The new equipment will not result in an increase in production. Addition of a new cullet tower (bin), a discharge feeder, and a new belt conveyor/weigher system (3 conveyors) will segregate the handling of different types of cullet. The new equipment will hold, weigh, and convey segregated cullet to an existing conveyor, where the cullet will combine with batch ingredients prior to feed into the furnace.

Cullet will be screened to remove undesired fine material. The box is an open top container containing a mesh screen. Cullet will be filled by a payloader into the top of the box and separated by size as it falls through the screen. The coarse cullet will be transported to an existing cullet elevator, and transferred through a new closed chute into the new cullet tower described above. The fines will be accumulated in a storage pile and re-used in the production process.

Four new dust collectors will be added to the new cullet system:

- Dust collector #1 – gallery conveyor #1 at infeed point
- Dust collector #2 – gallery conveyor #1 at discharge point
- Dust collector #3 – on new cullet bin
- Dust collector #4 – on Belt conveyor #3

## V. Equipment Listing

### Pre-Project Equipment Description:

**C-948-7-4** 517,000 GALLON CULLET STORAGE SILO #4 AND CULLET CRUSHING OPERATION WITH CULLET ELEVATOR SERVED BY A PANGBORN CORPORATION BAGHOUSE FABRIC COLLECTOR #DC-5, SERIAL #42-CH3-6656

### Proposed Modification:

**C-948-7-5** MODIFICATION OF 517,000 GALLON CULLET STORAGE SILO #4 AND CULLET CRUSHING OPERATION WITH CULLET ELEVATOR SERVED BY A PANGBORN CORPORATION BAGHOUSE FABRIC COLLECTOR #DC-5, SERIAL #42-CH3-6656: REPLACE CULLET CRUSHER

**C-948-30-0** MATERIAL HANDLING SYSTEM CONSISTING OF A CULLET TOWER (HOPPER) AND DISCHARGE FEEDER, A BELT CONVEYOR/WEIGHER SYSTEM WITH 3 CONVEYORS, A CULLET SCREENING BOX, A MIXER DISCHARGE VIBRATING FEEDER, AND FOUR ASSOCIATED DUST COLLECTORS: ONE (1) DONALDSON TORIT MODEL DLM-V4/7F1 AND THREE (3) J.D.B. DENSE FLOW MODEL DF110R

### Post Project Equipment Description:

**C-948-7-5** 517,000 GALLON CULLET STORAGE SILO #4 AND CULLET CRUSHING OPERATION WITH CULLET CRUSHER AND CULLET ELEVATOR SERVED BY A PANGBORN CORPORATION BAGHOUSE FABRIC COLLECTOR #DC-5, SERIAL #42-CH3-6656

**C-948-30-0** MATERIAL HANDLING SYSTEM CONSISTING OF A CULLET TOWER (HOPPER) AND DISCHARGE FEEDER, A BELT CONVEYOR/WEIGHER SYSTEM WITH 3 CONVEYORS, A CULLET SCREENING BOX, A MIXER DISCHARGE VIBRATING FEEDER, AND FOUR ASSOCIATED DUST COLLECTORS: ONE (1) DONALDSON TORIT MODEL DLM-V4/7F1 AND THREE (3) J.D.B. DENSE FLOW MODEL DF110R

## VI. Emission Control Technology Evaluation

PM<sub>10</sub> is the pollutant of concern emitted from the material handling operation. The PM<sub>10</sub> emissions are controlled with a baghouse dust collector and cartridge filters. According to the vendor, the baghouses have a PM<sub>10</sub> control efficiency of 99.9%.

Design check calculations:

Air Flow Calculations for each dust collector:

*J.D.B Dense Flow pulse jet dust collector*

Airflow: 324 ft<sup>3</sup>/min (per Applicant)  
 Air/Cloth Ratio: = Air Flow Rate ÷ Cloth Area  
 = 324 cfm ÷ 108 ft<sup>2</sup> = 3.0 ft/min

*Donaldson Torit dust collector*

Airflow: 200 ft<sup>3</sup>/min (per Applicant)  
 Air/Cloth Ratio: = Air Flow Rate ÷ Cloth Area  
 = 200 cfm ÷ 43 ft<sup>2</sup> = 4.7 ft/min

The pulse jet cleaning mechanism uses a high pressure jet of air to remove the dust from the bags. The dust cake is removed from the bag by a blast of compressed air injected into the top of the bag tube. The air blast causes the bag to flex or expand as the shock wave travels down the bag tube. As the bag tube flexes, the dust cake fractures and deposited particulates are discharged from the bag. Pulse jet baghouses are generally designed with air-to-cloth ratio (filtering velocity) between 5 and 15 ft/min.

The calculated air/cloth ratio is lower than the typical range. However the baghouse manufacturer and the operator described this piece of equipment as a high efficiency dust collector, and the facility has assured that this baghouse is appropriate for their operation.

**VII. General Calculations**

**A. Assumptions**

- Facility operates 24 hours per day, 365 days per year (per Applicant)
- PM<sub>10</sub> is the only pollutant of concern in this project
- The baghouse dust collectors have a PM<sub>10</sub> control efficiency of 99% (per manufacturer)
- Permit C-948-7 maximum daily amount of material throughput shall not exceed 5,183 tons per day (current PTO)

**B. Emission Factors**

| Emission Factor    |              |                            |
|--------------------|--------------|----------------------------|
| Permit Unit        | gr-PM10/dscf | Source                     |
| C-948-7 (crushing) | 0.0012       | AP-42 Table 11.19.2-2 8/04 |

| <b>Emission Factor (Permit C-948-30-0)</b> |              |                        |
|--|--------------|------------------------|
| Emission Unit                              | gr-PM10/dscf | Source                 |
| J.D.B Dense Flow Baghouse #1               | 0.001        | Manufacturer guarantee |
| J.D.B Dense Flow Baghouse #2               | 0.001        | Manufacturer guarantee |
| J.D.B Dense Flow Baghouse #3               | 0.001        | Manufacturer guarantee |
| Donaldson Torit Baghouse                   | 0.001        | Manufacturer guarantee |

### C. Calculations

#### 1. Pre-Project Potential to Emit (PE1):

##### C-948-7-4

$$\begin{aligned} \text{Daily PE1} &= 5,183 \text{ tons/day} \times 0.0012 \text{ lb/ton} \\ &= 6.2 \text{ lb-PM}_{10}/\text{day} \end{aligned}$$

$$\begin{aligned} \text{Annual PE1} &= 6.2 \text{ lb-PM}_{10}/\text{day} \times 365 \text{ days/year} \\ &= 2,263 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

##### C-948-30-0

Since this is a new emissions unit, PE1 = 0.

#### 2. Post Project Potential to Emit (PE2):

##### C-948-7-5

There is no change in emissions. Therefore, PE2 = PE1.

##### C-948-30-0

For each J.D.B Dense Flow dust collector,

$$\begin{aligned} \text{Daily PE2} &= 0.001 \text{ gr/dscf} \div 7,000 \text{ gr/lb} \times 324 \text{ (ft}^3/\text{min)} \times 1,440 \text{ min/day} \\ &= 0.1 \text{ lb-PM}_{10}/\text{day} \end{aligned}$$

For each Donaldson Torit dust collector,

$$\begin{aligned} \text{Daily PE2} &= 0.001 \text{ gr/dscf} \div 7,000 \text{ gr/lb} \times 200 \text{ (ft}^3/\text{min)} \times 1,440 \text{ min/day} \\ &= 0.04 \end{aligned}$$

For all four dust collectors,

$$\begin{aligned} \text{Daily PE2} &= 0.1 \text{ lb-PM}_{10}/\text{day} \times 3 \text{ dust collectors} + 0.0 \text{ lb-PM}_{10}/\text{day} \times 1 \text{ dust collector} \\ &= 0.3 \text{ lb-PM}_{10}/\text{day} \rightarrow 0 \text{ lb-PM}_{10}/\text{day}^* \end{aligned}$$

\* Per District Policy APR 1130, District policy is to consider an IPE of less than 0.5 lb/day to be rounded to zero for the purposes of triggering NSR requirements and therefore the requirements are not triggered. However, to minimize rounding errors, DELs, SSPE, PE and all other associated figures will be reflected in the EE and the permits without setting a daily increase in emissions of less than 0.5 lb/day to zero.

For each J.D.B Dense Flow dust collector,

$$\begin{aligned} \text{Annual PE2} &= 0.001 \text{ gr/dscf} \div 7,000 \text{ gr/lb} \times 324 \text{ (ft}^3\text{/min)} \times 1,440 \text{ min/day} \times 365 \text{ days/year} \\ &= 24 \text{ lb-PM}_{10}\text{/year} \end{aligned}$$

For each Donaldson Torit dust collector,

$$\begin{aligned} \text{Annual PE2} &= 0.001 \text{ gr/dscf} \div 7,000 \text{ gr/lb} \times 200 \text{ (ft}^3\text{/min)} \times 1,440 \text{ min/day} \times 365 \text{ days/year} \\ &= 15 \text{ lb-PM}_{10}\text{/year} \end{aligned}$$

For all four dust collectors,

$$\begin{aligned} \text{Annual PE2} &= 24 \text{ lb-PM}_{10}\text{/year} \times 3 \text{ dust collectors} + 15 \text{ lb-PM}_{10}\text{/year} \times 1 \text{ dust collector} \\ &= 87 \text{ lb-PM}_{10}\text{/year} \end{aligned}$$

### 3. Pre-Project Stationary Source Potential to Emit (SSPE1):

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

The Pre-Project Stationary Source Potential to Emit (SSPE1) is summarized below.

| Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year) |                 |                 |                  |         |        |
|---|-----------------|-----------------|------------------|---------|--------|
|   | NO <sub>x</sub> | SO <sub>x</sub> | PM <sub>10</sub> | CO      | VOC    |
| Pre-Project SSPE (SSPE1)  | 2,174,245       | 526,332         | 177,423          | 229,052 | 28,300 |

\* Per project C-1074225

### 4. Post Project Stationary Source Potential to Emit (SSPE2):

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. The Post Project Stationary Source Potential to Emit (SSPE2) is summarized below:

| <b>Post-Project Stationary Source Potential to Emit [SSPE2] (lb/year)</b> |                 |                 |                  |         |        |
|---|-----------------|-----------------|------------------|---------|--------|
|   | NO <sub>x</sub> | SO <sub>x</sub> | PM <sub>10</sub> | CO      | VOC    |
| Pre-Project SSPE (SSPE1)  | 2,174,245       | 526,332         | 177,423          | 229,052 | 28,300 |
| C-948-30-0  | 0               | 0               | 87               | 0       | 0      |
| Post-Project SSPE (SSPE2)   | 2,174,245       | 526,332         | 177,510          | 229,052 | 28,300 |

## 5. Major Source Determination

Pursuant to Section 3.24 of District Rule 2201, a Major Source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. However, Section 3.24.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site."

| <b>Major Source Determination (lb/year)</b> |                 |                 |                  |         |        |
|---|-----------------|-----------------|------------------|---------|--------|
|   | NO <sub>x</sub> | SO <sub>x</sub> | PM <sub>10</sub> | CO      | VOC    |
| Pre-Project SSPE (SSPE1)                    | 2,174,245       | 526,332         | 177,423          | 229,052 | 28,300 |
| Post Project SSPE (SSPE2)                   | 2,174,245       | 526,332         | 177,510          | 229,052 | 28,300 |
| Major Source Threshold                      | 20,000          | 140,000         | 140,000          | 200,000 | 20,000 |
| Major Source?                               | Yes             | Yes             | Yes              | Yes     | Yes    |

The source is an existing Major Source for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC and will remain a Major Source for these pollutants.

## 6. Baseline Emissions (BE)

BE = Pre-project Potential to Emit for:

- Any unit located at a non-major source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Rule 2201, Section 3.22.

C-948-7

**BE PM<sub>10</sub>**

Clean Emissions Unit, Located at a Major Source

Pursuant to Rule 2201, Section 3.12, a Clean Emissions Unit is defined as an emissions unit that is "equipped with an emissions control technology with a minimum control efficiency of at

least 95% or is equipped with emission control technology that meets the requirements for achieved-in-practice BACT as accepted by the APCO during the five years immediately prior to the submission of the complete application.

The emission unit in this project is served by a dust collector, which has PM<sub>10</sub> control efficiency of 99% or greater. Therefore, Baseline Emissions (BE) are equal to the Pre-Project Potential to Emit (PE1).

As calculated in Section VII.C.1 above, PE1 is summarized in the following table:

| <b>Baseline Emissions [BE] (lb/year)</b> |                       |                       |                        |           |            |
|--|-----------------------|-----------------------|------------------------|-----------|------------|
|  | <b>NO<sub>x</sub></b> | <b>SO<sub>x</sub></b> | <b>PM<sub>10</sub></b> | <b>CO</b> | <b>VOC</b> |
| <b>C-948-7-4</b>                         | 0                     | 0                     | 2,263                  | 0         | 0          |

### C-948-30-0

Since this is a new emissions unit, BE = PE1 = 0 for all pollutants.

## **7. SB 288 Major Modification**

SB 288 Major Modification is defined in 40 CFR Part 51.165 as *"any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."*

Calculated emission increases from new or modified emission units that are less than or equal to 0.5 lb/day are rounded to 0 (consistent with District Policy APR-1130 Increases Maximum Daily Permitted Emissions Less Than or Equal to 0.5 lb/day). This calculation is performed on an emission unit by emission unit basis. New or modified emission units with emission increases that round to 0 shall not constitute an SB 288 Major Modification.

This project results in an emission increase less than 0.5 lb/day. Therefore, this project shall not constitute an SB 288 Major Modification.

## **8. Federal Major Modification**

District Rule 2201, Section 3.17 states that major modifications are also federal major modifications, unless they qualify for either a "Less-Than-Significant Emissions Increase" exclusion or a "Plantwide Applicability Limit" (PAL) exclusion.

A Less-Than-Significant Emissions Increase exclusion is for an emissions increase for the project, or a Net Emissions Increase for the project (as defined in 40 CFR 51.165 (a)(2)(ii)(B) through (D), and (F)), that is not significant for a given regulated NSR pollutant, and therefore is not a federal major modification for that pollutant.

- To determine the post-project projected actual emissions from existing units, the provisions of 40 CFR 51.165 (a)(1)(xxviii) shall be used.

- To determine the pre-project baseline actual emissions, the provisions of 40 CFR 51.165 (a)(1)(xxxv)(A) through (D) shall be used.
- If the project is determined not to be a federal major modification pursuant to the provisions of 40 CFR 51.165 (a)(2)(ii)(B), but there is a reasonable possibility that the project may result in a significant emissions increase, the owner or operator shall comply with all of the provisions of 40 CFR 51.165 (a)(6) and (a)(7).
- Emissions increases calculated pursuant to this section are significant if they exceed the significance thresholds specified in the table below.

| <b>Significant Threshold (lb/year)</b> |                            |
|--|----------------------------|
| <b>Pollutant</b>                       | <b>Threshold (lb/year)</b> |
| VOC                                    | 0                          |
| NO <sub>x</sub>                        | 0                          |
| PM <sub>10</sub>                       | 30,000                     |
| SO <sub>x</sub>                        | 80,000                     |

Calculated emission increases from new or modified emission units that are less than or equal to 0.5 lb/day are rounded to 0 (consistent with District Policy APR-1130 Increases Maximum Daily Permitted Emissions Less Than or Equal to 0.5 lb/day). This calculation is performed on an emission unit by emission unit basis. New or modified emission units with emission increases that round to 0 shall not constitute a Federal Major Modification.

This project results in an emission increase less than 0.5 lb/day. Therefore, this project shall not constitute a Federal Major Modification.

### 9. Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.

PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$$\begin{aligned}
 PE2_{\text{quarterly}} &= PE2_{\text{annual}} \div 4 \text{ quarters/year} \\
 &= 87 \text{ lb/year} \div 4 \text{ qtr/year} \\
 &= 22 \text{ lb PM}_{10}/\text{qtr}
 \end{aligned}$$

$$\begin{aligned}
 PE1_{\text{quarterly}} &= PE1_{\text{annual}} \div 4 \text{ quarters/year} \\
 &= 0 \text{ lb/year} \div 4 \text{ qtr/year} \\
 &= 0 \text{ lb PM}_{10}/\text{qtr}
 \end{aligned}$$

| <b>Quarterly NEC [QNEC] C-948-30-0</b> |              |              |               |
|--|--------------|--------------|---------------|
|  | PE2 (lb/qtr) | PE1 (lb/qtr) | QNEC (lb/qtr) |
| NO <sub>x</sub>                        | 0            | 0            | 0             |
| SO <sub>x</sub>                        | 0            | 0            | 0             |
| PM <sub>10</sub>                       | 22           | 0            | 22            |
| CO                                     | 0            | 0            | 0             |
| VOC                                    | 0            | 0            | 0             |

| <b>Quarterly NEC [QNEC] C-948-7-5</b> |              |              |               |
|---------------------------------------|--------------|--------------|---------------|
|                                       | PE2 (lb/qtr) | PE1 (lb/qtr) | QNEC (lb/qtr) |
| NO <sub>x</sub>                       | 0            | 0            | 0             |
| SO <sub>x</sub>                       | 0            | 0            | 0             |
| PM <sub>10</sub>                      | 566          | 566          | 0             |
| CO                                    | 0            | 0            | 0             |
| VOC                                   | 0            | 0            | 0             |

## VIII. Compliance

### Rule 2201 New and Modified Stationary Source Review Rule

#### A. Best Available Control Technology (BACT)

##### 1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following\*:

- a) Any new emissions unit with a potential to emit exceeding two pounds per day,
- b) The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c) Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d) Any new or modified emissions unit, in a stationary source project, which results in a Major Modification.

\*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

##### a. New Emissions units with PE > 2 lb/day

As seen in Section VII.C.2 of this evaluation, the applicant is proposing to install a new material handling operation with a PE less than 2 lb/day for PM<sub>10</sub>. BACT is not triggered for PM<sub>10</sub> since the PE is less than 2 lbs/day.

##### b. Relocation of emissions with PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

**c. Modification of emissions units with AIPE > 2 lb/day**

For modified emissions units, the AIPE can be calculated as follows:

$$\text{AIPE} = \text{PE2} - \text{HAPE}$$

Where,

AIPE = Adjusted Increase in Permitted Emissions, (lb/day)

PE2 = Post-Project Potential to Emit, (lb/day)

HAPE = Historically Adjusted Potential to Emit, (lb/day)

$$\text{HAPE} = \text{PE1} \times (\text{EF2}/\text{EF1})$$

Where,

PE1 = The emissions unit's Potential to Emit prior to modification or relocation, (lb/day)

EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1

EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

$$\text{AIPE} = \text{PE2} - (\text{PE1} \times (\text{EF2} / \text{EF1}))$$

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There are no emission factor changes in this project. Therefore, EF2 / EF1 = 1.

$$\begin{aligned} \text{AIPE} &= 6.2 - (6.2 * (1)) \\ &= 6.2 - 6.2 * 1 \\ &= 0.0 \text{ lb-PM}_{10}/\text{day} \end{aligned}$$

As demonstrated above, the AIPE is not greater than 2.0 lb/day for PM<sub>10</sub> emissions; therefore BACT is not triggered.

**d. Major Modification**

As discussed in Section VII.C.7 above, this project does not constitute a Major Modification; therefore BACT is not triggered.

**B. Offsets**

**1. Offset Applicability**

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the Post Project Stationary Source Potential to Emit (SSPE2) equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The following table compares the post-project facility-wide annual emissions in order to determine if offsets will be required for this project.

| Offset Applicability (lb/year) |                 |                 |                  |         |        |
|--------------------------------|-----------------|-----------------|------------------|---------|--------|
|                                | NO <sub>x</sub> | SO <sub>x</sub> | PM <sub>10</sub> | CO      | VOC    |
| Post Project SSPE (SSPE2)      | 2,174,245       | 526,332         | 177,510          | 229,052 | 28,300 |
| Offset Threshold               | 20,000          | 54,750          | 29,200           | 200,000 | 20,000 |
| Offsets Triggered?             | Yes             | Yes             | Yes              | Yes     | Yes    |

## 2. Quantity of Offsets Required

PM10 is the only pollutant of concern in this project. Therefore, calculations for only PM10 emissions are required.

Per Sections 4.7.1 and 4.7.3 of Rule 2201, the quantity of offsets in pounds per year for each pollutant is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) =  $(\Sigma[PE2 - BE] + ICCE) \times DOR$ , for all new or modified emissions units in the project

where:

PE2 = Post-project Potential to Emit (lb/year)

BE = Baseline Emissions (lb/year)

ICCE = Increase in Cargo Carrier Emissions (lb/year)

DOR = Distance Offset Ratio, determined pursuant to Rule 2201, Section 4.8

BE = Pre-project Potential to Emit for:

- Any unit located at a non-major source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source

otherwise,

BE = Historic Actual Emissions (HAE)

Per District Policy APR 1130, District policy is to consider an IPE of less than 0.5 lb/day to be rounded to zero for the purposes of triggering NSR requirements. This project results in an emission increase of less than 0.5 lb/day. Therefore, offsets are not required for this project.

## C. Public Notification

### 1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSPE of greater than 20,000 lb/year for any pollutant.

#### a. New Major Sources, Federal Major Modifications, and SB288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in VII.C.7, this project does not constitute a SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

#### b. PE > 100 lb/day

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

#### c. Offset Threshold

The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

| Offset Threshold |                    |                    |                     |                            |
|------------------|--------------------|--------------------|---------------------|----------------------------|
| Pollutant        | SSPE1<br>(lb/year) | SSPE2<br>(lb/year) | Offset<br>Threshold | Public Notice<br>Required? |
| NO <sub>x</sub>  | 2,174,245          | 2,174,245          | 20,000 lb/year      | No                         |
| SO <sub>x</sub>  | 526,332            | 526,332            | 54,750 lb/year      | No                         |
| PM <sub>10</sub> | 177,423            | 177,510            | 29,200 lb/year      | No                         |
| CO               | 229,052            | 229,052            | 200,000 lb/year     | No                         |
| VOC              | 28,300             | 28,300             | 20,000 lb/year      | No                         |

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

**d. SSIPE > 20,000 lb/year**

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e.  $SSIPE = SSPE2 - SSPE1$ . The values for SSPE2 and SSPE1 are calculated according to Rule 2201, Sections 4.9 and 4.10, respectively. The SSIPE is compared to the SSIPE Public Notice threshold of 20,000 lb/year in the following table.

| <b>Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice</b> |                    |                    |       |                            |
|--|--------------------|--------------------|-------|----------------------------|
| Pollutant  | SSPE2<br>(lb/year) | SSPE1<br>(lb/year) | SSIPE | Public Notice<br>Required? |
| NO <sub>x</sub>  | 2,174,245          | 2,174,245          | 0     | No                         |
| SO <sub>x</sub>  | 526,332            | 526,332            | 0     | No                         |
| PM <sub>10</sub>   | 177,510            | 177,423            | 87    | No                         |
| CO   | 229,052            | 229,052            | 0     | No                         |
| VOC  | 28,300             | 28,300             | 0     | No                         |

As demonstrated above, the SSIPEs for all pollutants are less than 20,000 lb/year; therefore public noticing is not required for SSIPE purposes.

**2. Public Notice Action**

As discussed above, this project will not result in emissions, for any criteria pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

**D. Daily Emission Limits (DELs)**

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

**Proposed Rule 2201 (DEL) Conditions:**

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- Maximum daily amount of material throughput shall not exceed 5183 tons per day. [District NSR Rule]
- PM<sub>10</sub> emissions rate from the cullet crushing operation shall not exceed 0.0012 lb-PM<sub>10</sub>/ton-material. [District Rule 2201]

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- Controlled PM10 emissions from each dust collector shall not exceed 0.001 gr/scf. [District Rule 2201]

**E. Compliance Assurance**

The following measures shall be taken to ensure continued compliance with District Rules:

**1. Source Testing**

As stated in District Policy APR 1705, non-combustion equipment served by a baghouse with expected PM10 emissions of 30 pounds per day or greater must be tested upon initial start-up. Units with PM10 emissions in excess of 70 pounds per day should also be tested on annual basis.

As shown in the calculation section above, all equipment have PM10 emissions below the above levels. Therefore, pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

**2. Monitoring**

No monitoring is required to demonstrate compliance with Rule 2201.

**3. Recordkeeping**

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following conditions will appear on the permit to operate:

- Differential operating pressure for each baghouse shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]
- Records of all maintenance of each baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201]

**4. Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

**Rule 2520 Federally Mandated Operating Permit**

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit pursuant to Section 3.20 of this rule:

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment application.

#### **Rule 4101 Visible Emissions**

Rule 4101 states that no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity.

For operation served by a baghouse, visible emissions shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour.

A permit condition will be listed on permit as follows:

- Visible emissions from each baghouse shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]

#### **Rule 4102 Nuisance**

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

## California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project (Attachment C), the total facility prioritization score including this project was less than or equal to one. Therefore, no future analysis is required to determine the impact from this project and compliance with the District’s Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District’s significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 10 in a million). As outlined by the HRA Summary in Attachment C of this report, the emissions increases for this project was determined to be less than significant.

### Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

The manufacturer has guaranteed a PM<sub>10</sub> emission rate of 0.001 gr/scf for each dust collector.

Since 0.001 grain/dscf is less than 0.1 grain/dscf, compliance with this rule is expected.

### Rule 4202 Particulate Matter Emission Rate

This rule limits the allowable PM emission rate based on the equipment process weight rate. Section 3.1 defines the process weight as “the total weight of all materials introduced into any specific process, which process may cause any discharge into the atmosphere.”

Per section 4.1, particulate matter (PM) emissions from any source operation shall not exceed the allowable hourly emission rate (E) as calculated using the following applicable formulas:

$$E = 3.59 P^{0.62} \text{ (when, } P = \text{ process weight rate } \leq 30 \text{ tons/hr)}$$

$$E = 17.31 P^{0.16} \text{ (when, } P = \text{ process weight rate } > 30 \text{ tons/hr)}$$

### C-948-7-5

The post-project process weight rate of the cullet operation is 215.96 tons per hour (equivalent to 5,183 tons/day).

$$\begin{aligned}\text{Rule 4202 emission limit} &= 17.31 * P^{0.16} \text{ (where P greater than 30 tons/hr)} \\ &= 17.31 * (215.96)^{0.16} \\ &= 40.91 \text{ lb/hr}\end{aligned}$$

The operation has a maximum Post Project Potential to Emit (PE2) of 0.26 lb/hr (6.2 lb/day ÷ 24 hr/day).

Therefore, the PM emissions are within allowable limits and compliance with the rule is expected.

#### C-948-30-0

The post-project process weight rate of the material handling operation is 27.08 tons per hour (equivalent to 650 tons/day).

$$\begin{aligned}\text{Rule 4202 emission limit} &= 3.59 * P^{0.62} \text{ (where P less than 30 tons/hr)} \\ &= 3.59 * (27.08)^{0.62} \\ &= 27.76 \text{ lb/hr}\end{aligned}$$

The operation has a maximum Post Project Potential to Emit (PE2) of 0.01 lb/hr (0.3 lb/day ÷ 24 hr/day).

Therefore, the PM emissions are within allowable limits and compliance with the rule is expected.

#### **California Health & Safety Code 42301.6 (School Notice)**

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

#### **California Environmental Quality Act (CEQA)**

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District conducted a Risk Management Review and concludes that potential health impacts are less than significant.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

**IX. Recommendation**

Compliance with all applicable rules and regulations is expected. Issue Authorities to Construct C-948-7-5 and '30-0 subject to the permit conditions on the attached draft Authorities to Construct in Attachment C.

**X. Billing Information**

| <b>Annual Permit Fees</b> |              |                           |            |
|---------------------------|--------------|---------------------------|------------|
| Permit Number             | Fee Schedule | Fee Description           | Annual Fee |
| C-948-7-5                 | 3020-05-F    | 517.0 kGAL Cullet Silo #4 | \$301.00   |
| C-948-30-0                | 3020-01-C    | 70.5 hp                   | \$197.00   |

**Attachments**

- A. Current Permit to Operate
- B. Certificate of Conformity
- C. Health Risk Assessment
- D. Draft ATCs

**Attachment A**  
**Current Permit to Operate**

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-948-7-4

**EXPIRATION DATE:** 02/29/2016

**EQUIPMENT DESCRIPTION:**

517,000 GALLON CULLET STORAGE SILO #4 AND CULLET CRUSHING OPERATION WITH CULLET ELEVATOR SERVED BY A PANGBORN CORPORATION BAGHOUSE FABRIC COLLECTOR #DC-5, SERIAL #42-CH3-6656.

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Maximum daily amount of material throughput shall not exceed 5183 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Dust collector filters shall be inspected annually while in operation for evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Dust collector filters shall be inspected annually while not in operation for tears, scuffs, abrasions or holes which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. Visible emissions shall be inspected quarterly during operation. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions prior to further loading. Corrective action shall eliminate visible emissions before next loading event. The results of inspection shall be kept in a record and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. Permittee shall maintain daily records of material throughput and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Fresno County Rule 404, District Rule 4202 and Fresno County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-948-10-6

**EXPIRATION DATE:** 02/29/2016

## **EQUIPMENT DESCRIPTION:**

SILO UNLOADING AND MIXING OPERATION INCLUDING BATCH GATHERING BELT, BATCH ELEVATOR AND TOTALIZING SCALE SERVED BY PANGBORN CORP DC-6 FABRIC COLLECTOR (SN 63-CH3-6671) OR DC-2 FABRIC COLLECTOR (SN 67 CH3-6664) AND GLASS MASTER TURBIN MODEL 12000 MIXER SERVED BY A TORIT DOWN FLO-II MODEL #DFT-2-4 BAGHOUSE. PAGBORN CORP DC-2 FABRIC COLLECTOR IS SHARED BY PERMIT UNITS -6 AND -8

## **PERMIT UNIT REQUIREMENTS**

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Visible emissions from the dust collector shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Emissions shall be controlled by a baghouse dust collector: either DC-6 (Pangborne Model #67-CH3) or DC-2 (Pangborne Model #63-CH3). [District NSR Rule] Federally Enforceable Through Title V Permit
6. PM10 emissions from the transfer of materials from the storage silos to the mixer shall not exceed 0.00025 lb/ton of material throughput. [District NSR Rule] Federally Enforceable Through Title V Permit
7. PM10 emissions shall not exceed 0.006 pound per ton of material throughput. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Maximum throughput of the batch mixer shall not exceed 1500 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Combined emissions from permit units C-948-6 and C-948-10 shall not exceed 12.4 lb-PM10/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Dust collector filters shall be inspected annually while in operation for evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Dust collector filters shall be inspected annually while not in operation for tears, scuffs, abrasions or holes which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Visible emissions from the dust collector shall be checked monthly, while in operation. If visible emissions are observed, corrective action shall be taken eliminate visible emissions. Corrective action shall eliminate visible emissions within 24 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

14. Permittee shall maintain daily records of the material throughput to the batch mixer, and such records shall be made available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Fresno County Rule 404, District Rule 4202 and Fresno County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

**Attachment B**  
**Certificate of Conformity**

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

**TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM**

**I. TYPE OF PERMIT ACTION (Check appropriate box)**

- SIGNIFICANT PERMIT MODIFICATION                       ADMINISTRATIVE  
 MINOR PERMIT MODIFICATION    AMENDMENT

|  |                      |
|--|----------------------|
| COMPANY NAME: PPG Industries, Inc.   | FACILITY ID: C = 948 |
| 1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility |                      |
| 2. Owner's Name: PPG Industries, Inc.  |                      |
| 3. Agent to the Owner: n/a   |                      |

**II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):**

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- 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 forgoing is correct and true:

Ray Yee  
Signature of Responsible Official

11/15/11  
Date

Ray Yee  
Ray Yee  
Name of Responsible Official (please print)

Plant Manager  
Plant Manager  
Title of Responsible Official (please print)

**Attachment C**  
**Health Risk Assessment**

# San Joaquin Valley Air Pollution Control District Risk Management Review

To: Stanley Tom – Permit Services  
From: Leland Villalvazo – Technical Services  
Date: December 18, 2011  
Facility Name: PPG  
Location: 3333 S Peach Ave  
Application #(s): C-948-30-0  
Project #: C-1113297

---

## A. RMR SUMMARY

| RMR Summary                                  |                                |  |                   |                    |
|--|--------------------------------|--|-------------------|--------------------|
| Categories                                   | Cullet Baghouse<br>(Unit 30-0) |  | Project<br>Totals | Facility<br>Totals |
| Prioritization Score                         | 0.13                           |  | 0.13              | >1.0               |
| Acute Hazard Index                           | 0.0                            |  | 0.0               | 0.0                |
| Chronic Hazard Index                         | 0.01                           |  | 0.01              | 0.01               |
| Maximum Individual Cancer Risk ( $10^{-6}$ ) | 0.0                            |  | 0.0               | 2.58               |
| T-BACT Required?                             | No                             |  |                   |                    |
| Special Permit Conditions?                   | No                             |  |                   |                    |

### Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

#### Unit # 30-0

No special conditions are required.

## B. RMR REPORT

### I. Project Description

Technical Services received a request on December 5, 2011 to perform a Risk Management Review for a proposed installation of glass cullet baghouse and associated equipment.

### II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Since the total facility prioritization score was greater than one, a refined health risk assessment

was required. Emissions calculated using the PM<sub>10</sub> emissions provided by the processing engineer and assumption (worst-case) that all PM<sub>10</sub> was Crystalline Silica. These emissions were input into the HEARTs database. The AERMOD model was used, with the parameters outlined below and meteorological data for 2005-2009 from Fresno to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the Hot Spots Analysis and Reporting Program (HARP) risk assessment module to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

| <b>Analysis Parameters<br/>Unit 30-0</b> |        |                             |             |
|--|--------|-----------------------------|-------------|
| <b>Source Type</b>                       | Point  | <b>Location Type</b>        | Rural       |
| <b>Stack Height (m)</b>                  | 22.098 | <b>Closest Receptor (m)</b> | Max Modeled |
| <b>Stack Diameter. (m)</b>               | 0.203  | <b>Type of Receptor</b>     | Residential |
| <b>Stack Exit Velocity (m/s)</b>         | 2.91   | <b>Max Hours per Year</b>   | 8760        |
| <b>Stack Exit Temp. (°K)</b>             | 273    |                             |             |

### III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk factor associated with the project is less than 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on page 1 of this report must be included for this proposed unit.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

### IV. Attachments

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Toxic emissions summary
- D. Prioritization score
- E. Facility Summary

**Attachment D**  
**Draft Authority to Construct**  
**(ATC) Permits**

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

**ISSUANCE DATE: DRAFT**

**PERMIT NO:** C-948-7-5

**LEGAL OWNER OR OPERATOR:** PPG INDUSTRIES  
**MAILING ADDRESS:** 3333 S PEACH AVE  
FRESNO, CA 93725

**LOCATION:** 3333 S PEACH AVE  
FRESNO, CA 93725

**EQUIPMENT DESCRIPTION:**  
MODIFICATION OF 517,000 GALLON CULLET STORAGE SILO #4 AND CULLET CRUSHING OPERATION WITH CULLET ELEVATOR SERVED BY A PANGBORN CORPORATION BAGHOUSE FABRIC COLLECTOR #DC-5, SERIAL #42-CH3-6656: REPLACE CULLET CRUSHER

**CONDITIONS**

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse shall not exceed 5% opacity for a period of periods aggregating more than three minutes in any one hour [District Rule 2201] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

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DAVID WARNER, Director of Permit Services

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8. The cleaning frequency and duration for the baghouse shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The differential pressure gauge reading range for the baghouse shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Differential operating pressure for the baghouse shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Maximum daily amount of material throughput shall not exceed 5183 tons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. PM10 emissions rate from the cullet crushing operation shall not exceed 0.0012 lb-PM10/ton-material. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Dust collector filters shall be inspected annually while in operation for evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Dust collector filters shall be inspected annually while not in operation for tears, scuffs, abrasions or holes which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Visible emissions shall be inspected quarterly during operation. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions prior to further loading. Corrective action shall eliminate visible emissions before next loading event. The results of inspection shall be kept in a record and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Records of all maintenance of each baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Permittee shall maintain daily records of material throughput and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Fresno County Rule 404, District Rule 4202 and Fresno County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

**ISSUANCE DATE: DRAFT**

**PERMIT NO:** C-948-30-0

**LEGAL OWNER OR OPERATOR:** PPG INDUSTRIES  
**MAILING ADDRESS:** 3333 S PEACH AVE  
FRESNO, CA 93725

**LOCATION:** 3333 S PEACH AVE  
FRESNO, CA 93725

**EQUIPMENT DESCRIPTION:**

MATERIAL HANDLING SYSTEM CONSISTING OF A CULLET TOWER (HOPPER) AND DISCHARGE FEEDER, A BELT CONVEYOR/WEIGHER SYSTEM WITH 3 CONVEYORS, A CULLET SCREENING BOX, A MIXER DISCHARGE VIBRATING FEEDER, AND FOUR ASSOCIATED DUST COLLECTORS: ONE (1) DONALDSON TORIT MODEL DLM-V4/7F1 AND THREE (3) J.D.B. DENSE FLOW MODEL DF110R

**CONDITIONS**

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Visible emissions from each baghouse shall not exceed 5% opacity for a period of periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Material removed from each dust collector shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 4102]
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

**DRAFT**

DAVID WARNER, Director of Permit Services

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7. Each baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The cleaning frequency and duration for each baghouse shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Replacement bags numbering at least 10% of the total number of bags in each baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Each baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The differential pressure gauge reading range for each baghouse shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Controlled PM10 emissions from the dust collector shall not exceed 0.001 gr/scf. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Differential operating pressure for each baghouse shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Records of all maintenance of each baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Particulate matter emissions from each source operation shall not exceed the maximum allowable emission rate (lb/hr), as determined using the following formula:  $E = 3.59 \times P^{0.62}$ , where E equals the maximum allowable emission rate (lb/hr) and P equals the process weight rate (tons/hr) and is less than or equal to 30 tons/hr. [District Rule 4202, 4.0] Federally Enforceable Through Title V Permit
16. Dust collector filters for each baghouse shall be inspected annually while in operation for evidence of particulate matter breakthrough and replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Dust collector filters for each baghouse shall be inspected annually while not in operation for tears, scuffs, abrasions or holes which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Records of dust collector maintenance, inspections, and repair for each baghouse shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Visible emissions from each baghouse shall be inspected quarterly during operation. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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