



PPG Industries, Inc. Chemicals P.O. Box 1000 Lake Charles, Louisiana 70602

June 4, 1992

Mr. John R. Newton  
Surveillance Program Manager  
Compliance Division  
Louisiana Department of Environmental Quality  
P. O. Box 82135  
Baton Rouge, LA 70884-2135

**Re: Inspection of March 30 through April 2, 1992  
PPG, Lake Charles, LA - noted deficiencies**

Dear Mr Newton,

On March 31 through April 2, 1992, representatives of LDEQ performed an air inspection of the PPG Industries, Lake Charles Complex. Their report indicated that PPG appeared to be operating in compliance with applicable Louisiana Air Quality Regulations at the time of the inspection. However, the report did note four deficiencies. In your May 4, 1992 letter, you asked that PPG respond in writing to each of the noted deficiencies and state what measures would be taken to correct these deficiencies. The deficiencies noted are itemized below:

- Item No. 1 Fugitive dust emissions observed at the Silicas Plant at a rail car loadout station and from the cleaning of a vacuum truck used for spill cleanup.
- Item No. 2 Inadequate record keeping pertaining to scrubbers and baghouses in the Silicas Plant [Required by Permit No. 2085 (M-I)].
- Item No. 3 Inadequate recordkeeping in the TE II Unit regarding responses to area monitor alarms.
- Item No. 4 VCM area monitors not span checked daily as required by regulation.

PPG has addressed these deficiencies and the corrective actions for each item are listed below.

- Item No. 1 See Attachment No. 1 (pages 1-4)
- Item No. 2 Se Attachment No. 1 (pages 1, 5 and 6)

- Item No. 3 PPG has responded in full to agency concerns about recordkeeping. In addition, concerns about carrier gas bottle switching have been addressed. SOPs pertaining to these issues have been revised and all personnel concerned have been made aware of the revisions and their responsibilities. See Attachments No. 2 and No. 3.
- Item No. 4 PPG has revised area monitoring plans to comply with the regulatory requirement that all VCM area monitors be span checked daily. Sections affected in the area monitoring plans are provided in Attachments No. 4, 5, 6, and 7 and the revisions highlighted.

If you have any questions regarding these responses, please call me at 318/491-4698.

Respectfully,

  
MICHAEL W. RASBERRY  
Environmental Foreman

MWR

Certified Mail/Return Receipt Requested



PPG Industries, Inc. Chemicals P.O. Box 1000 Lake Charles, Louisiana 70602

DATE: May 22, 1992  
TO: M. Rasberry  
FROM: Dale French *df*  
SUBJECT: Response to DEQ Inspection at Silicas

During the March 31, 1992 visit to Silicas, DEQ observed three items of concern that were reported in their letter dated May 4, 1992. Actions have been implemented that correct all three items.

Fugitive dust emissions were observed during the loading of a bulk car. The loading procedure in effect at the time of the visit called for all hatch doors to be opened and a vacuum hose placed in one of the open hatches. Since the inspection, different procedures have been tested, and as May 20, 1992 memo from Linda Reinhardt states, a new procedure has been implemented that provides much better control of fugitive dust emissions. This procedure calls for two hatches to be opened at a compartment, while all others remain closed. A vacuum hose with a seal adaptor is placed over one opening while the other is used for loading. This procedure is repeated for each compartment.

Fugitive dust emissions were also noted where an Allwaste vacuum truck, used for spill clean up, was being dumped into the Grit Chamber. A memo issued April 14, 1992 to Allwaste Services by Jerry Carlile, Dryer Operations Foreman, outlines the guidelines for dumping into the Grit Chamber, and the requirements to control fugitive dust. It should be noted that this was an isolated incident; however, the checks implemented should keep it from future occurrences.

At the time of the inspection, Silicas was initiating a record keeping procedure for all of its scrubbers and baghouses. This procedure has been implemented. A sample of the log sheets is attached. These forms will be kept by each control room and will be available for review during inspections.

SL 025633

PPG CHEMICALS  
Lake Charles, LA

Attachment No. 1  
Page 2  
Silica Products  
Interoffice Memo

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To: Charlie Haynes  
From: Linda Reinhardt *LPR*  
Date: 5/20/92  
Subject: Dust Control During Bulk Loading

As you are aware, testing of the bulk baghouse vacuum system as a means of controlling fugitive dust emissions during bulk car loading operations showed a marked improvement in dust containment. The standard loading procedure should be modified, effective today, to require the use of the vacuum system.

Please review the new loading procedure with each bulk loader and revise the SOP accordingly. It must be understood that:

1. The procedure must be followed for each and every car loaded.
2. The vacuum supply hoses must be maintained (i.e., no holes, securely attached). Any hoses not in use must be sealed.
3. In addition to supplying vacuum to the compartment during loading, the system is also to be used to vacuum any loose powder from the top of the car prior to washing the car.

SL 025634



PPG Industries, Inc. Chemicals P. O. Box 1000 Lake Charles, Louisiana 70602

April 14, 1992

David Fanta, General Manager  
Allwaste Services of Louisiana, Inc.  
P. O. Box 113  
Sulphur, LA 70663

Mr. Fanta:

On March 30 - April 2, 1992 The Louisiana Department of Environmental Quality performed an air quality inspection of the PPG Lake Charles facility. On March 31, 1992 an inspection of the Silica Products facility was made.

One "area of concern" listed by the inspectors in their final report as a deficiency affects both PPG and Allwaste. This incident involved an Allwaste vacuum truck washing out at the grit chamber with a water hose. This action created a noticeable dust cloud.

Because of the increasing standards for air quality imposed on PPG by DEQ the following guidelines will be necessary when processing waste silica within the PPG Silicas facility:

1. Notify the Dryer Operations Foreman before dumping any material into the grit chamber.
2. The Dryer Operations Foreman will determine if the material can be dumped into the grit chamber.
3. All dry silica waste powder that is dumped into the grit chamber will have to be mixed with sufficient water to completely eliminate dust.
4. Any large amounts of wet silica will be sent to the Tricil press for in plant processing.
5. Significant amounts of dry silica will be sent to the BFI landfill per our normal procedure.
6. Any large amounts of dry silica that cannot be sent to the BFI landfill will be mixed with water and sent to the Tricil press for in plant processing.

The decision for implementing items 4 and 5 will be made by the Spray Dryer Operations Foreman (4827) and Dryer Operations Foreman (4230).

SL 025635



Attachment No. 1  
Page 4

PPG Industries, Inc. Chemicals P.O. Box 1000 Lake Charles, Louisiana 70602

Regards,

A handwritten signature in dark ink, appearing to read 'Jerry Carlile', is written above the typed name.

Jerry Carlile  
Silica Products  
Dryer Operations Foreman

SL 025636

Dryer Control Room

Date \_\_\_\_\_

| Process<br>Point No. | Description                          | Type of<br>Service | Dryer<br>Flow Rate<br>Daily Average | Dust<br>Transitions |          | Comments |
|----------------------|--------------------------------------|--------------------|-------------------------------------|---------------------|----------|----------|
|                      |                                      |                    |                                     | Normal              | Abnormal |          |
| 100                  | No. 1 Dryer Scrubber (AP Service)    |                    |                                     |                     |          |          |
| 101                  | No. 2 Dryer Scrubber (AP Service)    |                    |                                     |                     |          |          |
| 102                  | No. 3 Dryer Scrubber                 |                    |                                     |                     |          |          |
| 103                  | No. 4 Dryer Scrubber                 |                    |                                     |                     |          |          |
| 104                  | No. 5 Milling and Packing Scrubber   |                    |                                     |                     |          |          |
| 105                  | No. 6 Milling and Packing Scrubber   |                    |                                     |                     |          |          |
| 106                  | Grain AP Packing Baghouse            |                    |                                     |                     |          |          |
| 107                  | Bulk Loading Baghouse                |                    |                                     |                     |          |          |
| 108                  | Granulated Product Baghouse          |                    |                                     |                     |          |          |
| 109                  | W-Milled AP Baghouse                 |                    |                                     |                     |          |          |
| 110                  | Hi-Gal AP Packer Baghouse            |                    |                                     |                     |          |          |
| 111                  | No. 4 Roller Mill Baghouse           |                    |                                     |                     |          |          |
| 112                  | No. 5 Roller Mill Baghouse           |                    |                                     |                     |          |          |
| 113                  | Spray Dried AP Packer Baghouse       |                    |                                     |                     |          |          |
| 114                  | No. 2 Pellet Bin Vent                |                    |                                     |                     |          |          |
| 115                  | Spray Dried AP Bulk Baghouse         |                    |                                     |                     |          |          |
| 116                  | No. 1 Dryer Discharge Baghouse       |                    |                                     |                     |          |          |
| 117                  | No. 2 Dryer Discharge Baghouse       |                    |                                     |                     |          |          |
| 118                  | No. 3 Dryer Discharge Baghouse       |                    |                                     |                     |          |          |
| 119                  | AP Packing Bin Receiver Baghouse     |                    |                                     |                     |          |          |
| 120                  | West C.D. Bulk Bin Receiver Baghouse |                    |                                     |                     |          |          |

SL 025637

Operator \_\_\_\_\_

Inspection Sheet

Date: \_\_\_\_\_

|                             |                             |
|-----------------------------|-----------------------------|
| Inspection Point No. _____  |                             |
| Description _____           |                             |
| Reason For Inspection _____ |                             |
| Inspector _____             |                             |
| <b>External Inspection:</b> | <b>Internal Inspection:</b> |
| Structure _____             | Structure _____             |
| Shell _____                 | Shell _____                 |
| Visible defects _____       | Visible defects _____       |
| Pumps _____                 | Bags _____                  |
| Fans _____                  | Bag cages _____             |
| Controls _____              | Rotating Element _____      |
| Pulse air system _____      | Comments _____              |
| Stack _____                 | _____                       |
| Comments _____              | _____                       |
| _____                       |                             |
| _____                       |                             |

WRITTEN BY: MJF  
 APPROVED BY: RMC  
 DATE: 10-8-87  
 REVIEWED: 5-19-92

1904-002.SCF  
 TRII-VC AIR MONITOR

OPERATOR'S NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

| CHECK | ACTION STEPS (Capital letters) and Comments (Small letters) |
|-------|-------------------------------------------------------------|
|-------|-------------------------------------------------------------|

1. WHEN AN AIR MONITOR ALARM IS RECEIVED, THE APPROPRIATE OPERATOR OR LEAD OPERATOR IS TO GO OUT AND INVESTIGATE THE LEAK IMMEDIATELY. It is your responsibility to investigate, correct, and report on any alarms that occur. Our ambient air monitoring records are reviewed by the La. DEQ. To assure them that we are handling VC correctly, our records must be complete.
- 2. CORRECTIVE ACTION IS TO BE TAKEN TO STOP THE LEAK IF ONE IS FOUND. RESPIRATORY PROTECTION MUST BE WORN.
  - 0 - 50 ..... PPM COMFO-II HALF MASK
  - 50 - 250 ..... PPM COMFO-II FULL FACE MASK
  - >250 OR UNKNOWN..... PPM AIR PACK OR BREATHING AIR
- 3. THE FOLLOWING INFORMATION IS TO BE NOTED IN THE LOGBOOK FOR EACH ALARM: (NOTE: STEPS A - D ARE TO BE DONE FOR EVERY ALARM NEEDING RESPONSE. REPEATED ALARMS AT THE SAME POINT ARE NOT ACCEPTABLE; USE OF AN HNU OR TIP IS REQUIRED ON REPEAT ALARMS.)
  - (a) WHEN THE ALARM WAS RECEIVED. WRITE TIME IN MILITARY FORM.
  - (b) WHAT MEANS OR INSTRUMENTATION WAS USED TO SEARCH FOR OR FIND THE LEAK.
  - (c) RESULTS OF THE LEAK CHECK INCLUDING AN INSTRUMENT READING.
  - (d) WHAT WAS FOUND. EVEN IF NOTHING WAS FOUND. WRITE "NOTHING FOUND."
- 4. IF THE AIR MONITOR SYSTEM APPEARS TO BE MALFUNCTIONING ON BACK SHIFT, IMMEDIATELY CONTACT THE SHIFT SUPERVISOR TO CALL OUT THE ANALYZER GROUP TO REPAIR THE SYSTEM. IF ANALYZER IS FOUND TO BE MALFUNCTIONING MONDAY-FRIDAY BEFORE 05:00 A.M., THE ANALYZER GROUP MUST BE CALLED OUT. AFTER 05:00 A.M., THE LEAD MAN SHOULD PASS ON TO HIS RELIEF THAT THE ANALYZER GROUP SHOULD BE CALLED OUT AT 05:00 A.M.

SL 025639

- 5. THE LEADMAN IS RESPONSIBLE FOR CHECKING THE SHIFT REPORTS AND DAILY REPORTS. RESPONSE TO ALARMS ARE TO BE IMMEDIATELY. EACH ALARM ON THE REPORT SHOULD CONTAIN A PHRASE STATING SO. AN EXAMPLE OF THIS IS "OPERATOR CHECKED AT ALARM TIME..." MAKE EVERY EFFORT TO CHECK THE ALARM AS SOON AS POSSIBLE. IF FOR SOME REASON WE ARE UNABLE TO DO SO, NOTE AS SUCH AND GIVE A REASON. THE REMAINDER OF THE RESPONSE SHOULD CLEARLY STATE WHAT WAS FOUND AND WHAT CORRECTIVE ACTION WAS TAKEN. EXAMPLES OF THIS ARE: "...CHECKED WITH LEAK-DETEK. FOUND A PLUG LEAKING ON FT-141. TIGHTENED IT UP AND THE LEAK STOPPED." "...CHECKED WITH HNU AND FOUND NOTHING.
- 6. IF THE RESPONSE IN THE LOGBOOK IS INCOMPLETE OR MISSING, THE LEAD MAN IS RESPONSIBLE FOR TRACKING DOWN THE ANSWERS. WRITE NOTE IN THE APPROPRIATE LOGBOOKS IF NECESSARY.
- 7. TRI-11 MONITORING POINTS ARE:
1. NW OF THE VC DOPP KETTLES
  2. SE OF THE QUENCH TOWER
  3. SOUTH OF THE QUENCH LIQ. PUMPS
  4. NW OF FURNACE FEED DRYERS
  5. WEST OF THE VC-HCL STILL
  6. NW OF THE VC-HCL REFLUX TANK
  7. SE OF THE VC STRIPPER REFLUX TANK
  8. SW OF THE CATALYST POT
  9. NW OF THE DCE REACTOR PUMPS
  10. IN CONTROL ROOM LAB
  11. NEAR THE PROCESS SUMP

WRITTEN BY: RMC  
APPROVED BY: RMC  
DATE: 5-20-92

5904-036.SOP  
(VC AIR MONITOR GAS CYLINDER SWITCHING)

OPERATOR'S NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

| CHECK | ACTION STEPS (Capital letters) and Comments (Small letters) |
|-------|-------------------------------------------------------------|
|-------|-------------------------------------------------------------|

- \_\_\_\_\_ 1. JOB SAFETY INSTRUCTIONS REVIEWED.
- \_\_\_\_\_ 2. INSURE THAT YOU ARE WEARING PROPER SAFETY EQUIPMENT. ( IT IS ALWAYS PROPER TO WEAR SAFETY GLASSES (OR GOGGLES), HARD HAT, EAR PLUGS, AND ESCAPE RESPIRATOR IN THE PLANT.)

NOTE: THE PRESSURES OF THE ANALYZER FEED LINES AND CYLINDERS ARE INDICATED BY THE GAUGES ON THE REGULATORS. THE VC OPERATOR RECORDS PRESSURE THREE TIMES A DAY ON THE VC PROCESS LOGSHEET.

CHANGE CYLINDERS WHEN THE CYLINDER PRESSURE IS 500 PSIG OR LESS. EVERY THURSDAY, CHECK BOTTLE PRESSURE TO MAKE SURE BOTTLES WILL LAST THROUGH THE WEEKEND. THE ANALYZER IS AUTOMATICALLY CALIBRATED EVERYDAY. BOTTLE CHANGES CAN GET THE CALIBRATION OUT OF RANGE. BY NOT HAVING TO SWITCH BOTTLES ON THE WEEKEND WILL HELP TO KEEP CALIBRATION THE SAME. ON DAYS FRIDAY THE ANALYZER PERSON WILL MAKE CORRECTIONS FOR THE BOTTLE SWITCH THAT TOOK PLACE ON THURSDAY. IF THE BOTTLE THAT WAS SWITCHED ON THURSDAY HAS A REASONABLE AMOUNT OF PRESSURE IN IT FOR A COUPLE OF DAYS YOU DO NOT HAVE TO REMOVE IT. IT CAN BE PUT BACK IN SERVICE DURING THE WEEK UNTIL IT'S PRESSURE GETS DOWN TO 500 PSIG.

- \_\_\_\_\_ 3. CLOSE OFF THE CYLINDER BEING CHANGED AT THE CYLINDER HEAD. CLOSE OFF THE APPROPRIATE BLOCK VALVE ON THE HARD PIPE HEADER TO THE REGULATOR.
- \_\_\_\_\_ 4. OPEN THE CYLINDER VALVE OF THE SECOND CYLINDER ALREADY IN THE RACK AND LEAK CHECK THE FEEDLINE TO THE HEADER. THEN OPEN THE BLOCK VALVE OF THE SECOND CYLINDER AND ADJUST TO THE APPROPRIATE PRESSURE. THE PRESSURE SETTING FOR THE ANALYZER IS 80 PSIG.
- \_\_\_\_\_ 5. REMOVE FEED LINE FROM EMPTY CYLINDER AND CAP THE CYLINDER.
- \_\_\_\_\_ 6. REMOVE THE CYLINDER AND REPLACE IT WITH A FULL CYLINDER.

NOTE: REMEMBER TO REHANG THE SAFETY CHAIN OR ROPE ON THE RACK.

- \_\_\_\_\_ 7. RECONNECT THE FEED LINE TO THE NEW CYLINDER. THE CYLINDER SHOULD NOT BE OPENED UNTIL IT IS NECESSARY.

NOTE: ONLY ONE CYLINDER SHOULD BE OPENED TO THE REGULATOR FEED LINE. INSPECT ALL TUBING AND FITTINGS WHEN WORKING WITH HIGH PRESS.

SL 025641

- \_\_\_\_\_ 8. RECORD IN LOGBOOK.

WRITTEN BY: SCH  
APPROVED BY: SCH  
DATE: 5/21/92

1904-037  
CHECKING THE VINYL MONITORING  
AUTOMATIC BENCHMARKING

- 1) At approximately 8:15 am every morning the vinyl monitoring system will automatically benchmark itself for accuracy.
- 2) After three benchmarking runs (all to occur within 15 minutes) the Vinyl and Lead Operators check the benchmark DEVIATION.
- 3) The Lead Operator will record these numbers in the spaces provided on his daily log sheet.
- 4) IF THE DEVIATION IS GREATER THAN 5% OR LESS THAN -5% THE LEAD OPERATOR IS TO CALL OUT A MEMBER OF THE ANALYZER GROUP TO CALIBRATE THE SYSTEM. IF IT IS ON THE WEEKEND THE LEAD OPERATOR IS TO CALL THE SHIFT SUPERVISOR TO CALL OUT A MEMBER OF THE ANALYZER GROUP TO CALIBRATE THE SYSTEM.

FPG INDUSTRIES, INC.

LAKE CHARLES, LOUISIANA

VCM II

VINYL CHLORIDE

LEAK DETECTION AND ELIMINATION PROGRAM

- I. Monitoring Equipment
- II. Calibration and Maintenance
- III. Monitoring Program
- IV. Plan of Action
- V. Definition of a Leak

AREAS INCLUDED IN THIS PROGRAM:

- 1. VCM Formation, Purification, and Shift Storage Areas
- 2. VCM Low Temperature Storage and Barge and Ship Loading Areas

## II. CALIBRATION AND MAINTENANCE

### A. Fixed Point System

The vinyl chloride monitoring system is calibrated and span checked daily with a gas mixture containing 5 ppm vinyl chloride in nitrogen. A calibration gas cylinder, the gas analysis of which is traceable to the National Bureau of Standards, or an equivalent gas mixture and certified with a statement of shelf life, is used. Maintenance is performed on an as-needed basis based upon a daily check of the operation and condition of the system. In addition, on an annual basis, the integrity of the system is tested by introducing a known concentration of VCM into each sample point in the field.

### B. Portable Detector

The portable hydrocarbon detector is calibrated weekly to verify that it has not lost its sensitivity to vinyl chloride. The gas used for this test comes from a gas cylinder containing 10 ppm VCM in air, the gas analysis of which is traceable to the National Bureau of Standards, or from an equivalent gas mixture and is certified with a statement of shelf life. Maintenance is performed on an as-needed basis based upon the operation and condition of the detector.

PPG INDUSTRIES, INC.  
LAKE CHARLES, LOUISIANA

VINYL STORAGE/LOADING AREA

VINYL CHLORIDE  
LEAK DETECTION AND ELIMINATION PROGRAM

- I. Monitoring Equipment
- II. Calibration and Maintenance
- III. Monitoring Program
- IV. Plan of Action
- V. Definition of a Leak

AREAS INCLUDED IN THIS PROGRAM

1. VCM Tank Car Loading
2. Sphere Storage Area
3. Day Tanks Storage Area
4. Maintenance Shop

## II. CALIBRATION AND MAINTENANCE

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PPG INDUSTRIES, INC.  
LAKE CHARLES, LOUISIANA  
VC SECTION OF TRI-ETHANE II

VINYL CHLORIDE  
LEAK DETECTION AND ELIMINATION PROGRAM

- I. Monitoring Equipment
- II. Calibration and Maintenance
- III. Monitoring Program
- IV. Plan of Action
- V. Definition of a Leak

## II. CALIBRATION AND MAINTENANCE

### A. Fixed Point System

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### B. Portable Detector

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