Gressler, John (OGC)

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Sent:	Thursday, December 17, 1998 11:59 AM
To:	Narrative Report
Cc:	*All Employees at PED
Subject:	Narrative Report - Pedricktwon VCM Release

VCM RELEASE - GASKET FAILURE ON POLY 5
DISPERSION RESIN - PEDRICKTOWN PLANT
12/16/98

SUMMARY

A gasket on a 24-inch diameter nozzle failed on Poly 5 on 11/24/98. A 4-inch piece of gasket blew out when the poly was at reaction pressure (135 psig). The VCM loss was estimated to be 500 lbs. No injuries, equipment damage, or personnel exposure resulted from this release. This was not an EPA reportable release and will not result in a NESHAPS noncompliance. The emission will be included in the Facility Wide Permit that includes fugitive emissions as an enforceable requirement.

BOARD OF REVIEW

A review of the incident was conducted with the following people in attendance:

Jody Spano - Dispersion Shift Lead Technician
1 - Dispersion Rover Technician
Darrell Robinette - Sr. Operations Specialist
Al Matyger - Dispersion Manufacturing Manager
Jim Kiel - Environmental Manager
John Cusik - LPA Lead Technician
Ben Messick - LPA Console Technician

CONCLUSION

Due to the age and size of the gasket, the gasket had extruded out over time causing thin spots and eventual failure.

NARRATIVE

Poly 5 made reaction normally at 2313 on 11/24/98. At 2315, the LEL alarm in the Poly Bldg went off, the building technicians found a leak on top of Poly 5 (second floor) and told the Console

Technician to put the poly to HOLD (a holding state for the computer so nothing further is done by the computer). L Rover Technician, put on a Scott Air Pak and got closer to the poly to determine what was wrong. He saw a lot of foam from the emulsifiers being sprayed out behind the poly toward the west wall away from him. It appeared to him to be a leak at the 04 valve (a manifold block valve and the first valve off the poly). While was not certain of the leak location he knew it was bad enough to stay away from the leak and handle the situation with the computer. A water hose was put on the poly manhead to knock down the foam behind the poly. A spot ventilation hose was also set in place in the area of the leak.

The shift met in the pressurized office to decide what to do. They decided to use the emergency poly transfer procedure. They notified the Console Technician of the problem and instructed him to equalize this poly with a poly that was under vacuum and had just completed steam sweep. The Console Technician equalized the polys from the bottom of the polys. This transferred approximately 50% of the liquid out of Poly 5 to Poly 1.

The building technicians went to the first floor to connect the stainless steel transfer hoses. All Technicians wore proper personal protective equipment when completing this task. The premix booster pump is used for this transfer. The premix was in the homogenization step for a charge to the next poly so the line had to be recovered before the hoses could be connected. This recovery took 20 minutes. Jody Spano, Lead Technician, was notified of a THA alarm in the VCM Tank Farm. He went to investigate the leak and also informed the BFG Latex Lead Technician of the status of the incident. He found the THA alarm to be less than 10 ppm.

Once the line was recovered, the hoses were connected and pressure checked with water. This took approximately 10 minutes. The remaining contents of the poly were transferred to Poly 1 within 10 minutes. Poly 5 was put on recovery and pulled down to a vacuum. The poly was steam swept twice and opened. The time from leak start to vacuum was approximately 50 minutes.

FACTS SURROUNDING THE INCIDENT

1. The charge was a normal charge with no premix, homogenization, or heat up problems.

2. The poly reached and passed vacuum check and went through heat up without leaking because the building
GC system did not detect any leaks until the LEL alarm went off at the time of the failure.

3. The wind direction was plant north to south. The wind was blowing toward the VCM tank Farm.

4. Building ventilation in the Poly bldg was plant north to south.

5. The leak occurred at a 24-inch diameter nozzle on the top of Poly 5. The nozzle had a blind flange installed on
it. The nozzle purpose is for a condenser mount.

6. The gasket was an asbestos-containing gasket. The gasket material is Donex 250B Chrysogile Asbestos Fiber with
SBR binder.

MANAGEMENT SYSTEMS INVESTIGATION

1. All technicians were properly trained and certified for all tasks performed.

2. All individuals dealing with this leak properly used personal protective equipment.

3. No one had any contact with liquid VCM.

4. Emergency procedures were followed.

5. Areas were notified of the problem via radio communication.

6. The gasket was 10 years old. Inspection upon removal showed the gasket to be slightly brittle and very thin in spots.

7. The gasket was an acceptable gasket for this service according to the Geon standards.

8. The bolts on the flange were not loose. In fact they were difficult to remove when the gasket was replaced.

9. All of the line and hose connections were made downstairs. No one was upstairs where the leak was located.

10. Building monitoring in the Large Poly Console area, the Latex office, and the VCM Tank Farm showed a single reading of < 10 ppm. The air inlet for the Large Poly Console area is just south of the Dispersion Poly Bldg.

CORRECTIVE ACTION

1. The condenser flange gaskets on the 5 polys that don't have flexitallic gaskets will be changed to this type.

Complete Larry LaPlante

2. A team will be formed to review the gasket standard, torquing and bolt requirements and make recommendations for improvements.

1/30/99 Earl Ransome

3. Proper torque wrenches will be purchased so plant personnel can install the larger flexitallic gaskets properly.

Complete Anthony Massari

4. A poly PM will be established to change out all poly gaskets every two years. This frequency matches the RV change out frequency. Poly integrity testing and other calibrations will be done at this time. The program will start in 1999.

Larry LaPlante

5. The premix piping will be modified to eliminate the need for line recovery should emergency hose is needed.

12/30/98 Darrell Robinette