

VISTA CHEMICAL COMPANY

ABERDEEN PLANT

SEPTEMBER 2, 1992

PROCESS HAZARD ANALYSIS

FOR

VCM TANK FARM COMPRESSOR UPGRADE PROJECT

VCM TANK FARM COMPRESSOR UPGRADE
PROCESS HAZARD ANALYSIS COMPLETION REPORT

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I. SCOPE

This Process Hazard Analysis was completed specifically for the VCM Tank Farm Compressor Upgrade project. This Safety and Health project installs instrumentation and DCS interlocks for the compressors to provide safer operation during VCM unloading. The PHA does not cover the overall operations of unloading VCM from the railcars to the sphere. A separate PHA has already been completed for the unloading operation.

The PHA addressed instrumentation failures and reviewed DCS interlocking schemes for the equipment.

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II. TEAM MEMBERS

The following is a list of the team members assembled to perform the PHA on this project. All are employees of Vista at the Aberdeen plant.

<u>NAME</u>	<u>TITLE</u>
Larry Frye	General Mechanic "A"
Berlin Genetti	Co-op Process Engineer
Dean Honeycutt	Yard Supervisor
Jerry Roberts	Safety Inspector
Joe Shackelford	Instrument Technician
Rory Sneed	Senior Process Engineer
Jim White	Project Engineer

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III. DOCUMENTS UTILIZED

The following documents were made available to each team member prior to and during the PHA.

1. Class "A" Design
2. Piping and Instrumentation Diagram
3. Mechanical Drawings

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IV. SUMMARY OF IDENTIFIED POTENTIAL HAZARDS

1. CAUSE: Failure or accidental closing of the VCM vapor valve (00HV103) from the sphere, the liquid VCM valve (00HV102) to the sphere, or the railcar isolation valve (00XV120).
- CONSEQUENCE: Cavitation or dead-heading of the VCM compressors. This could potentially damage the compressors and subsequently cause a VCM leak.
- RECOMMENDATIONS: Include the inputs for these valves in the compressor interlocking, such that the compressors are shut down when any of these valves are closed.
- RESOLUTION: The above recommendation has been implemented into the electrical design and operating procedures.
- RISK RATING: 4