



Consent Decree Appendix A
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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Denver, CO 80202-1129
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Ref: 8ENF-AT

FEB 26 2016

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Brandon Sproles
Engineering Manager – Process Safety
Kinder Morgan Inc.
1001 Louisiana Street, Suite 1000
Houston, Texas 77002

Re: Notification of Violations - Clean Air Act (CAA) Section 112(r)(7) Risk Management
Program (RMP)

Dear Mr. Sproles:

On October 1, 2014, the Environmental Protection Agency conducted an inspection at the Altamont Gas Plant located in Altamont, Utah to evaluate compliance with section 112(r)(7) of the CAA and the RMP requirements. On March 24 and 25, 2015, the EPA conducted an inspection at the Rawlins Station Gas Plant located in Sinclair, Wyoming to evaluate compliance with section 112(r)(7) of the CAA and the RMP requirements. These two inspections revealed multiple violations of the chemical accident prevention provisions of CAA section 112(r)(7), 42 U.S.C. § 7412(r)(7), and its implementing regulations in 40 CFR part 68. Pursuant to 42 U.S.C. § 7413(b), the Administrator may commence a civil action against any person that is the owner or operator of an affected source, to obtain civil penalties and injunctive relief whenever such person has violated or is violating any requirement or prohibition of the CAA, including the requirements of 42 U.S.C. § 7412 and its implementing regulations in 40 C.F.R. part 68.

The EPA, by this letter, is notifying Kinder Morgan of the violations in the enclosed Worksheet Findings. This worksheet was compiled as a result of the inspections.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Cobb", is written over the typed name of David Cobb.

David Cobb, Acting Unit Chief
Toxics Enforcement Unit
Office of Enforcement, Compliance, and
Environmental Justice

Enclosure

Worksheet of Findings

THE ALTAMONT GAS PLANT

1. **40 C.F.R. part 68. Requirement found at subpart D – Mechanical Integrity [68.73(d)(1)]:**

Inspections and tests shall be performed on process equipment.

Inspections and tests were not performed on process piping at the Altamont Gas Plant. During the EPA inspection five process piping circuits were selected for review of their inspection and testing history. Two of the five piping circuits did not have any record of inspections and tests ever performed: 3"FL-144-A and 8"GH-77-B. In addition, another of the piping circuits did not have any record of visual inspection: 2"LH-125-A. Inspection and testing requirements for process piping are found at American Petroleum Institute (API) 570 *Piping Inspection Code*.

2. **40 C.F.R. part 68. Requirement found at subpart D – Mechanical Integrity [68.73(d)(1)]:**

Inspections and tests shall be performed on process equipment.

Inspections and tests were not performed on pressure vessels at the Altamont Gas Plant. During the EPA inspection three pressure vessels were selected for review of their inspection and testing history. Two of the three pressure vessels did not have any record of internal inspection: V-14 and V-16E. In addition, V-14 did not have an external inspection performed at an acceptable frequency. At the time of the EPA inspection, the most recent external inspection was performed in 2001. Inspection and testing requirements for pressure vessels are found at API 510 *Pressure Vessel Inspection Code*.

3. **40 C.F.R. part 68. Requirement found at subpart D – Mechanical Integrity [68.73(d)(2)]:**

Inspection and testing procedures shall follow recognized and generally accepted good engineering practices (RAGAGEP).

Inspection and testing procedures on process equipment at the Altamont Gas Plant did not follow RAGAGEP. Data collected from inspection and testing of process equipment was not analyzed in accordance with API 510 and 570. Altamont Gas Plant's integrity management software, AIM², had several pieces of equipment with analysis indicating overdue retirement dates and overdue next inspection dates, yet the equipment was still in operation. For example, at the time of the EPA inspection, V-14 had a retirement date of 11/6/2013, based on CML 7.01. The retirement date had been significantly exceeded and the equipment was still in operation. Kinder Morgan personnel indicated that this was likely to inaccurate data input and/or inaccurate analysis. This observation was pervasive throughout the AIM² database. Lack of accurate data analysis prevents a facility from ensuring its process equipment is able to operate safely. This largely disables Kinder Morgan from preventing chemical accidents at the Altamont Gas Plant.

4. **40 C.F.R. part 68. Requirement found at subpart D – Incident Investigation [68.81(d)(5)]:**

A report shall be prepared at the conclusion of the investigation which includes any recommendations resulting from the investigation.

An incident investigation performed on November 3, 2012, at the Altamont Gas Plant did not include all reasonable and critical recommendations. The investigation was related to a fire/explosion that occurred when a distance piece on an Ingersoll-Rand compressor failed. As part of the investigation, a Kinder Morgan metallurgy laboratory report concluded that the

materials of construction for the distance piece did not meet the manufacturers' specifications. The actual materials of construction were ASTM A48 Class 25 rather than the required ASTM A48 Class 50 from Ingersoll-Rand's specifications. A total of nine Ingersoll-Rand compressors were in operation at the Altamont Gas Plant at the time the EPA inspection. Kinder Morgan did not recommend testing all other similar compressors to ensure the distance pieces have safe and acceptable materials of construction.

5. 40 C.F.R. part 68. Requirement found at subpart D – Incident Investigation [68.81(e)]:

The owner or operator shall establish a system to promptly address and resolve the incident investigation report findings and recommendations. Resolutions and corrective actions shall be documented.

All resolutions and corrective actions from the November 2012 incident investigation at the Altamont Gas Plant were not documented. One of the corrective actions resulting from the investigation was to, "Add the inspection of the distance piece to the semi-annual and annual inspections." According to facility personnel, this was a visual inspection of the distance piece to look for cracks and/or abnormalities around every 4,000 service hours for the semi-annual inspection and around every 8,000 service hours for the annual inspection. During the EPA inspection compressor records were reviewed for two compressors and the recommendation to visually inspect distance pieces was not being documented, as recommended.

K1C Compressor

Date of Compressor Inspection	Compressor Service Hours	Distance Piece Inspection Documented?
1/25/13	Info not available	yes
11/11/13	124,879	no
3/26/14	12,577	yes
8/26/14	Listed as 2K hr inspection	no

K3B Compressor

Date of Compressor Inspection	Compressor Service Hours	Distance Piece Inspection Documented?
1/25/13	Info not available	yes
4/9/14	7,447 (listed as 4000 hr)	no

6. 40 C.F.R. part 68. Requirement found at subpart D – Process Safety Information [68.65)(1)(i)]:
Information pertaining to equipment in the process shall include materials of construction.

Process safety information at the Altamont Gas Plant did not include correct materials of construction for the distance piece on compressors. Ingersoll-Rand's specifications called for ASTM A48 Class 50 and the material for the distance piece in use was found to be ASTM A48 Class 25; a harder material more susceptible to brittle fracture.

RAWLINS STATION GAS PLANT**1. 40 C.F.R. part 68. Requirement found at subpart D – Mechanical Integrity [68.73(e)]:**

The owner or operator shall correct deficiencies in equipment that are outside acceptable limits before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

Deficiencies in process equipment were not corrected at the Rawlins Station Gas Plant. Kinder Morgan provided a document titled *Eq Circ ID Retirement Due Report* which lists the calculated retirement dates for piping circuits at the Rawlins Station Gas Plant. This document indicates that seventy-four (74) piping circuits were in operation past their calculated retirement dates at the time of the EPA inspection. While Kinder Morgan may claim that these retirement dates could be the result of inaccurate data entry and/or inaccurate data analysis, from a mechanical integrity standpoint, the Rawlins Gas Plant does not have adequate information to ensure process equipment is in safe operating condition. This largely disables Kinder Morgan from preventing chemical accidents at the Rawlins Gas Plant.

2. 40 C.F.R. part 68. Requirement found at subpart D – Mechanical Integrity [68.73(d)(3)]:

The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

The frequency of inspections and tests performed on pressure vessels at the Rawlins Station Gas Plant were not consistent with the good engineering practices of API 510 *Pressure Vessel Inspection Code*. In response to the EPA's Notice of Inspection, Kinder Morgan provided a spreadsheet of pressure vessel inspection history. The spreadsheet indicated that at least twenty-nine (29) pressure vessels were not inspected and tested at the frequency required by API 510. During the EPA inspection, the inspection records of six (6) pressure vessels were reviewed more in-depth. All six (6) pressure vessels were out of compliance.

Vessel ID	Vessel Description	Last Internal Inspection	Last External Inspection	Last Online Inspection
HE-5	Glycol exchanger	No documentation available	Visual performed within 2 weeks of EPA inspection	No documentation available
V-5	Deprop reflux accumulator	No documentation available	No documentation available	1994 (Note the retirement date listed in AIM ² was 11/19/2008)
V-37-1	VTR propane treater	No documentation available	No documentation available	2005 UT readings
18-28	Deprop reboiler	No documentation available	Visual performed within 2 weeks of EPA inspection	No documentation available
31-3	Still tower (lean oil)	No documentation available	2010	2010

Vessel ID	Vessel Description	Last Internal Inspection	Last External Inspection	Last Online Inspection
T-18	Catch all tank	No documentation available	No documentation available	No documentation available

3. **40 C.F.R. part 68. Requirement found at subpart D – Process Safety Information [68.65(d)(2)]:**
The owner or operator shall document that equipment complies with RAGAGEP.

Two (2) pressure vessels at the Rawlins Station Gas Plant, V-6 and V-7, did not comply with RAGAGEP. During a field walk-through, the EPA observed a steel plate welded to each of the pressure vessels' cylindrical shell. This type of repair or alteration requires an R Stamp per ASME Section VIII, Div. 1. Kinder Morgan was unable to provide R Stamps or similar documentation. In addition, the shop drawing for V-6 and V-7 do not show the welded plates. Documentation was not available to confirm the vessels were designed, repaired, inspected, tested, and operated in a safe manner.

4. **40 C.F.R. part 68. Requirement found at subpart D – Process Safety Information [68.65(d)(1)(i)]:** Information pertaining to equipment in the process shall include materials of construction.

Materials of construction were not available for pressure vessels in the NGL storage area at the Rawlins Station Gas Plant. Safety concerns related to the uncertainty of suitable materials of construction resulted in the decision to partially shut down the facility on January 13, 2015.

5. **40 C.F.R. part 68. Requirement found at subpart D – Process Safety Information [68.65(d)(2)]:**
The owner or operator shall document that equipment complies with RAGAGEP.

Tank T-18 did not have documentation confirming that it complies with RAGAGEP. T-18 was identified as a pressure vessel on the P&ID but Kinder Morgan personnel indicated it is an atmospheric tank referred to as a "catch-all tank".

6. **40 C.F.R. part 68. Requirement found at subpart D – Process Hazard Analysis [68.67(e)]:**
The owner or operator shall establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed.

Three (3) recommendations from the PHA conducted in 2010 at the Rawlins Station Gas Plant were not resolved in a timely manner and documented. All three (3) recommendations are associated with the "BTU Control Station" (Node 117):

1. Ensure any recommendations from flare study have been addressed [PHA (2010) page 526]
2. Consider the addition of a LAH on V-54. [PHA (2010) page 527]
3. Consider the addition of a continuous flare system purge that sweep[s] all major headers. (fuel gas with rotameters etc.) [PHA (2010) page 527]

7. **40 C.F.R. part 68. Requirement found at subpart D – Hot Work Permit [68.85(b)]:**
The permit shall document that the fire prevention and protection requirements in 29 C.F.R. 1910.252 have been implemented prior to beginning the hot work operations.

A hot work permit issued on 11/21/2014 did not identify the name of the fire watch. Kinder Morgan Procedure PSM 109 *Hot Work Program* requires the name of the fire watch. 29 C.F.R. 1910.252(b) states, “Fire watchers shall have fire extinguishing equipment readily available and be trained in its use. They shall be familiar with facilities for sounding an alarm in the event of a fire.” If the hot work permit does not provide the name of the fire watch, it is impossible to confirm that person has met the requirements of 29 C.F.R. 1910.252.

8. **40 C.F.R. part 68. Requirement found at subpart G – Risk Management Plan [68.195(b)]:**
If the emergency contact information required at 68.160(b)(6) has changed since June 21, 2004, the owner or operator shall submit corrected information within thirty days of the change.

The emergency contact, Mr. Eric Dawson, left the Rawlins Station Gas Plant in January of 2015. The emergency contact information was not updated until May 12, 2015, more than thirty (30) days after the change.