

Public Comment on the Environmental Assessment (EA) by
The Federal Energy Regulatory Commission (FERC) of
The Texas Eastern Appalachia to Market (TEAM 2014) Project
in FERC Docket CP13-84-000

James E. Rosenberg
555 Davidson Road
Grindstone, PA 15442
Fayette County
(724) 785-9398
October 16, 2013

These comments are directed to FERC's Environmental Assessment¹ of the Uniontown Compressor Station (though they may equally apply to other compressor stations in the TEAM 2014 project ("Project")). I object to the EA on the basis that it contains the following flaws:

1. The EA fails to evaluate Texas Eastern's submitted air modeling studies.

On 6/17/2013, Texas Eastern submitted air modeling studies for the Uniontown Compressor Station in this docket.² Such studies are crucial in evaluating the probability of acute exposures from air pollution in excess of ATSDR or OSHA safety levels. The EA has not taken consideration of this material, and has not used it to evaluate the risk of acute exposure to air pollutants at levels that threaten health. Instead, the EA relies on analysis of Potential To Emit (PTE) figures to assess the risk of air pollution from the Uniontown Compressor Station. PTE amounts are typically calculated as aggregate figures in units such as tons per year. However, safety levels of specific air pollutants, such as VOCs, are typically set in units such as parts per million for a specified amount of time. The EA does not provide any basis for extrapolating between these two different types of unit. Accordingly, the EA does not provide an adequate assessment of the actual health risks of acute exposure to air pollutants. As will be seen below (item 3), Texas Eastern has a documented history of severe acute excess emissions of air pollution. The EA must take account of *evaluated* air modeling studies and be amended to give a serious analysis of the probability of adverse health effects from incidents such as the Bernville accident described below.

2. The EA fails to evaluate compressor station noise exposures due to blowdown or malfunction.

The noise studies for compressor stations in Project were evidently carried out in circumstances of "normal operation". They do not measure noise levels during periods of blowdown or malfunction. In fact, there is a documented case of a neighbor of the Uniontown Compressor station being *injured* by noise. From Thomas Koziel vs. Texas Eastern Transmission, L.P., United States Court for the Western District of Pennsylvania, Docket # 13cv1197, the plaintiff alleges:

Plaintiff resides in Uniontown, Pennsylvania, approximately 500 feet from the Uniontown Compressor Station. Doc. No. 1-3, ¶ 1. The Compressor Station is owned and operated by Defendant and used in the natural gas industry. Id. at ¶ 3. Plaintiff's property includes a garage which is approximately 670 feet from the Compressor Station. Id. at ¶ 1. The garage is constructed of metal. Id.

On December 31, 2010, a high-pitched sound was emitted from the Compressor Station for

1 Docket CP13-84 Accession # 20130913-4002, <<http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13349110>>.

2 Docket CP13-84 Accession # 20130617-5178 RR 9, <<http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13284485>>, <<http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13284486>>, <<http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13284487>>, <<http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13284488>>.

approximately fifteen (15) minutes. Id. at ¶ 5. Plaintiff was in his garage at the time; the noise was amplified by the metal structure. Id. Plaintiff phoned an emergency number related to the plant and was told that a response team was on its way. Id. at ¶ 6. Plaintiff also dialed 911. Id. at ¶ 7. Emergency services responded. Id.

Employees of Spectra Energy confirmed the sound had emanated from the Compressor Station and told Plaintiff that the noise was caused by a frozen valve. Id. at ¶ 9. Plaintiff has experienced severe health problems related to his hearing and sleep because of his exposure to the noise. Id. at ¶¶ 10-13.

(This matter is still in litigation.) Attachment A shows a Fayette County property map giving the relationship of Mr. Koziel's parcel to the parcel containing the Uniontown Compressor Station. Surely the potential for noise to cause adverse health effects at Uniontown Compressor Station will only get worse as the power is upgraded, unless specific mitigation measures are taken. Assessment of noise levels that does not take into account the possibility of blowdown or malfunction is inadequate.

3. The EA fails to evaluate the potential for acute air pollution exposures due to blowdown or malfunction.

The EA discusses PTE amounts for compressor stations in Project, but does not provide an analysis of how those numbers are calculated. As part of its role in the Pennsylvania State Implementation Plan (SIP), as well as its role in implementing the Pennsylvania Air Pollution Control Act, the Pennsylvania Department of Environmental Protection (PA-DEP) typically evaluates an applicant's PTE based on information supplied by the vendors of the applicant's equipment, the applicant's analysis, PA-DEP's technical review, and (in the case of Plan Approvals) public comment. It is customary for *all* of this analysis to rely on assessment of equipment in normal operation. However, history has shown that significant emissions can occur during blowdowns, and very substantial emissions indeed can occur from malfunction.

An extremely significant case of such malfunction was experienced by Texas Eastern at its Bernville Compressor Station. As Spectra Energy states in a letter to PA-DEP:

“On Monday October 29, 2012 the Texas Eastern Transmission, LP, Bernville Compressor Station (Title V No. 06-05033), experienced an emergency shutdown (ESD).” ... “The total gas loss was 174,536 MCF which resulted in **61.31 tons of VOC emissions.**” ... “Gas was vented for forty three minutes.” (The documents pertaining to this incident are here attached as Appendix C.) [Emphasis added.]

The amount of VOC emissions in this case is significant: from a single case of malfunction, the Bernville Compressor Station emitted more VOC in one hour than an entire year's threshold for VOC major source.

This calls into question the entire basis of calculating PTE without including reasonably weighted assessment of the likelihood of malfunction combined with the emissions consequence of malfunction. We have seen above a case where emissions occurred at the Uniontown Compressor Station for approximately 15 minutes. If the amount of gas emitted per minute in the Uniontown incident in item 2 above is comparable to the Bernville case, we may reasonably infer that the Uniontown incident that has already occurred may have released as much as 20 tons of VOC in just that one incident.

Because these numbers are so shockingly large, it is useful to review the Bernville case and understand its cause. By Spectra Energy's own admission, this incident resulted from human error: a lockout / tag out human operations problem caused a valve to malfunction. This was not an industry-unprecedented problem. On Thursday, March 29, 2012, the Lathrop Compressor Station — owned and operated by a different company — exploded and caught fire as the result of just such a lockout / tag out human error problem as occurred at

Bernville.³ Although the Lathrop case was arguably different equipment and a different operator, natural gas compressor station operators across the industry had ample warning from it of the consequences of lockout / tagout errors. Not only did Spectra Energy not learn from the Lathrop incident to prevent the Bernville case from occurring, neither Spectra Energy nor FERC seems to have learned from the Bernville case that to evaluate environmental risk it is not sufficient to merely analyze “equipment”. The human systems that operate equipment must also be analyzed. Was the Uniontown incident above also due to human error? What training did operators at Uniontown Compressor Station receive to learn the lesson of Bernville?

We now have a documented case of a compressor station emitting in less than an hour more than major-source levels of VOC for an entire year! The consequences of this for air pollution regulation are clear:

FERC, EPA, PA-DEP, and all other regulators of air pollution must include assessment of the potential for malfunction, including the risk of human error. Such an assessment must be made part of the process of environmental assessment. An operator’s history, and the steps the operator has taken to prevent cases of malfunction in the future, must also be assessed. **Such assessment has not occurred** in the EA for the TEAM 2014 Project.

While the Bernville case is perhaps the most severe case known of emissions from a single compressor station malfunction, “routine” blowdowns are also a concern. Half a dozen blowdowns over the course of a year can add up to one Bernville, depending on how long they last. “Routine” blowdowns are typically not reported. Compressor station neighbors report hearing them repeatedly. To leave blowdowns out of the air emissions assessment picture completely is to presume the highly highly unlikely. What is Spectra Energy’s history of total accumulated blowdown time per year at the Uniontown Compressor Station? Are we to believe it is 0? What is the probability of acute health effects on compressor station neighbors from hazardous air pollutants? If FERC truly wants to assess these matters, it should **hold a hearing** at which compressor station neighbors can convey their experience first hand.

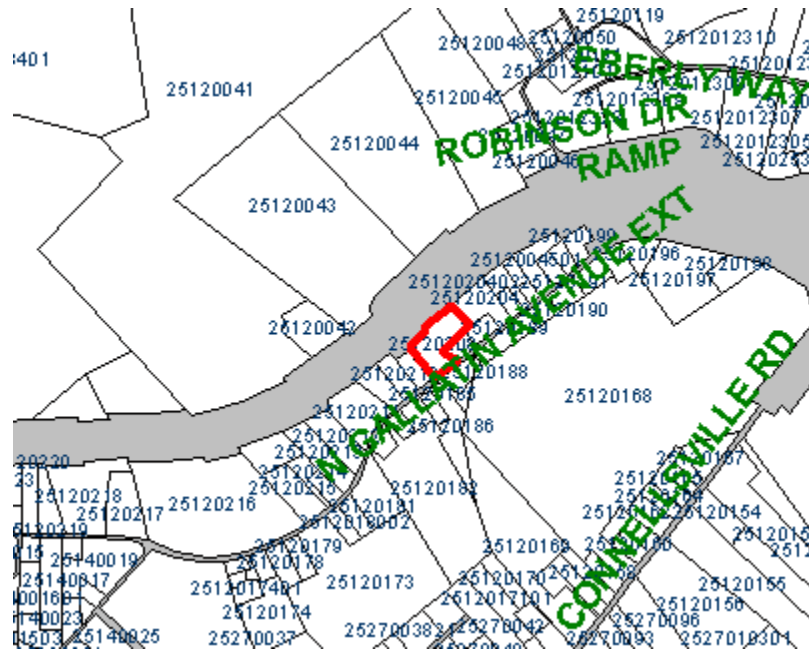
4. The EA fails to evaluate Uniontown Compressor Station’s status as to PHMSA Class and HCA.

The EA discusses the issue of High Consequence Areas (HCA) and includes an assessment of which pipeline segments are deemed to be HCA. Uniontown Compressor Station is not mentioned in this analysis. The EA does not provide any analysis of the potential impact circle of a possible accident at Uniontown Compressor Station. The Lathrop Compressor Station accident referred to above demonstrates that incidents such as those described in item 2 and item 3 above can in the worst case cause an explosion. The EA must be amended to determine whether Uniontown Compressor Station qualifies as an HCA. Attachment B shows a property map of the vicinity of Uniontown Compressor Station. There are a significant number of houses and buildings close by.

It is likewise important to assess what PHMSA Class Uniontown Compressor Station belongs to. The Lathrop Compressor Station accident referred to above was investigated by both PA-DEP and the Pennsylvania Public Utility Commission (PUC). PUC was acting under the terms of Pennsylvania Act 127, but withdrew its investigators as lacking jurisdiction because it was determined to be a Class 1 location. Such issues should be determined in advance by FERC. The EA must be amended to determine the class for the Uniontown Compressor Station.

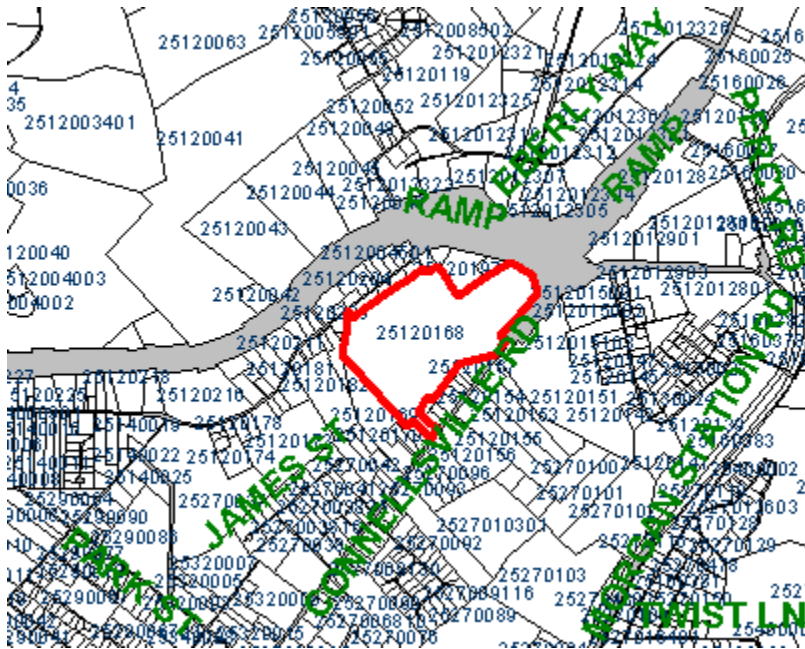
³ <http://shale.sites.post-gazette.com/index.php/news/archives/24437-compressor-station-explosion-shuts-down-at-least-10-wells>, <http://thetimes-tribune.com/news/gas-drilling/dep-williams-restarted-damaged-compressor-without-state-ok-1.1295539#axzz1rA7LwaQh>

Attachment A
Property Map Showing the Property of Thomas Koziel in Relation to Uniontown
Compressor Station



The Texas Eastern property for Uniontown Compressor Station is shown as parcel # 25120168. Mr. Koziel's property is outlined in red, parcel number 25120208.

Attachment B
Property Map Showing Properties in the Vicinity of Uniontown Compressor Station



Attachment C
Documents Pertaining to Uncontrolled Release of Pollutants at Bernville Compressor
Station Due to Malfunction

TEXAS EASTERN TRANSMISSION, LP
5400 Westheimer Court
Houston, TX 77056-5310
713.627.5400 main

Mailing Address:
P.O. Box 1642
Houston, TX 77251-1642



December 13, 2012

Mr. William Weaver
Air Quality Program Manager
PA Department of Environmental Protection
909 Elmerton Ave.
Harrisburg, PA 17110

**Re: TEXAS EASTERN TRANSMISSION, LP
BERNVILLE COMPRESSOR STATION
RESPONSE TO NOTICE OF VIOLATION**

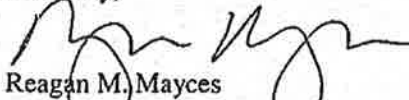
Dear Mr. Weaver:

On Wednesday December 5, 2012 Texas Eastern Transmission, LP received a Notice of Violation (NOV) for the Bernville Compressor Station (Title V No. 06-05033). This letter is to address the request to provide an abatement plan upon 15 days of receipt of the NOV.

We have conducted a root cause analysis of the gas release associated with the emergency shutdown (ESD) that occurred at Bernville on October 29, 2012 that resulted in the NOV. We have concluded that the excess emissions were a result of human performance error that occurred during annual station maintenance in the weeks prior to the ESD event. Our corrective action to prevent a similar event is to revise our maintenance procedure to include lockout tag out on all valves associated with the maintenance task, this will clearly identify which valves must be returned to their "inservice" state prior to task completion. Responsible personnel at the Bernville Compressor Station will be instructed in this revision to our maintenance procedure and station management will ensure compliance with the revised procedure.

Our abatement plan therefore is to revise the procedure as noted and ensure appropriate communication and oversight of the revised procedure. A copy of the revision which will be incorporated into our maintenance procedure on 12/14/12 is attached.

Sincerely,


Reagan M. Mayces
EHS Manager – US Operations
Air Compliance

cc: Tom Wooden – Houston Office



Gas Handling Procedure

Revision Date: 10/06/12

Please fill out all the highlighted areas. Fill in N/A if not applicable.

Procedure Title:

Bernville Staon Yard Shutdown Procedure

Location:

Business Unit:

NE_TETCO

Area:

Eagle

Contact:

Je Williams

Location:

Bernville

Pipe Segment:

Project #:

The following section is scheduled to be removed from service on:

Facility:

Line No:

Staon Yard

Valve Secons:

N/A

Size:

30" in.

From M.P.:

N/A

MP

KP

Length of Secon involved:

N/A

miles

To M.P.:

N/A

The following schemacs will be referenced in this procedure: (print & aach to the approved procedure)

CSD-51.10

Scope of Work (including sequence of events):

To Isolate, Blowdown and then once the work is complete, purge , pack and return the staon yard back to service.

Procedure Secons to be Ulized:

Check all that apply

Prior Prep

Hot Cut

Pulldown # 1

Nitrogen Purge

Pulldown # 2

Evacuaon w/ Air

Pulldown # 3

Gas Purge # 1

Blowdown

Gas Purge # 2

ID #:	NE-12-614	Date Approved:	12/14/12	Approver:	CR Shuckhart	Approved for Multiple Use:	Yes
-------	-----------	----------------	----------	-----------	--------------	----------------------------	-----



Gas Handling Procedure

Revision Date: 10/06/12

Please fill out all the highlighted areas. Fill in N/A if not applicable.

Notifications, Approvals & Permits:

Permits & Databases:

Entered in Gas Control Outage Database:

Date	Init.

Entered in Environmental Permit Database:

--	--

Work Clearance Received From Environmental Permit Request:

--	--

Purge Schedule Received from Region Tech Sta:

--	--

Hot work permit requested & received for any hot work:

--	--

Approvals & Reviews

Site Communication Review Complete:

Date	Init.

Site Hazard Review Complete:

--	--

Review All Input & Delivery Points With Gas Control:

--	--

Review and approval by Area (please have someone other than the author review):

--	--

Review and Approval by Gas Control:

--	--

Notifications:

	Telephone	Contact	Date/Time	Init.
Gas Control				
County EMS	610-374-4800			
PEMA	800-424-7362			

Pre-Job Safety Meeting:

- Items to be reviewed include: scope of work along with any hazards and mitigation methods associated with the work, job assignments, equipment to be used, schematics for the location, type of communication to be used during the work. SOP #1-2010, 5-3010 and all other referenced SOPs and documents.

The pre-job safety meeting (should include all personnel involved in the procedure):

Date	Init.

Please fill out all the highlighted areas. Fill in N/A if not applicable.

Initial Isolation

Setup Operation:

Comments/Remarks

This step will isolate or verify the staon yard is isolated.

NOTES:

- ◊ All Isolaon valves need to have Lockout/ Tagout (LO/TO) applied per S.O.P. 5-3070 (Hazardous Energy Control).
- ◊ Open body bleeds on isolaon valves where possible to verify that the bodies blow down or if using as a "Double Block & Bleed".
- ◊ The closing of all tap valves will be coordinated with Gas Control.

Permission to begin the procedure received from Gas Control:

Contact	Date/ Time	Init.

Valve Operations

- ◊ All valves, listed in sequence, to be opened, closed, checked open and checked closed:

Site	MP	Operation	Size	Function	Valve #	LO/TO		Date/Time	Init.
						Req'd	Try		
Bernville Staon	194.17								
Note:		Verify all units are oine							
		Check Open	24"	SCO Valve	SCO-1	No			
		Check Open	6"	SCO Valve	SCO-2	No			
		Check Open	24"	SCO Valve	SCO-3	No			
		Check Open	30"	SCO Valve	SCO-4	No			
		Check Open	30"	Block Valve	SPCV-1	No			
		Check Open	30"	Block Valve	SPCV-2	No			
		Slowly Close	24"	ESD Suct. Valve	12-338	Yes			
Note:		Close power & pilot gas to the valve							
		Close	30"	ESD Suct. Valve	19-80	Yes			
Note:		Close power & pilot gas to the valve							
		Close	30"	ESD Suct. Valve	27-687	Yes			
Note:		Close power & pilot gas to the valve							
		Close	24"	ESD Disch. Valve	12-339	Yes			
Note:		Close power & pilot gas to the valve							
		Close	30"	ESD Disch. Valve	19-430	Yes			
Note:		Close power & pilot gas to the valve							
		Close	30"	ESD Disch. Valve	27-168	Yes			
Note:		Close power & pilot gas to the valve							
		Close	36"	ESD Disch. Valve	28-87	Yes			
Note:		Close power & pilot gas to the valve							
		Check Open	24"	DCO Valve	DCO-1	No			
		Check Open	24"	DCO Valve	DCO-2	No			
		Check Open	30"	DCO Valve	DCO-3	No			
Close power and pilot gas valves to SBD-1 & SBD-2									
Note:		This will prevent the blowdown valves from operang.							
		Check Close	2"	ESD Tap Valve	12-340	Yes			
		Check Close	2"	ESD Tap Valve	19-431	Yes			
		Check Close	8"	Kicker Valve	KV-1	No			
		Check Close	30"	Trap Valve	27-683	Yes			
		Check Close	10"	Equalizer Valve	19-425	Yes			
		Check Open	30"	By-Pass Valve	19-775	No			
		Check Open	30"	By-Pass Valve	27-680	No			
		Check Open	30"	By-Pass Valve	27-689	No			
		Check Close	30"	Launcher Valve	19-438	Yes			
Note:		Verify the equalizer valves are closed							
		Check Close	8"	Kicker Valve	28-74	Yes			
		Check Close	8"	Kicker Valve	27-158	Yes			
		Check Open	36"	By-Pass Valve	28-83	No			
		Check Open	30"	By-Pass Valve	27-161	No			
		Check Open	30"	By-Pass Valve	19-428	No			

Please fill out all the highlighted areas. Fill in N/A if not applicable.

Blowdown

Comments/Remarks

This will blowdown the sucon side and the discharge side of the staon yard. Once the blowdown is complete, the staon blowdown valves will be opened.

NOTES:

- Blowdown trailers, separators and ares shall be located at least 50' from any potenal ignion sources including overhead power lines. (monitor the area for hazardous atmosphere during the blowdown event)
- Prior to venng of any gas, eliminate all ignion sources, post warning signs and have re exnguishers available.
- ◊ All Isolaon valves need to have Lockout/ Tagout (LO/TO) applied per S.O.P. 5-3070 (Hazardous Energy Control).

Blowdown Will Be Thru: Separator/Blowdown Trailer Deodorizer Noise Silencer Flare Blowoff Valve Source Control

Blowdown Will Be Thru Valve #: Located At: Restricted size:

Valve Operations

◊ All valves, listed in **sequence**, to be opened, closed, checked open and checked closed:

Site	MP	Operation	Size	Function	Valve #	LO/TO		Date/Time	Init.
						Req'd	Try		
Bernville Staon	194.17								
Sucon Side									
		Open	10"	Equalizer Valve	EV-1	No			
		Open	10"	Equalizer Valve	EV-2	No			
		Open	10"	Equalizer Valve	27-686	No			
		Slowly Open	2"	Blowdown Valve	27-685	No			
Note:	This will start the sucon side blowdown								
		Slowly Open	2"	Strainer Valve	SV-1	No			
		Slowly Open	2"	Strainer Valve	SV-2	No			
Discharge Side									
		Open	8"	Kicker Valve	KV-1	No			
		Open	8"	Kicker Valve	19-434	No			
		Slowly Open	2"	Blowdown Valve	19-435	No			
Note:	This will start the discharge side blowdown								
Once the Blowdown is complete open the staon blowdown valves									
		Open	8"	ESD BO Valve	SBD-1	No			
		Open	8"	ESD BO Valve	SBD-2	No			

Take precaouns and follow all steps to prevent accidental ignion.

Time Blowdown Began: Date: Initial Line Pressure: psig
 Time Blowdown Ended: Date: Final Line Pressure: psig

Work to be Completed

Scope of Work (including sequence of events):

NOTES:

- ◊ Keep all unnecessary people out of the work area.
- Prior to cung the football, eliminate all ignion sources and have re exnguishers available.
- Verify that proper Lockout/Tagout is in place.



Gas Handling Procedure

Revision Date: 10/06/12

Please fill out all the highlighted areas. Fill in N/A if not applicable.

Gas Purge & Pack Operation # 1:

Scope of Work (including sequence of events):

Once the work is completed, the staon yard will be purged. Using the Historical purge of 50 psi for 20 minutes.

Purge Info:

The following secon is scheduled to be purged on:

Date: _____

Line No: Staon Yard

Pipe Segment: Staon Yard

Valve Secon: N/A

Size: N/A in.

Nominal WT: N/A

From: N/A MP

Length of Secon to be Purged: Staon Yard

To: N/A MP

Purge Calculaons: Historical

Direcon of Purge From Valve: 27-686

To Valve: SBD-1 & SBD-2

Monitoring Equipment: _____

If other, specify: _____

Purge Will Be Thru: Separator/Blowdown Trailer Deodorizer Noise Silencer Flare Blowoff Valve Source Control

Target Inlet Purge Pressure: 50 psig

Estmated Purge Duraon: 1-1/2 Displacements: N/A min. 5 Displacements: N/A min.

Contact	Date/Time	Init.

Permission to begin the purge received from Gas Control:

Purge Inlet Valve #: 10" Plug Valve 27-686

Install Gravitometer or CGI on Valve #: N/A

Locaon of Pressure Gauge: TBD

NOTES:

- Blowdown trailers, separators and ares shall be located at least 50' from any potenal ignion sources including overhead power lines.
- Prior to venng of any gas, eliminate all ignion sources, post warning signs and have re exnguishers available.
- ◊ All Isolaon valves need to have Lockout/ Tagout (LO/TO) applied per S.O.P. 5-3070 (Hazardous Energy Control).

Valve Operations

◊ All valves, listed in sequence, to be opened, closed, checked open and checked closed:

Site	MP	Operation	Size	Function	Valve #	LO/TO		Date/Time	Init.
						Req'd	Try		
Bernville Staon	194.17								
Note:	Prior to purging the Staon yard: set up and purge the ESD Supply Tank using 2" ESD Supply Tap 12-340. Leave 2" ESD Tap Valve 12-340 open unl the yard is returned to service.								
		Close	2"	Blowdown Valve	27-685	No			
		Close	10"	Receiver Valve	27-686	No			
		Close	2"	Strainer Valve	SV-1	No			
		Close	2"	Strainer Valve	SV-2	No			
		Close	8"	Kicker Valve	KV-1	No			
		Close	8"	Kicker Valve	19-434	No			
		Close	2"	Blowdown Valve	19-435	No			
Note:	Equalize the pig barrel prior to fully opening trap valve								
		Slowly Open	30"	Trap Valve	27-683	Remove			
		Check Open	10"	Equalizer Valve	EV-1	No			
		Check Open	10"	Equalizer Valve	EV-2	No			
		Check Open	8"	ESD BO Valve	SBD-1	No			
		Check Open	8"	ESD BO Valve	SBD-2	No			
		Slowly Open	10"	Equalizer Valve	27-686	No			
Note:	This Will Start The Purge								
Note:	Once the 20 minute, 50 psi purge is complete: close the (2) 8" Staon Blowdown Valves								
		Close	8"	ESD BO Valve	SBD-1	N/A			
		Close	8"	ESD BO Valve	SBD-2	N/A			

Time Purge Began: _____

Time Purge Ended: _____

When purging is completed, close the vent valve and disconnect all equipment. Complete Purge Report (Form #7T-116).

Please fill out all the highlighted areas. Fill in N/A if not applicable.

Pack: _____

Comments/Remarks

Once SBD-1 & SBD-2 are closed the pack will begin

Pack Control Valve #: _____ 10" Plug Valve 27-686

Location of Pressure Gauge: _____ TBD

Time Pack Began: _____ Start pressure: _____

NOTES:

Prior to venting of any gas, eliminate all ignition sources, post warning signs and have re extinguishers available.

Valve Operations

◊ All valves, listed in **sequence**, to be opened, closed, checked open and checked closed:

Site	MP	Operation	Size	Function	Valve #	LO/TO		Date/Time	Init.
						Req'd	Try		
Bernville Staon	194.17								
Note:	Connue the pack unl the Staon Yard pressure is equalized with pipeline pressure								
		Slowly Open	10"	Receiver Valve	27-686	N/A			
Note:	When the piping has equalized connue with the return to service secon below								

Time Pack Ends: _____ End Pressure: _____

Return to Service:

Comments/Remarks

This will place all the valves back into there normal posion.

NOTES:

Prior to venting of any gas, eliminate all ignition sources and have re extinguishers available.

Verify that all body bleed valves are closed and Lockout/Tagouts are removed.

◊ The opening of all tap valves will be coordinated with Gas Control.

Valve Operations

◊ All valves, listed in **sequence**, to be opened, closed, checked open and checked closed:

Site	MP	Operation	Size	Function	Valve #	LO/TO		Date/Time	Init.
						Req'd	Try		
Bernville Staon	194.17	Open	24"	ESD Suct. Valve	12-338	Remove			
Note:	Slowly open the pilot gas valve and then the power gas valve								
		Open	30"	ESD Suct. Valve	19-80	Remove			
Note:	Slowly open the pilot gas valve and then the power gas valve								
		Open	30"	ESD Suct. Valve	27-687	Remove			
Note:	Slowly open the pilot gas valve and then the power gas valve								
		Open	24"	ESD Disch. Valve	12-339	Remove			
Note:	Slowly open the pilot gas valve and then the power gas valve								
		Open	30"	ESD Disch. Valve	19-430	Remove			
Note:	Slowly open the pilot gas valve and then the power gas valve								
		Open	30"	ESD Disch. Valve	27-168	Remove			
Note:	Slowly open the pilot gas valve and then the power gas valve								
		Open	36"	ESD Disch. Valve	28-87	Remove			
Note:	Slowly open the pilot gas valve and then the power gas valve								
		Check Close	8"	ESD BO Valve	SBD-1	N/A			
Note:	Slowly open the pilot gas valve and then the power gas valve								
		Check Close	8"	ESD BO Valve	SBD-2	N/A			
Note:	Slowly open the pilot gas valve and then the power gas valve								
		Open	2"	ESD Tap Valve	ESD-1	N/A			
		Open	2"	ESD Tap Valve	ESD-2	N/A			
		Open	2"	ESD Tap Valve	ESD-3	N/A			
		Open	2"	ESD Tap Valve	ESD-4	N/A			
		Close	2"	ESD Tap Valve	12-340	N/A			
		Close	10"	Equalizer Valve	EV-1	N/A			
		Close	10"	Equalizer Valve	EV-1	N/A			
		Close	10"	Recelver Valve	27-686	N/A			
		Close	30"	Trap Valve	27-683	N/A			

Note: Verify that all valve body bleed valves have been closed and secured. Remove all remaining LO/TO equipment.



Gas Handling Procedure

Revision Date: 10/06/12

Please fill out all the highlighted areas. Fill in N/A if not applicable.

Notifications:

	Telephone	Contact	Date/ Time	Init.

Contact Gas Control and provide return to service data (mes, pressures, etc.):

Contact Region Sta and provide return to service data (status, etc.):

Enter all Gas loss into database:

If this procedure was approved for multiple use & was modified send to Region for re-approval:

Contact	Date/ Time	Init.

Wise, Lori

From: Cramer, Sean E <SECramer@spectraenergy.com>
Sent: Monday, December 17, 2012 3:20 PM
To: Wise, Lori
Cc: Borst, William
Subject: Bernville NOV Response
Attachments: img-Z17161418-0001.pdf

Lori,

Attached is the response to the Bernville NOV. A hard copy is being mailed out today to the Southcentral office. Let me know if you have any questions.

Thanks, Sean



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

e-FACTS 2/203/9

December 4, 2012

NOTICE OF VIOLATION

CERTIFIED MAIL No. 7012 1010 0001 6689 4978

Mr. Thomas Wooden
Vice President
Texas Eastern Transmission, LP
5400 Westheimer Court
Houston, TX 77056

Re: Title V Permit #06-05033
Source operation violation
North Heidelberg Township, Berks County

Dear Mr. Wooden:

On October 29, 2012, the Texas Eastern Transmission, LP (Texas Eastern) experienced an emergency shutdown at its Bernville Compressor Station located in North Heidelberg Township, Berks County.

A malfunction report submitted to the Department on October 31, 2012, indicated that the emergency shutdown was due to a malfunctioning gas detector. As a consequence of that event, the initial report stated that 0.41 ton of VOC was emitted during a leak of 735,000 scf of natural gas. At the Department's request, Texas Eastern submitted a revised report on November 14, 2012, indicating that 61.31 tons of VOC was emitted during a leak of 174,536,000 scf of natural gas. The revised report states that the increased emissions were due to a suction valve that failed to close. Furthermore the revised report states that this suction valve failed to close because the operator failed to properly engage the valve assembly after recent maintenance.

By failing to properly engage the valve assembly, Texas Eastern failed to operate the source in a manner consistent with good operating practices and caused or permitted the violation of the following condition of its Title V Operating Permit #06-05033, effective April 1, 2008:

<u>Section</u>	<u>Condition No.</u>	<u>Page No.</u>	<u>25 Pa Code Violation</u>
B	007(b)	6	127.444

CERTIFIED MAIL No. 7012 1010 0001 6689 4978

Mr. Thomas Wooden, Vice President
Texas Eastern Transmission, LP

- Page 2 -

December 4, 2012

The above violation constitutes unlawful conduct and a public nuisance as defined by Sections 8 and 13 of the Air Pollution Control Act ("APCA"), the Act of January 8, 1960, P.L. 2119 (1959) 35 P.S. 4008 and 4013, respectively, for each day of violation. Violations of the Department's Rules and Regulations are subject to the penalties of Sections 9 and 9.1 of the APCA.

With regard to this violation, please submit to this office within 15 days of receipt of this letter an abatement plan to avoid similar violations in the future.

This Notice of Violation is neither an order nor any other final action by the Department of Environmental Protection. It neither imposes nor waives any enforcement action available to the Department under any of its statutes. If the Department determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions regarding this matter, please do not hesitate to contact me at 610.916.0100.

Sincerely,



Lori L. Wise
Air Quality Specialist

cc: Southcentral Regional Office
Reading District Office
Mr. Sean Cramer, Environmental Coordinator



e-facts 212037

December 4, 2012

NOTICE OF VIOLATION

CERTIFIED MAIL No. 7012 1010 0001 6689 4978

Mr. Thomas Wooden
Vice President
Texas Eastern Transmission, LP
5400 Westheimer Court
Houston, TX 77056

Re: Title V Permit #06-05033
Source operation violation
North Heidelberg Township, Berks County

Dear Mr. Wooden:

On October 29, 2012, the Texas Eastern Transmission, LP (Texas Eastern) experienced an emergency shutdown at its Bernville Compressor Station located in North Heidelberg Township, Berks County.

A malfunction report submitted to the Department on October 31, 2012, indicated that the emergency shutdown was due to a malfunctioning gas detector. As a consequence of that event, the initial report stated that 0.41 ton of VOC was emitted during a leak of 735,000 scf of natural gas. At the Department's request, Texas Eastern submitted a revised report on November 11, 2012, indicating that 61.31 tons of VOC was emitted during a leak of 174,536,000 scf of natural gas. The revised report states that the increased emissions were due to a suction valve that failed to close. Furthermore the revised report states that this suction valve failed to close because the operator failed to properly engage the valve assembly after recent maintenance.

By failing to properly engage the valve assembly, Texas Eastern failed to operate the source in a manner consistent with good operating practices and caused or permitted the violation of the following condition of its Title V Operating Permit #06-05033, effective April 1, 2008:

<u>Section</u>	<u>Condition No.</u>	<u>Page No.</u>	<u>25 Pa Code Violation</u>
B	007(b)	6	127.444

CERTIFIED MAIL No. 7012 1010 0001 6689 4978

Mr. Thomas Wooden, Vice President
Texas Eastern Transmission, LP

- Page 2 -

December 4, 2012

The above violation constitutes unlawful conduct and a public nuisance as defined by Sections 8 and 13 of the Air Pollution Control Act ("APCA"), the Act of January 8, 1960, P.L. 2119 (1959) 35 P.S. 4008 and 4013, respectively, for each day of violation. Violations of the Department's Rules and Regulations are subject to the penalties of Sections 9 and 9.1 of the APCA.

With regard to this violation, please submit to this office within 15 days of receipt of this letter an abatement plan to avoid similar violations in the future.

This Notice of Violation is neither an order nor any other final action by the Department of Environmental Protection. It neither imposes nor waives any enforcement action available to the Department under any of its statutes. If the Department determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions regarding this matter, please do not hesitate to contact me at 610.916.0100.

Sincerely,



Lori L. Wise
Air Quality Specialist

cc: Southcentral Regional Office
Reading District Office
Mr. Sean Cramer, Environmental Coordinator

scanned 12/5/12

Wise, Lori

From: Cramer, Sean E <SECramer@spectraenergy.com>
Sent: Tuesday, November 20, 2012 10:42 AM
To: Borst, William
Cc: Wise, Lori
Subject: Revised Bernville Malfunction Report
Attachments: 2012 Malfunction Report_Revised.pdf

William,

I have attached a revised malfunction report for the event that occurred on 10/29/12 at our Bernville compressor station. A hard copy of the report is being sent to the southcentral office via FedEx today.

Please let me know if you have any additional questions. Thanks, Sean

Sean E. Cramer, CHMM
Sr. EHS Specialist - Northeast Region
Spectra Energy
Office: 717-540-8303
Cell: 717-215-7473
Fax: 713-386-3042

TEXAS EASTERN TRANSMISSION, LP
2601 Market Place Street, Suite 400
Harrisburg, PA 17110
717.540.8300 office
717.540.8350 fax



November 20, 2012

Mr. William Weaver
Air Quality Program Manager
PA Department of Environmental Protection
909 Elmerton Ave.
Harrisburg, PA 17110

**Re: TEXAS EASTERN TRANSMISSION, LP
BERNVILLE COMPRESSOR STATION
REVISED MALFUNCTION REPORT**

Dear Mr. Weaver:

On Monday October 29, 2012 the Texas Eastern Transmission, LP, Bernville Compressor Station (Title V No. 06-05033), experienced an emergency shutdown (ESD). The ESD occurred due to a malfunctioning gas detector in the turbine building. Station personnel responded to the station that evening to evaluate the facility. The gas detector was repaired on Tuesday October 30, 2012 and the station was brought back into service.

As a result of internal miscommunication, the gas loss and VOC emissions reported in my letter of October 31, 2012 did not include the total amount of gas vented during this incident. As has been subsequently verbally reported by Texas Eastern to agency representatives, coincidental with the ESD, a suction valve inside the station piping failed to close resulting in additional gas loss that was not included in my initial report. Upon investigation, we have determined that after recent valve maintenance, the operator failed to engage the valve assembly properly. This faulty condition was not detected until after the station attendant arrived to investigate the event.

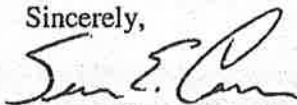
The total gas loss was 174,536 MCF which resulted in 61.31 tons of VOC emissions. Attached you will find an explanation of our emission calculations. Gas was vented for forty three minutes. Due to weather conditions on the 29th, it took the station attendant an extended period of time to get to the station. Once inside the station fencing, the station attendant closed the suction valve within two minutes. No additional personal protective equipment (PPE), besides standard PPE - ear protection, a hard hat, and safety toed shoes, were required to be worn by the station attendant. The gas released during this incident readily dissipated in the ongoing storm winds occurring during that time. The odor in the area associated with the incident was due to the mercaptan odorant that is injected into the gas stream.

Mr. William Weaver
Pennsylvania Department of Environmental Protection
November 20, 2012
Page 2

We regret the error in our initial report and have initiated a review of our reporting procedures to ensure that such internal miscommunications do not reoccur. We further regret causing alarm and resulting complaints from our neighbors concerning the mercaptan odor. Texas Eastern is reviewing whether sufficient data is available to evaluate ambient concentrations from this release through dispersion analysis and will apprise the agency once a determination of that is made.

If you have any questions or comments, please feel free to contact me at 717-540-8303.

Sincerely,



Sean E. Cramer
Sr. EHS Specialist
Northeast Region

Mr. William Weaver
Pennsylvania Department of Environmental Protection
November 20, 2012
Page 3

Gas Loss Calculation - Bernville ESD 10/29/12:

Volume of Gas *VOC density = tons VOC released
 $(174,536,400 \text{ scf}) * (0.0007 \text{ lb VOC/scf}_{\text{gas}}) * (1 \text{ ton}/2000 \text{ lbs}) = 61 \text{ tons VOC}$

Wise, Lori

From: Cramer, Sean E <SECramer@spectraenergy.com>
Sent: Thursday, November 15, 2012 4:55 PM
To: Wise, Lori
Subject: Bernville ESD - Recalculated VOC emissions

Lori,

I have updated our VOC emissions for the ESD that occurred at our Bernville Compressor Station on Monday October 29, 2012. The total VOC emissions from that event was 61.31 tons. These emissions will be included in our 2012 annual emissions statement.

Please let me know if you have any additional questions. Thanks, Sean

Sean E. Cramer, CHMM
Sr. EHS Specialist - Northeast Region
Spectra Energy
Office: 717-540-8303
Cell: 717-215-7473
Fax: 713-386-3042

Wise, Lori

From: Cramer, Sean E <SECramer@spectraenergy.com>
Sent: Wednesday, November 07, 2012 10:36 AM
To: Wise, Lori
Subject: Bernville ESD Notification
Attachments: img-Y07113235-0001.pdf.pdf

Lori,

Attached you will find the notification I sent to the southcentral office concerning the recent ESD from Bernville. I apologize, I should have copied you on the letter.

Let me know if you have any additional questions. Thanks, Sean

Sean E. Cramer, CHMM
Sr. EHS Specialist - Northeast Region
Spectra Energy
Office: 717-540-8303
Cell: 717-215-7473
Fax: 713-386-3042

Texas Eastern Transmission, LP
2601 Market Place Street, Suite 400
Harrisburg, PA 17110
717.540.8300 office
717.540.8350 fax



October 31, 2012

Mr. William Weaver
Air Quality Program Manager
PA Department of Environmental Protection
909 Elmerton Ave.
Harrisburg, PA 17110

**Re: TEXAS EASTERN TRANSMISSION, LP
BERNVILLE COMPRESSOR STATION
MALFUNCTION REPORT**

Dear Mr. Weaver:

On Monday October 29, 2012 the Texas Eastern Transmission, LP, Bernville Compressor Station (Title V No. 06-05033), experienced an emergency shutdown (ESD). The ESD occurred due to a malfunctioning gas detector in the turbine building. Station personnel responded to the station that evening to evaluate the facility. The gas detector was repaired on Tuesday October 30, 2012 and the station was brought back into service. The ESD resulted in a gas loss of 735,000 SCF which resulted in 0.41 ton of VOC.

If you have any questions or comments, please feel free to contact me at 717-540-8303.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean E. Cramer". The signature is fluid and cursive, with a large, sweeping initial "S".

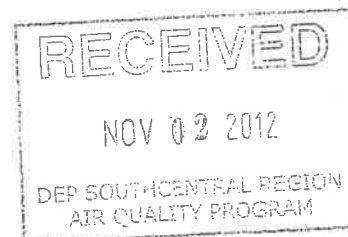
Sean E. Cramer
Sr. EHS Specialist
Northeast Region

Texas Eastern Transmission, LP
2601 Market Place Street, Suite 400
Harrisburg, PA 17110
717.540.8300 office
717.540.8350 fax



October 31, 2012

Mr. William Weaver
Air Quality Program Manager
PA Department of Environmental Protection
909 Elmerton Ave.
Harrisburg, PA 17110



**Re: TEXAS EASTERN TRANSMISSION, LP
BERNVILLE COMPRESSOR STATION
MALFUNCTION REPORT**

Dear Mr. Weaver:

On Monday October 29, 2012 the Texas Eastern Transmission, LP, Bernville Compressor Station (Title V No. 06-05033), experienced an emergency shutdown (ESD). The ESD occurred due to a malfunctioning gas detector in the turbine building. Station personnel responded to the station that evening to evaluate the facility. The gas detector was repaired on Tuesday October 30, 2012 and the station was brought back into service. The ESD resulted in a gas loss of 735,000 SCF which resulted in 0.41 ton of VOC.

If you have any questions or comments, please feel free to contact me at 717-540-8303.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean E. Cramer".

Sean E. Cramer
Sr. EHS Specialist
Northeast Region