#### Public Comment Regarding DEP's Intent to Issue Draft Plan Approval 26-00413B Texas Eastern Uniontown Compressor Station

James E. Rosenberg 555 Davidson Road Grindstone, PA 15442 jr@amanue.com (724) 785-9398

Pursuant to PA Bulletin 44 Pa.B. 36, Saturday, January 4, 2014, I take strong objection to issuance of Plan Approval 26-00413B ("Plan") as drafted, on grounds detailed below. As shown in eFACTS Authorization Record 940427<sup>1</sup>, on August 29, 2012, the Department of Environmental Protection (DEP) received an application (Application) on behalf of Texas Eastern for a horsepower upgrade for its Uniontown Compressor Station in North Union Township, Fayette County. This project is part of a larger interstate natural gas transmission line project known as "TEAM 2014", which is before the Federal Energy Regulatory Commission (FERC) under Docket CP13-84<sup>2</sup>. By Texas Eastern's own account, Uniontown Compressor Station is classified as *urban* for air modeling purposes<sup>3</sup>. In support of this classification, a Fayette County property map showing the vicinity of Uniontown Compressor Station is here attached as Attachment A. A glance at this map will readily show that there are significantly many nearby properties, including many residences. Most compressor stations in Pennsylvania are in rural locations, but this one is not. Accordingly, I respectfully *request a hearing* be held on this issue in the affected community. As will be seen below, there is a pattern of compressor station incidents regarding both Texas Eastern in general and Uniontown Compressor Station in particular which are of profound concern to the community's concern for clean air.

Specific grounds for objection:

## **1.** There is a <u>material omission</u> from Application in failing to list a Notice of Violation for Inspection ID 2120319<sup>4</sup> in its Air Pollution Control Act Compliance Review Form.

As part of its application, Texas Eastern properly lists "Bernville Station" under Air Pollution Control Act Compliance Review Form Section B, General Information Regarding "Applicant". On October 29, 2012, there occurred a truly shocking incident at Texas Eastern's Bernville Compressor Station ("Bernville 10/29/2012") in which no less than 61 tons of VOC were emitted in less than an hour. This is a truly astonishing amount of emissions — greater than the amount needed to classify a facility as Major Source for VOC! — and there is no indication whatsoever that DEP has taken this incident into account *in any way* in evaluating Application. It is quite possible that this is the single largest one-day release of VOC from any compressor station in the history of Pennsylvania, has major ramifications for the Plan Approval process, and will be referenced multiple times throughout this comment. File Review documents related to this incident are here attached as Attachment B. As part of the APCA Compliance Review Form Section B, an applicant must list "all documented conduct of violations or enforcement actions identified by the Department pursuant to the APCA, regulations, terms and conditions of an operating permit or plan approval". This section of Application *is completely blank*. As noted above, DEP did issue a Notice of Violation (NOV) for this incident:

"Construction, Modification, Reactivation and Operation of Sources, Operating Permit Requirements, Compliance requirements. A person may not cause or permit the operation of a source subject to this article unless the source and air cleaning devices identified in the

<sup>1</sup> http://www.ahs.dep.pa.gov/eFACTSWeb/searchResults\_singleAuth.aspx?AuthID=940427.

<sup>2</sup> http://elibrary.ferc.gov/idmws/docket\_search.asp, enter Docket Number CP13-84.

<sup>3 &</sup>quot;TEAM 2014 Project, Response to FERC June 5, 2013 Data Request, Resource Report 9, Question 5",

http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13284485, page 16.

<sup>4</sup> http://www.ahs.dep.pa.gov/eFACTSWeb/searchResults\_singleViol.aspx?InspectionID=2120319

application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the application and conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner **inconsistent with good operating practices**." [Emphasis added.]

A penalty in this case was assessed in the amount of \$15,000 under Enforcement ID 296561. By failing to disclose this information in its APCA Compliance Review Form, Texas Eastern has rendered Application materially deficient. Texas Eastern must be instructed to submit an amended application in which this deficiency is corrected, and Plan *must be withheld* until DEP can *redraft* its Review Memo ("Memo") taking into account the ramifications of the Bernville 10/29/2012 incident. These ramifications are many. Particularly notable are the following:

• The number 61.31 tons of VOC emitted in this one incident is Texas Eastern's own number<sup>5</sup>.

• File Review documents for the Bernville 10/29/2012 incident *establish a formula* for converting an amount of uncontrolled release of methane into an emissions amount for VOC resulting from blowdown.

• Texas Eastern admits this case was due to human error, and thus preventable.

• Bernville 10/29/2012 *proves* that emissions in excess of PTE from a single incident not only can happen, it did happen.

• Bernville 10/29/2012 *establishes conclusively* that blowdown and malfunction must be included in any analysis of PTE.

Omission of consideration of Bernville 10/29/2012 in both Application and its review is not just a minor lapse. This is an incident of historic proportions that shows conclusively that DEP must review its procedures from end to end to take proper account of blowdown and malfunction in the calculation of PTE for VOC.

Unfortunately, Bernville 10/29/2012 is not the only such incident. There is a documented case of a neighbor of the Uniontown Compressor station being *injured* by the noise from an uncontrolled release of methane ("Uniontown 12/31/2010"). 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 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.

<sup>5</sup> See letter, Sean E. Cramer to William Weaver, 11/20/2012 in the attached File Review Documents.

(This matter is still in litigation.) While I recognize that noise is not normally considered to be a regulated parameter under the Air Pollution Control Act, blowdown noise may act as the perceptible indicator of uncontrolled release of methane; the Bernville documents provide a method of converting from the duration of excess blowdown noise to an emissions amount for VOC. If the amount of methane emitted per minute from Uniontown 12/31/2010 is comparable to the amount of methane emitted per minute from Bernville 10/29/2012, the 12/31/2010 incident at Uniontown Compressor Station would have released no fewer than 21 tons of VOC, making a mockery of a PTE of 49 tpy and demonstrating that Plan Approval 26-00413A *should have been classified as Major Source for VOC*.<sup>6</sup>

## 2. The decision not to evaluate VOC in Memo is incorrect, due to failure of the analysis of VOC for the prior permit to take account of all information (e.g. blowdown and malfunction).

The pre-project number for Uniontown Compressor Station VOC PTE is 49 tpy. I have myself in the past, more than once, in plan approval public comments, complained that PTE amounts are published *without a margin for error*. This is particularly fallacious where a PTE amount, as in this case, is so close to the Major Source threshold. A certain number of blowdowns per year is a predictable outcome of compressor station operations. As above, a proper analysis of PTE for VOC should:

- Provide a number giving a reasonable estimate of the anticipated number of minutes of blowdown per year.
- Verify the number above against the historical record for the facility if it has a prior permit.
- Convert estimated minutes of blowdown per year into an amount of methane released per year from blowdown.

• Apply the Bernville 2012 formula to convert the amount of blowdown emissions per year into an amount of VOC released per year for blowdown.

• Add the amount of estimated blowdown VOC release to the PTE for VOC.

• Apply the same analysis as above to malfunction including malfunction from other related facilities from the same industry; where there have been malfunctions due to human error, evaluate corrective actions to determine the probability of the malfunction recurring.

None of this analysis has taken place for Plan.

## **3.** A correct analysis of Plan PTE for VOC must conclude that Uniontown Compressor Station is a Major Source of VOC.

PTE for VOC is listed as 48.5 tpy. An error of a mere 1.5 tpy must yield the conclusion that Uniontown Compressor Station is a Major Source for VOC. Bernville released 61.31 tons of VOC in 41 minutes in the 10/29/2012 incident. Using that number as a standard of comparison, 1.5 tons of VOC corresponds to 1.003 minutes of uncontrolled release comparable to Bernville. Are we to believe that Uniontown Compressor Station will experience less than one minute of blowdown per year? Such a number is not credible.

#### 4. Plan fails to meet DEP's own standard for Leak Detection BAT.

Memo correctly states: "Although GP-5 cannot be used for this project since the facility is TV and a transmission station, it has been referenced in this review since GP-5 can be used for similar equipment and

<sup>6</sup> While granted that Plan Approval 26-00413A was originally issued on 03/01/2010 — prior to Uniontown 12/31/2010 — it was extended via Authorization 891008, received 08/17/2011 and issued 8/30/2011.

function." (p. 4.) Unfortunately, DEP has failed to apply this reasoning to leak detection. To quote from GP-5, section J 2: "At a minimum, the owner or operator of the facility shall on a quarterly basis, use forward looking infrared ("FLIR") cameras or other approved leak detection monitoring devices approved by the Department for the detection of fugitive leaks." Where is this language in Plan? FLIR inspection once per quarter *is not often enough*. By not mentioning FLIR inspection at all in Plan, DEP is not following its own guidelines for leak detection BAT. This is not the first time it has been left to an alert citizen to remind DEP of its own standard BAT for leak detection. In response to public comment such as this one, DEP included in Plan Approval 26-00588A, Shamrock Compressor Station, SECTION C, Site Level Plan Approval Requirements, the following provision:

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 014 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

The Owner/Operator shall incorporate a leak detection and repair or maintenance program at the Facility. Components subject to this program shall include but not be limited to valves, connectors, open ended lines, pressure relief valves, and meters. Frequency of leak detection shall be on a quarterly basis. Acceptable leak detection methods include any of the following:

a. Optical gas imaging instrument. Use an optical gas imaging instrument for equipment leak detection in accordance with 40 CFR part 60, subpart A, § 60.18 of the Alternative work practice for monitoring equipment leaks, § 60.18(i)(1)(i); § 60.18(i)(2)(i) except that the monitoring frequency shall be annual using the detection sensitivity level of 60 grams per hour as stated in 40 CFR Part 60, subpart A, Table 1: Detection Sensitivity Levels; § 60.18(i)(2)(ii) and (iii) except the gas chosen shall be methane, and § 60.18(i)(2)(iv) and (v); § 60.18(i)(3); § 60.18(i)(4)(i) and (v); including the requirements for daily instrument checks and distances, and excluding requirements for video records. Any emissions detected by the optical gas imaging instrument is a leak unless screened with Method 21 (40 CFR part 60, appendix A-7) monitoring, in which case 10,000 ppm or greater is designated a leak. In addition, you must operate the optical gas imaging instrument manufacturer's operating parameters. Unless using methods in paragraph (b) of this condition, an optical gas imaging instrument must be used for all source types that are inaccessible and cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

b. Method 21. Use the equipment leak detection methods in 40 CFR part 60, appendix A-7, Method 21. If using Method 21 monitoring, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. Inaccessible emissions sources, as defined in 40 CFR part 60, are not exempt from this subpart. Owners or operators must use alternative leak detection devices as described in paragraph (a) or (b) of this condition to monitor inaccessible equipment leaks or vented emissions.

c. Infrared laser beam illuminated instrument. Use an infrared laser beam illuminated instrument for equipment leak detection. Any emissions detected by the infrared laser beam illuminated instrument is a leak unless screened with Method 21 monitoring, in which case 10,000 ppm or greater is designated a leak. In addition, you must operate the infrared laser beam illuminated instrument to detect the source types required by 40 CFR Part 60 Subpart W in accordance with the instrument manufacturer's operating parameters.

d. Acoustic leak detection device. Use the acoustic leak detection device to detect through-valve leakage. When using the acoustic leak detection device to quantify the through-valve leakage, you must use the instrument manufacturer's calculation methods to quantify the through-valve

leak. When using the acoustic leak detection device, if a leak of 3.1 scf per hour or greater is calculated, a leak is detected. In addition, you must operate the acoustic leak detection device to monitor the source valves required by this subpart in accordance with the instrument manufacturer's operating parameters. Acoustic stethoscope type devices designed to detect through valve leakage when put in contact with the valve body and that provide an audible leak signal but do not calculate a leak rate can be used to identify non-leakers with subsequent measurement required to calculate the rate if through-valve leakage is identified. Leaks are reported if a leak rate of 3.1 scf per hour or greater is measured.<sup>7</sup>

I call upon DEP to not only add a similar provision to Plan, but also to amend its word processing template used to construct plan approvals so that this provision is present by default in future plan approvals. It is simply not acceptable that it should be left to citizens to remind DEP of its own policy in a matter as important as leak detection.

## 5. There have been no submittals attesting to adequate training of all Texas Eastern personnel who work at Uniontown Compressor Station in the prevention of incidents such as Bernville 10/29/2012.

As noted in Plan Section B #013: 25 PA Code §127.25 states: "A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices." As noted above, Texas Eastern has admitted that Bernville 10/29/2012 was the result of human error. Consequently, there is simply no question that in the case of Bernville 10/29/2012, Texas Eastern was in clear violation of this §127.25 clause. The proper remedy for such a violation (apart from the assessed penalty) is for Texas Eastern to undertake a rigorous training program of all compressor station personnel to make certain such human errors do not recur. And: it is incumbent upon DEP to *evaluate* whether such due diligence on the part of Texas Eastern has occurred. In the face of such an extreme violation, for DEP not to undertake an evaluation of whether personnel who operate and will be operating Uniontown Compressor Station have received such training is simply negligent. DEP must *withhold* issuance of 26-00413B until it receives submittals from Texas Eastern attesting to proper training for prevention of human errors such as Bernville 10/29/2012.

## 6. Memo fails to evaluate Texas Eastern's air model for Uniontown Compressor Station submitted under FERC Docket CP13-84.

On 6/17/2013, Texas Eastern submitted to FERC under Docket CP13-84 its report "Response to FERC June 5, 2013 Data Request, Resource Report 9, Question 5"<sup>8</sup> containing air modeling studies for all of the compressor stations in the TEAM 2014 project, including Uniontown Compressor Station ("Air Model"). DEP has been unjustifiably lax in requiring air modeling studies for evaluation of compressor station plan approvals — particularly where, as in this case, the facility is a Major Source. For an applicant to have submitted an air modeling study in a related proceeding and DEP not to have considered that document in its regulatory review is simply inexcusable. Memo shows no indication that DEP is even aware of the existence of this document.

In fact, there are a number of reasons for questioning Air Model. For its weather data, Air Model relies on a monitoring station in Washington, PA as the closest monitoring station. (Lack of any air monitoring station in Fayette County is a frequent citizen complaint, *that is appropriate to repeat here*.) There are some significant differences in weather between Washington and Uniontown which may affect the risk of exposure to air pollution. Washington is often several degrees cooler than surrounding areas (as reported as "current conditions" by the National Weather Service NOAA Weather Radio). Proximity of Uniontown to Chestnut Ridge needs to

<sup>7</sup> See also Plan Approval 63-00968A, Smith Compressor Station, Washington County, Section C #013, also added as the result of public comment. It should be noted that Shamrock Compressor Station is a similar facility to Uniontown Compressor Station, having two Solar Mars turbines, as well as 6 1380 bhp reciprocating compression engines.

<sup>8</sup> FERC Accession Number 20130617-5178, RR9 DR5 Air Modeling Analyses Narrative.PDF, http://elibrary.ferc.gov/idmws/common/ OpenNat.asp?fileID=13284485.

be evaluated for its special wind patterns and susceptibility to stagnant air. Similarity in weather between Washington and Uniontown is simply assumed in Air Model; this needs to be evaluated.

Independent air modeling studies have shown in the past that compressor station exposures can significantly exceed permitted amounts. See for instance "AERMOD Modeling of NO<sub>2</sub> Impacts of the Barto Compressor Station", Clean Air Council, January 24, 2013<sup>9</sup>. DEP has given no indication whatever that this information has been taken into account in evaluating Plan. DEP must *withhold* issuance of 26-00413B until it has properly evaluated *all available information* related to air modeling for Uniontown Compressor Station.

## 7. There has been no proper analysis of probability of exposure to acute-effect toxic substance disease from the amounts of pollution permitted as Uniontown Compressor Station PTE.

PTE calculations are listed as total tons per year. As we have seen (Bernville 10/29/2012), actual emissions from a single event of less than one hour's duration can exceed the PTE. Meanwhile, agencies such as ATSDR and OSHA list unsafe exposure levels to chemicals capable of causing toxic chemical exposure disease in units such as parts per million for a given number of hours. DEP has provided no method of extrapolating between a tpy figure and a probability of being exposed to e.g. a ppm for 8 hours figure. It is exactly a dispersion study which would provide that link. As we have seen, DEP has not undertaken that analysis for Uniontown Compressor Station.

In several recent compressor station Comment Response Documents or Review Memos, DEP has attempted to refute this argument by loosely referencing dispersion/screening studies that "the department has received" concerning landfill gas fired engines<sup>10</sup>. This analysis is severely flawed for the following reasons:

(a) These studies are not cited in a form that the public can access.

The studies have not been published by DEP. They have not even been attached to Public Comment Response documents and provided to commenters who have raised this issue in the past. Where they are presumably available at all to the public through the process of File Review, they are not cited with actual permit numbers so the public can know which files to review. In short, DEP has treated these studies as if they were private information which cannot be challenged by any process of Public Comment. This is inexcusable.

(b) The fuel supply for the engines in question is not directly relevant to natural gas fired compression engines at compressor stations.<sup>11</sup>

(c) The studies were supplied by industry or applicants and have not been peer-reviewed.

(d) As noted above, the studies have not been subjected to public comment.

(e) The studies only address formaldehyde, and not e.g. benzene. Benzene is known to become dangerous at 0.5 ppm.

(f) The studies take no account of the actual kind of equipment actually installed at compressor stations<sup>12</sup>. For

Public Comment of James E. Rosenberg on Draft Plan Approval 26-00413B, Uniontown Compressor Station

<sup>9</sup> http://cleanair.org/sites/default/files/AERMOD%20NO2%20Modeling%20of%20Barto%20Compressor%20Station%20-%20Jan %2024,%202013%20(2).pdf

<sup>10</sup> See e.g. Review Memo from Alan A. Binder to Air Quality Permit File PA-63-00968A (Smith Compressor Station, Washington County), December 13, 2012, p. 14; Review Memo from Alexander Sandy to Air Quality Permit File GP5-26-00587C (Springhill #2 Compressor Station, Fayette County), pp 9-10.

<sup>11</sup> Uniontown Compressor Station does not presumably receive natural gas with significant natural gas liquids content. However, these same studies have been used to defend plan approvals for facilities that do.

<sup>12</sup> Uniontown Compressor Station does not apparently include any dehydrators. However, these same studies have been used concerning compressor stations where dehydrators *are* installed, even though they provide no guidance whatsoever concerning the acute toxic

instance, they take no account of the kind of malfunction that occured at either Bernville 10/29/2012 or Uniontown 12/31/2010.

What does DEP project the health effects would be on residents near the Uniontown Compressor Station (of which there are *many*!) of an event of the magnitude of Bernville 10/29/2012 or Uniontown 12/31/2010 under conditions of temperature inversion, no wind, and low cloud cover? There is nothing that "the department has received" that even attempts to assess this situation.

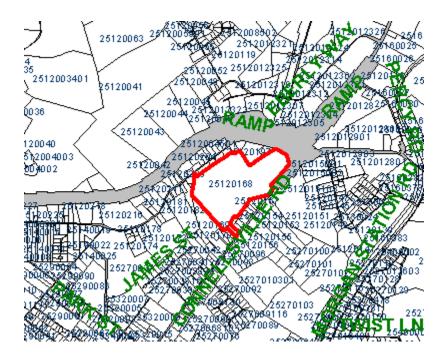
# 8. Because noise caused by blowdown and uncontrolled release is a perceptible indicator of emissions which may include regulated air pollutants, excessive blowdown noise must be explicitly included in the factors requiring reporting of malfunction.

Where noise results from blowdown or other form of uncontrolled release, it clearly fits the definition of air pollution in 25 PA Code §121.1: "The presence in the outdoor atmosphere of any form of contaminant, including, but not limited to, the discharging from stacks, chimneys, openings, buildings, structures, open fires, vehicles, processes or any other source of ... gases, vapors, ... in a place, manner or concentration ... which unreasonably interferes with the comfortable enjoyment of life or property." Therefore: DEP must take account of the Uniontown 12/31/2010 incident and all similar such incidents in evaluating whether Uniontown Compressor Station has caused air pollution. DEP *may not exclude noise* from those parameters monitored for air pollution compliance if that noise is caused by uncontrolled release of natural gas.

Respectfully submitted, James E. Rosenberg, 2/3/2013

substance disease exposure potential from dehydrators.

Attachment A Fayette County Property Map Showing the Vicinity of Uniontown Compressor Station



#### Attachment B File Review Documents Pertaining to the Bernville Compressor Station Incident, 10/29/2012

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

www.spectraenergy.com

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Revision Date: 10/06/12

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#### Pre-Job Safety Meeting:

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

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

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	-



Revision Date: 10/06/12

#### 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. Contact Date/ Time Init. Permission to begin the procedure received from Gas Control: Valve Operations All valves, listed in sequence, to be opened, closed, checked open and checked closed: LOTTO Site MP Operation Size Function Valve # Reg'd Try Date/Time Init, 194.17 **Bernville Staon** Note: Verify all units are oine Check Open SCO-1 24" SCO Valve No Check Open SCO Valve 6" 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" No Block Valve SPCV-2 Slowly Close 24" ESD Suct. Valve 12-338 Yes Note: Close power & pilot gas to the valve Close 30" ESO 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 & pliot 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 130" DCO Valve DCO-3 No Close power and pilot gas valves to SBD-1 & SBD-2 This will prevent the blowdown valves from operang. Note: 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" 27-683 Trap Valve 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 19-438 30" Launcher Valve 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



Revision Date: 10/06/12

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All Isolaon valves need to have	ive Locko	out/ Tagout (LO/	TO) ap	plied per S.O.P. 5-307	70 (Hazardous En	ergy Control).				
Blowdown Will Be Thru:	Separat	or/Blowdown Traile		Deodorizer	Noise Silencer	Flare	Blowo	ff Valve	Source Control	
Blowdown Will Be Thru Valv	e #:	27-685	& 19-4	35 Located A	At;	Pig Barrels	S 173 -	Re	estricted size:	2"
alve Operations						1 5 9 1				
• All valves, listed in sequenc	e, to be a	pened, closed,	checke	ed open and checked	closed:					
A STATES AND				1	112 1 at 2		LO	ло	i	
Site	MP	Operation	Size	e Function	Vi	ilve #	Req'd	Try	Date/Time	Inst
ernville Staon	194.17		1				<u> </u>			
con Side	<u> </u>	Open	10"	Enuplices Makes			In.		_	-
	-55.0W	Open	10"	Equalizer Valve	the second se	V~1 IV-2	No No	-		-
		Open	10"	Equalizer Valve		7-686	No			-
THE R PROPERTY OF THE REPORT OF	1000	Slowly Open	2"	Blowdown Valve		7.685	No			
Note: This will start	the suco	n side blowdow	_			-005	<u>Ind</u>		2.4116	
		Slowly Open	2"	Strainer Valve		5V-1	No	1		1
LIA. Serve		Slowly Open	2"	Strainer Valve		5V-2	No			
scharge Side		102101030	2010	A MINAGENCE	2016.11:010	I STORES	2.15	3.01	A	1.23.
A	Let IN	Open	8"	Kicker Valve	- K	(V-1	No		AB PLANE	
		Open	8"	Kicker Valve	19	-434	No	1	2 YO 10 320 T	10.00
		Slowly Open	2"	Blowdown Valve	19	9-435	No	- and the		
Note: This will start	the disch	arge side blowe	lown			BI D		-		22
						+17-				-
nce the Blowdown is complete op	en the s						1			
		Open Open	8" 8"	ESD BO Valve		BD-1	No			-
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	324	16,27				11 22 1	2) 3 545W		t water and	
		42					1.1		a low of the	North
	- 181	20.5 0	-	N 11 12 12 12 12 12 12 12 12 12 12 12 12		SV X	101 1 5	100 C	A = 25 0 - 1 -	100-5
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Star 1 1 24 2				All Carlos and Carlos		falifal		г		1
Time Blowdown Began:	CTT 1		1	Date:		Initial	Line Pre	ssure:		Jpsig
Time Blowdown Ended:				Date:	V., (N. 4.	Final	Line Pre	ssure:		psig
W										
Work to be Complete	a									
ope of Work (including sea	quence	of events):		Same in the second						
		일종일을 걸				11 . 7		× 10		
1	912 - Celj	1.0		11 S. 11 M M	2 . A	E. C. C.	1.8	X.20		-
OTES:										
Keep all unnecessary people :	out of th	e work area.								
Prior to cung the football, elin	ninate al	Linnion sources	and h	ave ce execulebore	nilahla					
and the second sec			ano ni	ave te exciguisners ava	andoje,					3
Verify that proper Lockout/Ta	gout is in	place.								
And the second		5360 N		division and state		181_09d1 9	VINGUE		44 (A. 19)	with.

5



Revision Date: 10/06/12

pe of Wor	k (including se	auence	of events):							
					g the Historical purge of 50 p	si for 20 minutes.	S. 660		1	
ge Info:	1.629	1.00		1	1.1993	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				
< 2 °	ving secon is sched	luled to be	e oursed on:		Date: Г		-			
				-	I have a second state of the	Etaan Var		1	Valve Secon;	N/A
Line No:	-	Staon Yard			Pipe Segment:	Staon Yard	or organizations	1	A 1991	
Size:	N/A	Jin.	Nom	inal W		From:		I/A	]MP	
Length of	Secon to be Purge	d:	Staon	Yard		To:	N	I/A	]MP	
Purge Cald	culaons:	K.	Historica	[						
Direcon of	f Purge From Valve	e	27-	686		To Va	alve:		SBD-1 & SBD-2	
MonitorIn	g Equipment:				1997 - 1998 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	If other, spe	cify:	1	64	11 - V
Purge Will		esenter/Bie	wdown Trailer		Deodorizer 🗌 Noise Silence		Blowoff Va	funt (	Source Control	
1.1.1.1.1.1		parator/bion	1.10		the second se			ive t		
Target Inle	et Purge Pressure:	1.	5	0	psig				ы. но	_
Esmated F	Purge Duraon:		1-1/2	Displac	ements: N/A r	nin.	5 Displacem	ents:	N/A	_min.
		88 _ <sup>1</sup> 85				Con	ture!	_	Date/ Time	I trit.
Permission	n to begin the purg	ge receive	d from Gas Co	ntrol:	100 T			14		-
Purge Inle	t Valve #	=		<b></b>		10" Plug Valv	a 27-686			
0				1						
	vitometer or CGI o					N/A		-		
Location o	of Pressure Gauge:	·		1	44 - X	TBD			HOLDER N.	C
overhead Prior to ve O All Isolaon	power lines. Inng of any gas, eli I valves need to have	minate all	ignion sources	s, post	east 50' from any potenal igr warning signs and have re ex plied per S.O.P. 5-3070 (Haza	nguishers available				
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#### Spectra) Energy

#### Gas Handling Procedure

Revision Date: 10/06/12

ack:			New Street		highlighted areas. Fil	25 11 21 21 2		. 2. A 1.	
Comments	/Remarks								
	D-2 are closed the	pack wi	ll begin	S		Andrew - Alter		19 mil 19 19 19 19 19 19 19 19 19 19 19 19 19	
Pack Contro		-		1		10* Plug Valve	27-686		
1.00	in the set								-
Location of	Pressure Gauge:	2.14				TBD		-	10.1
Т	Time Pack Began:		1.2.	J		Start pressu	ıre:		
alve Operations					warning signs and have re d open and checked close				
	Anna Cent	1.1	L., J. D. U.,	2	2		LO/TO		
Sit	te	MP	Operation	Size	Function	Valve #	Reg'd Try	Date/Time	Init
ernville Staon	and Arrent and	194.17			1 1 1 1 1 1 1	NU DEMONILEN		يو و و و و و و و و و و و و و و و و و و	1
Note:	Connue the pa	ack unlith	Slowly Open		is equalized with pipeline Receiver Valve	27-686	N/A		12020
Note:	When the nini	ing has e			the return to service seco				-l
						and the second sec			3.000
	Time Pack Ends:			1		End Press	ne:		
		_							
eturn to Sei	rvice:						- a - 1		
Comments				-					_
nis will place all t	the valves back int	to there	normal posion.						
	04 N 1				ave re exnguishers availat				
• The opening alve Operation	g of all tap valves <u>18</u>	will be c	oordinated with	h Gas Co					
• The opening alve Operation	g of all tap valves <u>18</u>	will be c	oordinated with	h Gas Co		ed:	L0/T0	1	
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Spectra) Energy

#### Revision Date: 10/06/12

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

	:: Telephone	Contact	Date/ Time	Init
Contact Gas Control and provide return		Contect	Date/ Time	init.
Contact Region Sta and provide return to				
Enter all Gas loss into database:				
If this procedure was approved for mula	e use & was modied send to Region for re-approval:			+

### Wise, Lori

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

ŝ,

Thanks, Sean

C-AACTS 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 **TP**, 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:

Section	Condition No.	<u>Page No.</u>	25 Pa Code Violation
В	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

Lori L. Wise Air Quality Specialist

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



e-facts 2120319

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

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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:

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

Printed on Recycled Paper

#### CERTIFIED MAIL No. 7012 1010 0001 6689 4978

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

- Page 2 -

December 4, 2012

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

Sincerely,

ri L. Whise

cc: Southcentral Regional Office

Lori L. Wise Air Quality Specialist

scanned 12/5/12

Reading District Office Mr. Sean Cramer, Environmental Coordinator

#### Wise, Lori

From: Sent: To: Cc: Subject: Attachments: Cramer, Sean E <SECramer@spectraenergy.com> Tuesday, November 20, 2012 10:42 AM Borst, William Wise, Lori Revised Bernville Malfunction Report 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 29<sup>th</sup>, 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 scf) \* (0.0007 lb VOC/scf<sub>gas</sub>) \* (1 ton/2000 lbs) = 61 tons VOC

#### Wise, Lori

From:	Cramer, Sean E <secramer@spectraenergy.com></secramer@spectraenergy.com>
Sent:	Thursday, November 15, 2012 4:55 PM⁄
To:	Wise, Lori
Subject:	Bernville ESD - Recalcualted 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.

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

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



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	DEP SOUTHCENTRAL REGION AIR QUALITY PROGRAM

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