ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	NSR Appeal No. 16-02
Ponderosa Compressor Station	)	
Permit No. SMNSR-UO-002178-2015.002	)	

ORDER GRANTING PETITIONER'S MOTION AND DISMISSING PETITION FOR REVIEW

On March 13, 2017, Tesoro Logistics, LP – Rockies ("TLLP") filed a "Motion to Dismiss [Its] Petition for Review" of a Tribal Minor New Source Review Permit issued by the U.S. Environmental Protection Agency, Region 8 ("Region") to TLLP for the Ponderosa Compressor Station. In its motion, TLLP represents that the Region "intends to issue [a] permit within a few weeks with * * * revisions discussed between the parties." Motion at 1. Of course, any permit action by the Region must be done in accordance with, and is subject to, applicable permitting regulations.

Having considered TLLP's motion and the representations therein, TLLP's Motion is GRANTED and its Petition for Review is DISMISSED.

So ordered.

ENVIRONMENTAL APPEALS BOARD[1]

Dated: MAR 2 1 2017

By: _____
Aaron P. Avila
Environmental Appeals Judge

[1] The three-member panel deciding this matter is composed of Environmental Appeals Judges Aaron P. Avila, Mary Kay Lynch, and Kathie A. Stein.

CERTIFICATE OF SERVICE

I certify that copies of the forgoing *Order Granting Petitioner's Motion and Dismissing Petition for Review* in the matter of Ponderosa Compressor Station, NSR Appeal No. 16-02, were sent to the following persons in the manner indicated:

By First Class Certified Mail, Return Receipt Requested:
Thomas H. Gibbons
Environmental Specialist
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202

By EPA Pouch Mail:
Sara L. Laumann
Associate Regional Counsel
Office of Regional Counsel, EPA Region 8
1595 Wynkoop Street
Mail Code 8RC
Denver, CO 80202-1129

Dated: MAR 2 1 2017

Annette Duncan
Administrative Specialist

BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATEMENTS ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
Ponderosa Compressor Station Permit No: SMNSR-UO-002178-2015.002	)	Appeal No. NSR 16-2

MOTION TO DISMISS PETITION FOR REVIEW

Tesoro Logistics, LP – Rockies (TLLP) respectfully requests the Environmental Appeals Board (Board) dismiss the Petition for Review of filed by TLLP for the Ponderosa Compressor Station permit.

Background and Cause for Motion

1. TLLP and EPA Region 8 have completed several productive conversations regarding the synthetic minor new source review permit that is the subject of this appeal.

2. Based on communications between the parties, permit conditions have been clarified and revised to the satisfaction of both parties.

3. EPA Region 8 intends to issue the permit within a few weeks with the revisions discussed between the parties.

In conclusion, and for all the foregoing reasons, TLLP respectfully requests that the Board grant this motion and dismiss the Petition for Review.

Respectfully Submitted,

Thomas H. Gibbons — 3/13/2017

Thomas H. Gibbons
Environmental Specialist
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202
Tel: (303) 454-6685
Thomas.H.Gibbons@tsocorp.com

Date

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Motion to Dismiss for Proceedings of the Ponderosa Compressor Station permit were sent to the following persons in the manner indicated:

By Electronic Submission:

Clerk of the Board
U.S. EPA
Environmental Appeals Board
1200 Pennsylvania Avenue, N.W.
Mail Code 1103M
Washington, D.C. 20460

By electronic mail:

Sara L. Laumann
Associate Regional Counsel
Office of Regional Counsel, EPA Region 8
1595 Wynkoop Street
Mail Code 8RC
Denver, CO 80202-1129
Tel: (303) 312-6443
Fax: (303) 312-6859
Email: Laumann.Sara@epa.gov

Dated: March 13, 2017

Thomas H. Gibbons
Environmental Specialist
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202
Tel: (303) 454-6685
Thomas.H.Gibbons@tsocorp.com

ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
	)	NSR Appeal No. 16-02
Ponderosa Compressor Station	)	
	)	
Permit No. SMNSR-UO-002178-2015.002	)	
	)	

ORDER GRANTING SECOND JOINT MOTION FOR EXTENSION OF TIME

On December 30, 2016, Tesoro Logistics, LP – Rockies ("TLLP") petitioned the Environmental Appeals Board to review the Tribal Minor New Source Review Permit issued by the U.S. Environmental Protection Agency, Region 8 ("Region") to TLLP for the Ponderosa Compressor Station. The Board previously granted the parties' joint motion for an extension of time, to and including February 28, 2017, for the Region to file its response to the Petition, the associated certified index of the administrative record, and the relevant portions of the administrative record. *See* Order Granting Motion for Extension of Time (Jan. 17, 2017). The Region and TLLP now jointly seek a further extension of time to March 30, 2017, for the Region to file and serve its response materials. *See* Joint Motion for Extension of Time (Feb. 23, 2017) ("Motion").

In support of the first joint extension motion, the parties indicated that they planned to meet to discuss resolving this matter without the need for further proceedings before the Board, and needed additional time to allow that meeting to occur (indeed, they represented that an *initial* meeting between representatives of TLLP and the Region could not occur until January 17, 2017). The parties indicate in their second joint extension motion that they have had "productive

conversations" and "continue to believe that it is in their mutual interest to take additional steps before proceeding with th[is] appeal." Motion at 1-2. The parties represent, however, that more time is needed to complete those additional steps. The parties request a further extension of the Region's deadline to file and serve its response materials to avoid the unnecessary expenditure of resources. *Id.* at 2. For the reasons that follow, the Motion is granted.

The Board strives to resolve all appeals expeditiously. Due to their time-sensitive nature, the Board gives highest priority to the timely resolution of new source review permit appeals. *See* Revisions to Procedural Rules to Clarify Practices and Procedures Applicable in Permit Appeals Pending Before the Environmental Appeals Board, 78 Fed. Reg. 5281 (Jan. 25, 2013) (codified at 40 C.F.R. § 124.19); Order Governing Petitions for Review of Clean Air Act New Source Review Permits (EAB Mar. 27, 2013), available at www.epa.gov/eab. The Board, however, also encourages parties to resolve matters without the need for further review to avoid any unnecessary expenditures of resources by the parties and the Board.

Having considered the Motion, jointly filed by the parties, and the parties' representations as to the need for more time to resolve this matter, the Board grants the second Joint Motion for Extension of Time. Accordingly, and pursuant to 40 C.F.R. § 124.19(n), the Region's response (and any other response) to the petition, as well as the associated certified index of the administrative record, and the relevant portions of the administrative record are due on or before **March 30, 2017**.

In the interest of encouraging progress on this matter, the Board notes that it expects that, on or before March 30, 2017, one of the following will occur:

a) Petitioner will move for dismissal of the petition pursuant to 40 C.F.R. § 124.19(k);
b) The Region will unilaterally withdraw the permit pursuant to 40 C.F.R. § 124.19(j);

c) The Region will move for a voluntary remand of the permit (for further consideration); or
d) The Region will file its response to the Petition, the associated certified index of the administrative record, and the relevant portions of the administrative record, *see* 40 C.F.R. § 124.19(b)(1).

So ordered.

ENVIRONMENTAL APPEALS BOARD

Dated: 02/28/17

By: _____
Aaron P. Avila
Environmental Appeals Judge

CERTIFICATE OF SERVICE

I certify that copies of the forgoing *Order Granting Second Joint Motion for Extension of Time* in the matter of Ponderosa Compressor Station, NSR Appeal No. 16-02, were sent to the following persons in the manner indicated:

By First Class Mail:
Thomas H. Gibbons
Environmental Specialist
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202

By EPA Pouch Mail:
Sara L. Laumann
Associate Regional Counsel
Office of Regional Counsel, EPA Region 8
1595 Wynkoop Street
Mail Code 8RC
Denver, CO 80202-1129

Dated: FEB 2 8 2017

Annette Duncan
Administrative Specialist

BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATEMENTS ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	
Ponderosa Compressor Station Permit No: SMNSR-UO-002178-2015.002	Appeal No. NSR 16-2

JOINT MOTION FOR EXTENSION OF TIME

The United States Environmental Protection Agency (EPA) Region 8 (Region) and Tesoro Logistics, LP – Rockies (TLLP) respectfully request the Environmental Appeals Board (Board) grant an extension until March 30, 2017 to the deadline for EPA to file its response, including the relevant parts of the administrative record and certified index, to the Petition for Review filed by TLLP for the Ponderosa Compressor Station permit. The extension will allow the parties to take steps to work through the issues appealed.

Background and Cause for Motion

1. The Region and TLLP have had several productive conversations regarding the synthetic minor new source review permit that is the subject of this appeal and need more time to complete additional steps.

2. Based on email communications between the parties on February 22, 2017, the parties continue to believe it is in their mutual interest to take additional steps before proceeding with the appeal.

3. The parties continue to believe they will be able to work through the issues without participating in the Board's Alternative Dispute Resolution Program ("ADR Program"); however, if the parties decide that participation in the ADR Program would be useful they will so notify the Board.

4. For the reasons stated above, the parties believe that filing EPA's response before the parties have had a chance to work through additional steps could result in an unnecessary expenditure of resources by the parties and the Board and, therefore, respectfully request the Board extend EPA's deadline to file its response until March 30, 2017. In light of the joint motion to extend the deadlines, the Region does not intend to file a response to the petition and the associated administrative record index by the deadline of February 28, 2017.

Respectfully submitted,

Sara L. Laumann 2/23/2017

Sara L. Laumann
Date
Associate Regional Counsel
Office of Regional Counsel, EPA Region 8
1595 Wynkoop Street
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Fax: (303) 312-6859
Email: laumann.sara@epa.gov

Thomas H. Gibbons — 2/23/2017

Thomas H. Gibbons
Environmental Specialist
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202
Tel: (303) 454-6685
Thomas.H.Gibbons@tsocorp.com

Date

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Joint Motion to extend the time for Proceedings of the Ponderosa Compressor Station permit were sent to the following persons in the manner indicated:

By Electronic Submission:

Clerk of the Board
U.S. EPA
Environmental Appeals Board
1200 Pennsylvania Avenue, N.W.
Mail Code 1103M
Washington, D.C. 20460

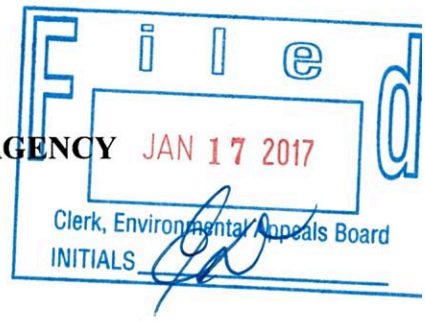
By electronic mail:

Thomas H. Gibbons
Environmental Specialist
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202
Tel: (303) 454-6685
Thomas.H.Gibbons@tsocorp.com

Dated: 2/23/2017

Sara L. Laumann
Associate Regional Counsel
Office of Regional Counsel, EPA Region 8
1595 Wynkoop Street
Mail Code 8RC
Denver, CO 80202-1129
Tel: (303) 312-6443
Fax: (303) 312-6859
Email: laumann.sara@epa.gov

ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.



In re:	)	NSR Appeal No. 16-02
Ponderosa Compressor Station	)	
Permit No. SMNSR-UO-002178-2015.002	)	

ORDER GRANTING JOINT MOTION FOR EXTENSION OF TIME

On December 30, 2016, Tesoro Logistics, LP – Rockies ("TLLP") petitioned the Environmental Appeals Board to review the Tribal Minor New Source Review Permit issued by the U.S. Environmental Protection Agency, Region 8 ("Region") to TLLP for the Ponderosa Compressor Station. The Region and TLLP now jointly seek an extension of time, until February 28, 2017, for the Region to file and serve its materials, 40 C.F.R. § 124.19(b)(1), responding to the Petition. *See* Joint Motion for Extension of Time (Jan. 13, 2017) ("Motion"). In support of the extension, the parties indicate that they plan to meet to discuss resolving this matter without the need for further proceedings before the Board and, in doing so, may avoid unnecessary expenditures of resources by the parties as well as the Board. Motion at 2.

Having considered the Motion and the parties' representations, and pursuant to 40 C.F.R. § 124.19(n), the Board grants the parties' Joint Motion for Extension of Time. The Region's response (and any other response) to the Petition, the associated certified index of the

administrative record, and the relevant portions of the administrative record, *see* 40 C.F.R. § 124.19(b)(1), are due **February 28, 2017**.

So ordered.

ENVIRONMENTAL APPEALS BOARD

Dated: 01/17/17

By: _____
Aaron P. Avila
Environmental Appeals Judge

CERTIFICATE OF SERVICE

I certify that copies of the forgoing *Order Granting Joint Motion for Extension of Time* in the matter of Ponderosa Compressor Station, NSR Appeal No. 16-02, were sent to the following persons in the manner indicated:

By First Class Mail:
Thomas H. Gibbons
Environmental Specialist
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202

By EPA Pouch Mail:
Sara L. Laumann
Associate Regional Counsel
Office of Regional Counsel, EPA Region 8
1595 Wynkoop Street
Mail Code 8RC
Denver, CO 80202-1129

Dated: 1-17-2017

Annette Duncan
Administrative Specialist

[Includes EPA's 1/12/17 responses]
BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATEMENTS ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
Ponderosa Compressor Station Permit No: SMNSR-UO-002178-2015.002	)	Appeal No. NSR 16-2

JOINT MOTION FOR EXTENSION OF TIME

The United States Environmental Protection agency (EPA) Region 8 (Region) and Tesoro Logistics, LP – Rockies (TLLP) respectfully request the Environmental Appeals Board (Board) grant an extension until February 28, 2017 to the deadline for EPA to file its response, including the relevant parts of the administrative record and certified index, to the Petition for Review filed by TLLP for the Ponderosa Compressor Station permit. The extension will allow the parties to meet and discuss resolution of the issues appealed.

Background and Cause for Motion

1. On November 30, 2016, the Region, acting pursuant to its authority under 40 C.F.R. § 49.158, issued a final synthetic minor new source review permit to Tesoro Logistics - Rockies for the Ponderosa Compressor Station.

2. TLLP faxed this permit appeal to the Environmental Appeals Board on December 29, 2016; and delivered the appeal to the Board by Federal Express on December 30, 2016.

3. Based on email communications between the parties on January 10, 2017, the parties have agreed to meet and believe it is in their mutual interest to discuss resolution of the items listed and described in the appeal before proceeding with the appeal.

4. Due to competing workload demands, TLLP representatives are unable to have an initial meeting with the Region's representatives until the afternoon of January 17, 2017.

5. EPA's response to the petition appears to be due on January 20, 2017. 40 C.F.R. § 124.19(b)(1).

6. The parties believe they will be able to work through the issues without participating in the Board's Alternative Dispute Resolution Program ("ADR Program"); however, if the parties decide that participation in the ADR Program would be useful they will so notify the Board.

7. The parties agree that service will be made by electronic means. 40 C.F.R. § 124.19(i)(3).

8. For the reasons stated above, the parties believe that filing EPA's response before the parties have had a chance to thoroughly discuss the issues could result in an unnecessary expenditure of resources by the parties and the Board and, therefore, respectfully request the Board extend EPA's deadline until February 28, 2017, to allow the parties to properly explore resolution of the issues. In light of the joint motion to extend the deadlines, the Region does not intend to file a response to the petition and the associated administrative record index by what appears to be a deadline of January 20, 2017.

Respectfully submitted,

Sara L Laumann 1/13/2017

Sara L. Laumann Date
Associate Regional Counsel
Office of Regional Counsel, EPA Region 8
1595 Wynkoop Street
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Denver, CO 80202-1129
Tel: (303) 312-6443
Fax: (303) 312-6859
Email: laumann.sara@epa.gov

Thomas H. Gibbons

January 13, 2017

Date

Thomas H. Gibbons
Environmental Specialist
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202
Tel: (303) 454-6685
Thomas.H.Gibbons@tsocorp.com

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Joint Motion to extend the time for Proceedings of the Ponderosa Compressor Station permit were sent to the following persons in the manner indicated:

By Electronic Submission:

Clerk of the Board
U.S. EPA
Environmental Appeals Board
1200 Pennsylvania Avenue, N.W.
Mail Code 1103M
Washington, D.C. 20460

By electronic mail:

Thomas H. Gibbons
Environmental Specialist
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202
Tel: (303) 454-6685
Thomas.H.Gibbons@tsocorp.com

Dated: 1/13/2017

Sara L. Laumann
Associate Regional Counsel
Office of Regional Counsel, EPA Region 8
1595 Wynkoop Street
Mail Code 8RC
Denver, CO 80202-1129
Tel: (303) 312-6443
Fax: (303) 312-6859
Email: laumann.sara@epa.gov

Siffring, Stuart

From: Gibbons, Thomas <Thomas.H.Gibbons@tsocorp.com>
Sent: Wednesday, January 18, 2017 11:00 AM
To: Laumann, Sara
Cc: Siffring, Stuart; Fallon, Gail; Pring, Daniel Daryl
Subject: RE: Question regarding one of the documents submitted

Hi Sara,

Thank you again for meeting with us yesterday. We look forward to seeing the draft administrative amendment to the Ponderosa Compressor Station permit.

To follow up CBI issue, Tesoro waives any claims regarding the matter below for the John Zink flare.

Best Regards,

Tom

Thomas Gibbons | *Environmental Specialist*
(303) 454-6685 | Thomas.H.Gibbons@tsocorp.com | 1801 California St. Suite 1200 Denver, CO 80202

From: Laumann, Sara [mailto:Laumann.Sara@epa.gov]
Sent: Tuesday, January 17, 2017 11:32 AM
To: Gibbons, Thomas
Cc: Siffring, Stuart; Fallon, Gail
Subject: Question regarding one of the documents submitted

Hi Tom

If we have time today when we meet it'd be helpful if we can talk about the following.

As you may have seen, the Region's website with our permits had included a link for the Ponderosa Compressor Station permit and then a second link for the permit documents. As I was looking over the permit documents last week I noticed that one of the documents submitted by Tesoro included a notation at the bottom indicating it's a proprietary document. The document is the "Proposal for Open Flame Vapor Combustion Unit" submitted to QEP by John Zink Company, April 17, 2014. The John Zink document was inadvertently included with all the documents on the Region's website. On Friday when we discovered this, we removed the set of documents that were included in the second link so that we could check with you on whether Tesoro wants to assert a confidential claim for the document or waive any claims. We'd be happy to discuss the CBI claim procedures at our meeting this afternoon or at another time.

Thank you,
-Sara
(303) 312-6443

Siffring, Stuart

From: Gibbons, Thomas <Thomas.H.Gibbons@tsocorp.com>
Sent: Monday, January 09, 2017 9:28 AM
To: Siffring, Stuart; Smith, Claudia
Cc: Pring, Daniel Daryl
Subject: RE: Ponderosa Compressor Station Permit SMNSR-U0-002178-2015.002

Dear Stuart,

I would like to further discuss the issue of the Ponderosa Compressor Station tank vapor combustor in early February. When would you and Claudia Smith be available for a meeting and/or conference call?

Best Regards,
Tom

Thomas Gibbons | *Environmental Specialist*
(303) 454-6685 | Thomas.H.Gibbons@tsocorp.com | 1801 California St. Suite 1200 Denver, CO 80202

From: Gibbons, Thomas
Sent: Thursday, December 22, 2016 3:15 PM
To: Stuart Siffring (Siffring.Stuart@epa.gov)
Cc: Pring, Daniel Daryl
Subject: Ponderosa Compressor Station Permit SMNSR-U0-002178-2015.002

Dear Stuart,

Thank you for speaking with me today regarding Condition I.E.4.a of Permit SMNSR-U0-002178-2015.002 and the MACT HH testing requirement for the enclosed combustion device for the storage tanks ("model demonstrated by a manufacturer to meet the total VOC and total HAP control efficiency requirements of this permit using the procedures specified in 40 CFR part 63, subpart HH for combustion control devices").

When you find the list of combustors that have been tested by various vendors for NSPS OOOO/OOOOa, please send email the link to me.

Best Regards,

Tom

Thomas Gibbons | *Environmental Specialist*
(303) 454-6685 | Thomas.H.Gibbons@tsocorp.com | 1801 California St. Suite 1200 Denver, CO 80202

Siffring, Stuart

From: Gibbons, Thomas <Thomas.H.Gibbons@tsocorp.com>
Sent: Tuesday, January 10, 2017 3:43 PM
To: Laumann, Sara; Siffring, Stuart; Smith, Claudia; Fallon, Gail
Cc: Pring, Daniel Daryl
Subject: RE: Tesoro Ponderosa CS

Dear Sara,

Yes, this joint motion for a 1-month stay is plausible. Please let me know when you have it drafted.

We look forward to meeting with you next Tuesday at 1:30 p.m.

Best Regards,

Tom

Thomas Gibbons | *Environmental Specialist*
(303) 454-6685 | Thomas.H.Gibbons@tsocorp.com | 1801 California St. Suite 1200 Denver, CO 80202

From: Laumann, Sara [mailto:Laumann.Sara@epa.gov]
Sent: Tuesday, January 10, 2017 12:01 PM
To: Siffring, Stuart; Smith, Claudia; Fallon, Gail; Gibbons, Thomas
Subject: RE: Tesoro Ponderosa CS

Thanks Stuart for setting up this meeting.

Tom: We look forward to meeting with you next to discuss the concerns raised in your appeal to the Environmental Appeals Board next week and we're hopeful we can find a way to work them out. I wanted to let you know that Stuart, Gail and I just left you a voice mail message about the timing considerations outlined in this email. As you may know, EPA's response to the appeal is due to the Board on January 20th. We'd like a chance to be able to work things out between Tesoro and EPA before filing our response, and are contacting you this week to see if will join us in a joint motion to the Board asking that they stay the case for a month, which we think would give us a chance to work things out before proceeding with the appeal. I am working on the draft filing now and can share it with you in the next couple of days. Please feel free to give me a call if you have any questions.

We look forward to hearing from you.

Sara Laumann
Office of Regional Counsel
(303) 312-6443

-----Original Appointment-----
From: Siffring, Stuart
Sent: Tuesday, January 10, 2017 10:58 AM
To: Laumann, Sara; Smith, Claudia; Fallon, Gail; Gibbons, Thomas

Subject: Tesoro Ponderosa CS
When: Tuesday, January 17, 2017 1:30 PM-2:30 PM (UTC-07:00) Mountain Time (US & Canada).
Where: R8DEN-2114-Aspen/R8-Wynkoop

Hello,

Let's get together and talk about the Tesoro Ponderosa CS EAB appeal and potential solutions. Tom, we will have counsel present and you are invited to bring yours along as well. Thanks,

-Stuart

Stuart Siffring
Environmental Engineer
US EPA Region 8 Air Program
Phone: (303) 312-6478
Fax: (303) 312-6064
https://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region

Siffring, Stuart

From: Gibbons, Thomas <Thomas.H.Gibbons@tsocorp.com>
Sent: Thursday, February 23, 2017 11:57 AM
To: Laumann, Sara; Siffring, Stuart
Cc: Pring, Daniel Daryl
Subject: RE: Check-in on EAB Appeal
Attachments: Ponderosa Compressor Station_Joint Extension Motion_2 23 2017_pg4 signed.pdf

Hi Sara,

This looks fine. I've attached my signature page 4.

I'll let you know what I hear from the EAB regarding the procedure.

Thanks,
Tom

Thomas Gibbons | *Environmental Specialist*
(303) 454-6685 | Thomas.H.Gibbons@tsocorp.com | 1801 California St. Suite 1200 Denver, CO 80202

From: Laumann, Sara [mailto:Laumann.Sara@epa.gov]
Sent: Thursday, February 23, 2017 9:00 AM
To: Gibbons, Thomas; Siffring, Stuart
Subject: RE: Check-in on EAB Appeal

Hi Tom
Thanks for connecting this morning. Here's a draft joint motion for extension of the agency's deadline, let us know if you have any comments or changes; and once we get a final motion we can both sign and I'll take care of filing it with the Board.

Thank you,
-Sara

Sara L. Laumann ● Associate Regional Counsel ● US EPA Region 8 ● (303) 312-6443

-----Original Appointment-----
From: Laumann, Sara
Sent: Wednesday, February 22, 2017 2:46 PM
To: Laumann, Sara; Gibbons, Thomas; Siffring, Stuart
Subject: Check-in on EAB Appeal
When: Thursday, February 23, 2017 8:30 AM-9:00 AM (UTC-07:00) Mountain Time (US & Canada).
Where: See conf call number in invite

Siffring, Stuart

From: Gibbons, Thomas <Thomas.H.Gibbons@tsocorp.com>
Sent: Monday, March 13, 2017 1:32 PM
To: Laumann, Sara; Siffring, Stuart
Cc: Pring, Daniel Daryl
Subject: RE: Ponderosa Compressor Station - Motion to Dismiss Petition For Review
Attachments: 20170313_Ponderosa Compressor Station_Motion to Dismiss.pdf

FYI – Attached to this email is the motion I just uploaded to the EAB's electronic filing system.

Thomas Gibbons | *Environmental Specialist*
(303) 454-6685 | Thomas.H.Gibbons@tsocorp.com | 1801 California St. Suite 1200 Denver, CO 80202

From: Laumann, Sara [mailto:Laumann.Sara@epa.gov]
Sent: Monday, March 13, 2017 8:55 AM
To: Gibbons, Thomas; Siffring, Stuart
Cc: Pring, Daniel Daryl
Subject: Re: Ponderosa Compressor Station - Motion to Dismiss Petition For Review

Tom,
Thank you for the below message letting us know you plan to file a motion today to dismiss the appeal.

Stuart and I will talk about your question and get back with you shortly o timing.

-Sara
(303) 312-6443

From: Gibbons, Thomas <Thomas.H.Gibbons@tsocorp.com>
Sent: Monday, March 13, 2017 8:50:39 AM
To: Laumann, Sara; Siffring, Stuart
Cc: Pring, Daniel Daryl
Subject: Ponderosa Compressor Station - Motion to Dismiss Petition For Review

Good Morning, Sara & Stuart,

Today, I'm planning to submit to the EAB a motion to dismiss the petition for review for the Ponderosa Compressor Station air permit.

Do you have a timeframe for how soon the permit can be issued after EAB dismisses the appeal?

Best Regards,
Tom

Thomas Gibbons | *Environmental Specialist*
(303) 454-6685 | Thomas.H.Gibbons@tsocorp.com | 1801 California St. Suite 1200 Denver, CO 80202

TESORO LOGISTICS
Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202

December 29, 2016

Via Fax (202-233-0121) & FedEx #778067107232

Clerk of the Board
U.S. Environmental Protection Agency
Environmental Appeals Board
1201 Constitution Avenue, NW
U.S. EPA East Building, Room 3334
Washington, D.C. 20004

RE: Petition for Review of Permit SMNSR-UO-002178-2015.002
Ponderosa Compressor Station
Uintah County, Utah

Dear Sir or Madam:

Pursuant to section 307(b)(1) of the federal Clean Air Act, 42 U.S.C. §7607(b)(1), Tesoro Logistics, LP – Rockies (TLLP), on behalf of on behalf of QEP Field Services, LLC (QEPFS), hereby submits this petition for review of the final action entitled "Final Synthetic Minor New Source Review Permit SMNSR-U0-002178-2015.002" issued by U.S. Environmental Protection Agency, Region 8, on November 30, 2016, for the Ponderosa Compressor Station. For reference, Permit SMNSR-U0-002178-2015.002 is enclosed. TLLP is the operator of the Ponderosa Compressor Station located on the Uintah & Ouray Indian Reservation in Uintah County, Utah. This petition is being filed timely with the Environmental Appeals Board within 30 days of permit issuance.

As stated in the final permit decision, "any person who commented on the specific terms and conditions of the proposed permit may petition the Environmental Appeals Board to review any term or condition of the permit." TLLP provided comment to EPA on the draft permit by letter dated July 28, 2016, and is therefore a party to the permitting process.

The following is a list and description of items for which TLLP is requesting review by the Environmental Appeals Board.

1. **Effective Date:** The permit transmittal letter states "The final permit will be effective on December 29, 2016." This date is incorrect since the permit is effective 30 days after the date of EPA's notice (November 30, 2016); the correct effective date is December 30, 2016.

2. **Location (Condition I.A, Site Location):** The section description of the location contains a typographic error. The correct section is "SW/SW S28, SE/SE S29, NW/NW S32, NE/NE S33" (section "33", not "3").

3. **Condition I.E.4.a:** This condition is not appropriate for the enclosed combustion device. This is a testing requirement under the "Emissions Control Systems" heading which states:

(a) The Permittee shall ensure that the enclosed combustion device is:

(i) A model demonstrated by a manufacturer to meet the total VOC and total HAP control efficiency requirements of this permit using the procedures specified in 40 CFR part 63, subpart HH for combustion control devices by the due date of the first annual report as specified in the Reporting Requirements section of this permit; or

(ii) Demonstrated by the Permittee to meet the VOC and total HAP control efficiency requirements of this permit by using the procedures specified in this section by the due date of the first annual report specified in Reporting Requirements section of this permit.

The enclosed combustion device referenced in this permit condition is for emissions control of storage tank vapors. These storage tanks are not subject to the requirements of 40 CFR Part 63, Subpart HH (MACT HH), so this requirement is not relevant. Since the storage tanks have uncontrolled VOC emissions less than 6 tons per year (tpy) per tank, they are also not subject to the New Source Performance Standards of 40 CFR Part 60, Subparts OOOO and OOOOa; so again this permit condition is not relevant. Condition I.E.4.a would be appropriate if the storage tanks were subject to MACT or NSPS, since these regulations include such requirements; however, neither regulation applies. Therefore, TLLP respectfully requests that Condition I.E.4.a be deleted from the permit.

As a viable (and preferable) alternative, the conditions applicable to the storage tanks could be removed in their entirety from the permit since their uncontrolled VOC and HAP potential emissions would not trigger any new requirements, and the facility-wide emissions would remain less than major source levels (i.e., 43.1 tpy VOC and 3.3 tpy HAPs).

If you have any questions regarding this petition, please contact me at (303) 454-6685 or Thomas.H.Gibbons@tsocorp.com.

Sincerely,

Thomas H. Gibbons
Environmental Specialist

Enclosure: Permit SMNSR-UO-002178-2015.002

cc: Daniel Pring, TLLP

Siffring, Stuart

To: Siffring, Stuart
Subject: Final Permit Issuance Notification - Tesoro Ponderosa CS

To whom it may concern,

Per your request to be included on the Uintah and Ouray Tribal Public Comment list serve, this is a notification of the issuance of a final permit and the accompanying response to comments document for the Tesoro Logistics - Ponderosa Compressor Station, issued pursuant to the Tribal Minor New Source Review (MNSR) Program at 40 CFR Part 49. We will also be posting the final MNSR permit and response to comments in PDF format on our website shortly at: http://www2.epa.gov/caa-permitting/caa-permits-issued-epa-region-8.

In accordance with the regulations at §49.159(a), the permit will be effective 30 days after the date of this notice, on December 29, 2016. Within 30 days after a final permit decision has been issued, any person who filed comments on the proposed permit or participated in the public hearing may petition the Environmental Appeals Board (EAB) to review any condition of the permit decision. The 30-day period within which a person may request review under this section begins when we have fulfilled the notice requirements for the final permit decision. Motions to reconsider a final order by the EAB must be filed within 10 days after service of the final order. A petition to the EAB is under Section 307(b) of the CAA, a prerequisite to seeking judicial review of the final agency action. For purposes of judicial review, final agency action occurs when we issue or deny a final permit and agency review procedures are exhausted.

If you have any questions or concerns regarding this final permit action, please contact me.

Thanks,

Stuart Siffring
Environmental Engineer
US EPA Region 8 Air Program
Phone: (303) 312-6478
Fax: (303) 312-6064
https://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region

Siffring, Stuart

From: Siffring, Stuart
Sent: Wednesday, November 30, 2016 4:03 PM
To: 'daniel.d.pring@tsocorp.com'
Cc: Smith, Claudia; minnieg@utetribe.com; Fallon, Gail; 'Reannin Tapoof'; 'Bruce Pargeets'
Subject: Final MNSR Permit for Ponderosa Compressor Station
Attachments: Tesoro Ponderosa CS Cover Ltr Final and RTC SMNSR.pdf; Tesoro Ponderosa CS Final SMNSR-UO-002178-2015.pdf

Mr. Pring,

I have attached the final requested permit and the accompanying response to comments document for the Ponderosa Compressor Station, issued pursuant to the Tribal Minor New Source Review (MNSR) Program at 40 CFR Part 49. We will also be posting the final MNSR permit and response to comments in PDF format on our website shortly at: http://www2.epa.gov/caa-permitting/caa-permits-issued-epa-region-8.

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If you have any questions or concerns regarding this final permit action, or would like a paper copy, please contact me.

Thanks,

Stuart Siffring
Environmental Engineer
US EPA Region 8 Air Program
Phone: (303) 312-6478
Fax: (303) 312-6064
https://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region

Gibbons, Thomas

From: Pring, Daniel Daryl
Sent: Wednesday, November 30, 2016 4:14 PM
To: Gibbons, Thomas
Subject: Fwd: Final MNSR Permit for Ponderosa Compressor Station
Attachments: Tesoro Ponderosa CS Cover Ltr Final and RTC SMNSR.pdf; Tesoro Ponderosa CS Final SMNSR-UO-002178-2015.pdf

Categories: High Priority

FYI

-------- Original message --------
From: "Siffring, Stuart" <Siffring.Stuart@epa.gov>
Date: 11/30/16 4:05 PM (GMT-07:00)
To: "Pring, Daniel Daryl" <Daniel.D.Pring@tsocorp.com>
Cc: "Smith, Claudia" <Smith.Claudia@epa.gov>, minnieg@utetribe.com, "Fallon, Gail" <fallon.gail@epa.gov>, 'Reannin Tapoof' <reannint@utetribe.com>, 'Bruce Pargeets' <bpargeets@utetribe.com>
Subject: Final MNSR Permit for Ponderosa Compressor Station

Mr. Pring,

I have attached the final requested permit and the accompanying response to comments document for the Ponderosa Compressor Station, issued pursuant to the Tribal Minor New Source Review (MNSR) Program at 40 CFR Part 49. We will also be posting the final MNSR permit and response to comments in PDF format on our website shortly at: http://www2.epa.gov/caa-permitting/caa-permits-issued-epa-region-8.

In accordance with the regulations at §49.159(a), the permit will be effective 30 days after the date of this notice, on December 29, 2016. Within 30 days after a final permit decision has been issued, any person who filed comments on the proposed permit or participated in the public hearing may petition the Environmental Appeals Board (EAB) to review any condition of the permit decision. The 30-day period within which a person may request review under this section begins when we have fulfilled the notice requirements for the final permit decision. Motions to reconsider a final order by the EAB must be filed within 10 days after service of the final order. A petition to the EAB is under Section 307(b) of the CAA, a prerequisite to seeking judicial review of the final agency action. For purposes of judicial review, final agency action occurs when we issue or deny a final permit and agency review procedures are exhausted.

If you have any questions or concerns regarding this final permit action, or would like a paper copy, please contact me.

Thanks,

Stuart Siffring
Environmental Engineer
US EPA Region 8 Air Program
Phone: (303) 312-6478
Fax: (303) 312-6064
https://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

Ref: 8P-AR

Daniel Pring
Supervisor, Environmental-Logistics
Tesoro Logistics
1801 California Street, Suite 1200
Denver, Colorado 80202

Re: Tesoro Logistics-Rockies Ponderosa Compressor Station
Permit # SMNSR-UO-002178-2015.002
Final Synthetic Minor New Source Review Permit

Dear Mr. Pring:

The U.S. Environmental Protection Agency Region 8 has completed its review of Tesoro Logistics-Rockies' application requesting a synthetic minor permit pursuant to the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR part 49 for the Ponderosa Compressor Station.

Tesoro Logistics requested this permit to establish federal enforceability for total volatile organic compound (VOC) emission reductions that occur as a co-benefit of applicable federal hazardous air pollutant emissions control requirements and voluntary control of storage tank emissions. Based on the information submitted in Tesoro Logistics' application and any subsequent communication with Tesoro Logistics, the EPA hereby issues the enclosed final synthetic minor MNSR permit for the Ponderosa Compressor Station. Please review each condition carefully and note any restrictions placed on this source.

A 30-day public comment period was held from July 1, 2016 to August 1, 2016. The EPA received comments from Tesoro Logistics on July 28, 2016. No other comments were received during the public comment period. The EPA's responses to the public comments are enclosed. The EPA made revisions to the permit based on Tesoro Logistic's comments. The final permit will be effective on December 29, 2016.

Pursuant to 40 CFR 49.159, within 30 days after the final permit decision has been issued, any person who commented on the specific terms and conditions of the proposed permit may petition the Environmental Appeals Board to review any term or condition of the permit. Any person who failed to comment on the specific terms and conditions of this permit may petition for administrative review only to the extent that the changes from the proposed to the final permit or other new grounds were not reasonably ascertainable during the public comment period. The 30-day period within which a person

may request review begins with this dated notice of the final permit decision. If an administrative review of the final permit is requested, the specific terms and conditions of the permit that are the subject of the request for review must be stayed.

If you have any questions concerning the enclosed final permit, please contact Stuart Siffring of my staff at (303) 312-6478.

Sincerely,

Carl Daly, Director
Air Program

Enclosures

cc: Bruce Pargeets, Director, Energy, Minerals and Air, Ute Indian Tribe
Minnie Grant, Air Coordinator, Energy, Minerals, and Air, Ute Indian Tribe
Honorable Shaun Chapoose, Chairman, Ute Indian Business Committee (w/o enclosures)
Edred Secakuku, Vice Chairman, Ute Indian Business Committee (w/o enclosures)
Reannin Tapoof, Executive Assistant, Ute Indian Business Committee (w/o enclosures)

EPA Responses to Comments from Tesoro Logistics on the Proposed Synthetic Minor MNSR Permit for the Ponderosa Compressor Station Pursuant to the MNSR Permit Program at 40 CFR Part 49

Comment #1:

"I.A. General Information – Corporate Office Location

a. Address should be changed to:
Tesoro Logistics-Rockies
1801 California Street, Suite 1200
Denver, Colorado 80202

b. Contact Name: Daniel Pring
Contact Email: Daniel.d.pring@tsocorp.com"

Basis #1: Original application contained different contact information.

EPA Response: We have made the requested revision to reflect the most current Corporate Office Location for the Permittee. As a matter of practice, we do not put the contact name and information in the permit itself. This information is kept in the permit record and our electronic permit tracking database. Therefore, in response to the request, we have not added the contact name and email to the permit.

Comment #2:

"I.D.5. Testing and Monitoring Requirements – (a)(i) Quarterly Inspections

a. The tanks are being filled constantly while the facility is operational. The quarterly inspections will be conducted on a set calendar schedule unless the facility is inactive."

Basis #1: Proposed permit made no allowance for when the facility is inactive.

EPA Response: We have revised the language in the referenced permit condition to allow for inspection flexibility during periods of inactivity or shutdown.

Comment #3:

"Technical Support Document II.Table 2. – Facility-Wide Emissions

a. "Proposed Allowable Emissions (tpy)" for SO_2 should be 1.01 instead of 1.04 as was submitted in the permit application."

Basis #1: TSD reflected the previous permit application emission rates.

EPA Response: There is no technical support document associated with the final permit, and we do not make changes to the technical support document for the proposed permit. Tesoro's comment is a part of the permit record, and the necessary correction is, therefore, documented in the permanent permit record.

Comment #4:

"**Technical Support Document III.B. – VOC Emissions Reductions**

a. Emissions restrictions will result in a VOC reduction from 124.27 tpy to 6.00 tpy from the TEG dehydrator, instead of 122.25 tpy to 6.00 tpy."

Basis #1: TSD reflected the previous permit application emission rates.

EPA Response: There is no technical support document associated with the final permit, and we do not make changes to the technical support document for the proposed permit. Tesoro's comment is a part of the permit record and the necessary correction is, therefore, documented in the permanent permit record.

United States Environmental Protection Agency
Region 8, Air Program
1595 Wynkoop Street
Denver, CO 80202

Air Pollution Control
Synthetic Minor Source Permit to Construct

40 CFR 49.151

 # SMNSR-UO-002178-2015.002

Permit to Construct to establish legally and practically enforceable limitations and requirements on sources at an existing facility

Permittee:

Tesoro Logistics-Rockies

Permitted Facility:

Ponderosa Compressor Station
Uintah and Ouray Indian Reservation
Uintah County, Utah

Summary

On September 8, 2015, the EPA received an application from Tesoro Logistics-Rockies (Tesoro), on behalf of QEP Field Services, LLC (QEPFS), requesting a synthetic minor permit for the existing Ponderosa Compressor Station in accordance with the requirements of the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR part 49. Tesoro requested legally and practically enforceable emissions and operational limitations that recognize emissions control equipment installed and operating on existing emissions units.

This permit action applies to an existing facility operating on Indian country lands within the Uintah and Ouray Indian Reservation in Utah.

This permit does not authorize the construction of any new emission sources, or emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. This permit is only intended to incorporate requested enforceable emission limits and operational restrictions from the MNSR application. Tesoro requested requirements to control emissions of volatile organic compounds (VOC) from one (1) tri-ethylene glycol (TEG) natural gas dehydration system using an open flame vapor combustion unit (flare) and to control emissions of VOC and hazardous air pollutants (HAP) from two (2) condensate and one (1) produced water storage tanks using an enclosed vapor combustion device (enclosed combustion device).

Upon compliance with this permit, Tesoro will have legally and practically enforceable restrictions on emissions that can be used when determining the applicability of other Clean Air Act (CAA) permitting requirements, such as under the Prevention of Significant Deterioration (PSD) Permit Program at 40 CFR part 52 and the Title V Operating Permit Program at 40 CFR part 71 (Part 71 Permit Program).

The EPA has determined that issuance of this MNSR permit will not contribute to National Ambient Air Quality Standards (NAAQS) violations, or have adverse effects on ambient air quality.

Table of Contents

I. Conditional Permit to Construct

A. General Information

Facility:	Tesoro Logistics-Rockies – Ponderosa Compressor Station
Permit number:	SMNSR-UO-002178-2015.002
SIC Code and SIC Description:	1311- Crude Petroleum and Natural Gas

Site Location:
Ponderosa Compressor Station
SW/SW S28, SE/SE S29, NW/NW S32, NE/NE S3
Township 8S, Range 22E
Uintah and Ouray Indian Reservation
Uintah County, Utah
Latitude 40.08807, Longitude -109.453332

Corporate Office Location
Tesoro Logistics-Rockies
1801 California Street, Suite 1200
Denver, Colorado 80202

The equipment listed in this permit shall be operated by Tesoro Logistics-Rockies at the location described above.

B. Applicability

1. This federal Permit to Construct is being issued under authority of the MNSR Permit Program.

2. The requirements in this permit have been created, at the Permittee's request to establish legally and practically enforceable restrictions for limiting TEG dehydration system VOC emissions and condensate and produced water storage tank VOC and total HAP emissions.

3. Any conditions established for this facility or any specific units at this facility pursuant to any permit issued under the authority of the PSD Permit Program or the MNSR Permit Program shall continue to apply.

4. By issuing this permit, the EPA does not assume any risk of loss which may occur as a result of the operation of the permitted facility by the Permittee, Owner, and/or Operator, if the conditions of this permit are not met by the Permittee, Owner, and/or Operator.

C. Requirements for the TEG Dehydration System

1. Construction and Operational Limits

   (a) The Permittee shall install and operate emission controls as specified in this permit on one (1) TEG natural gas dehydration system meeting the following specifications:

      (i) Limited to a maximum throughput of 55 million standard cubic feet per day (MMscfd) of natural gas;
      (ii) Equipped with no more than one (1) natural gas-fired TEG reboiler with a maximum rated heat input of 1 million British thermal units per hour (MMBtu/hr);
      (iii) Equipped with no more than one (1) BTEX condenser, one (1) TEG/gas separation unit, and one (1) flash tank; and

(iv) Equipped with no more than one (1) TEG recirculation pump limited to a maximum pump rate of 11.00 gallons per minute (gpm).

(b) Only the dehydration unit that is operated and controlled as specified in this permit is approved for installation and operation under this permit.

2. Emissions Limits

(a) Emissions of VOC from the TEG dehydration system still vent shall not exceed 6.00 tons in any consecutive 12-month period.

(b) The emission limit shall apply at all times unless otherwise specified in this permit.

3. Control and Operational Requirements

(a) The Permittee shall route all emissions from the TEG dehydration system still vent through a closed-vent system to an open flame vapor combustion device (flare) designed, operated, and monitored as specified in the Requirements for Emissions Control Systems section of this permit.

(b) The Permittee shall follow the manufacturer's recommended maintenance schedule and operational procedures, or recommended maintenance schedule and operational procedures developed by the vendor or Permittee, to ensure optimum performance of the TEG dehydration system, closed-vent system, and flare.

4. Emissions Calculation Requirements

(a) VOC emissions for the TEG dehydration system still vent must be calculated, in tons, and recorded at the end of each month, beginning with the first calendar month that this permit is effective.

(b) Prior to 12 full months of VOC emissions calculations, the Permittee shall, within 7 calendar days of the end of each month, add the emissions for that month to the calculated emissions for all previous months since the effective date of the permit and record the total. Thereafter, the Permittee must, within 7 calendar days of the end of each month, add the emissions for that month to the calculated emissions for the preceding 11 months and record a new 12-month total.

(c) VOC emissions shall be calculated, in tons, using a generally accepted simulation model or software (examples include ProMax and GRI-GLYCalc™ Version 4.0 or higher). Inputs to the model shall be representative of actual average monthly operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled, "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).

5. Testing Requirements

(a) The Permittee shall perform testing and inspections of the closed-vent system and flare, as specified in the Requirements for Emissions Control Systems section of this permit.

(b) The Permittee shall conduct extended laboratory analysis of the inlet wet gas stream to the TEG dehydration system (extended wet gas analysis) at least once every consecutive 12-month period. Alternatively, wet gas from the facility inlet separator can be taken for use in a process simulation software package. The analysis shall include the inlet gas temperature and pressure at which the sample was taken.

6. Monitoring Requirements

(a) The Permittee shall install, operate, and maintain a meter that continuously measures the natural gas flowrate from the TEG dehydration system. The meter shall be inspected on a monthly basis to ensure proper operation per the manufacturer's specifications.

(b) The Permittee shall convert monthly natural gas flowrate to a daily average by dividing the monthly flowrate by the number of days in the month that the TEG dehydration system processed natural gas. The Permittee shall document the actual monthly average natural gas flowrate.

D. Requirements for Natural Gas Condensate and Produced Water Storage Tanks

1. Construction and Operational Limits

(a) The Permittee shall install, maintain, and operate emission controls as specified in this permit on two (2) 400 barrel (bbl) natural gas condensate storage tanks and one (1) 300 bbl produced water storage tank.

(b) Only the natural gas condensate and produced water storage tanks operated and controlled as specified in this permit are approved for installation and operation under this permit.

2. Emissions Limits

(a) Aggregate emissions from the two (2) 400 bbl natural gas condensate storage tanks and the one (1) produced water storage tank shall not exceed:

(i) VOC: 0.63 tons in any consecutive 12-month period; and
(ii) Total HAP: 0.02 tons in any consecutive 12-month period.

(b) Emissions limits shall apply at all times unless otherwise specified in this permit.

3. Control and Operational Requirements

(a) The Permittee shall route all emissions from the natural gas condensate and produced water storage tanks through a closed-vent system to an enclosed combustion device, both designed, operated, tested, and monitored as specified in the Requirements for Emissions Control Systems section of this permit.

(b) Covers

(i) The Permittee shall equip all openings on each storage tank with a cover to ensure that all hydrocarbon emissions are efficiently being routed through a closed-vent system to a combustion device as specified in the Requirements for Emissions Control Systems section of this permit.

(ii) The Permittee shall ensure that each cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves, and gauge wells) form a continuous impermeable barrier over the entire surface area of the tanks.

(iii) Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in a tank on which the cover is installed, except during those times when it is necessary to use an opening as follows:

(A) To add material to, or remove material from the tank (this includes openings necessary to equalize or balance the internal pressure of the tank following changes in the level of the material in the tank);
(B) To inspect or sample the material in the tank; or
(C) To inspect, maintain, repair, or replace equipment located inside the tank.

(iv) Each thief hatch cover shall be weighted and properly seated.

(v) Pressure relief valves shall be set to release at a pressure that will ensure that all hydrocarbon emissions are routed through the closed-vent system to an enclosed combustion device, as specified in the Requirements for Emissions Control Systems section of this permit, under normal operating conditions.

(c) The Permittee shall follow the manufacturer's recommended maintenance schedule and operational procedures, or maintenance schedule and operational procedures developed by the vendor or Permittee, to ensure optimum performance of the natural gas condensate and produced water storage tanks, closed-vent system, and enclosed combustion device.

4. Emissions Calculation Requirements

(a) Aggregate VOC and total HAP emissions from the natural gas condensate and produced water storage tanks covered by this permit must be calculated, in tons, and recorded at the end of each month, beginning with the first calendar month that this permit is effective.

(b) Prior to 12 full months of VOC and total HAP emissions calculations, the Permittee must, within 7 calendar days of the end of each month, add the emissions for that month to the calculated emissions for all previous months since the effective date of the permit and record the total. Thereafter, the Permittee must, within 7 calendar days of the end of each month, add the emissions for that month to the calculated emissions for the preceding 11 months and record a new 12-month total.

(c) VOC and total HAP emissions shall be calculated, in tons and shall be determined using: the measured monthly volume of natural gas condensate and produced water routed to the tanks; the most recent extended laboratory analysis of the natural gas condensate stored in the tanks as required in this permit; a generally accepted simulation model or software (examples include E&P Tanks and ProMax); and the most recent tested VOC and total HAP control efficiency of the control device being used, as required in this permit in Section I.E. Requirements for Emissions Control Systems. Inputs to the model shall be representative of actual average monthly throughput and operating conditions of the storage tanks. Other calculation methods may be used upon prior written approval by the EPA.

5. Testing and Monitoring Requirements

(a) The Permittee shall perform visual inspections of the natural gas condensate and produced water storage tank covers, thief hatches, seals, and pressure relief valves to ensure proper condition and functioning at least once every calendar quarter that the facility is operational, as follows:

(i) The quarterly inspections shall be performed while the tanks are being filled.
(ii) Any damaged equipment shall be repaired immediately unless the repair requires resources not currently available. If the resources are not available, the repair shall be completed no later than 15 days after initial identification of the damage.
(iii) All repairs and maintenance activities shall be recorded in a maintenance and repair log and must be available for inspection.

(b) The Permittee shall perform testing and inspections of the closed-vent system and enclosed combustion device, as specified in the Requirements for Emissions Control Systems section of this permit, to ensure that the pressure and vacuum relief set-points of the storage tanks are not being exceeded in a way that has resulted, or may result, in venting of hydrocarbon emissions and possible damage to equipment.

(c) The Permittee shall measure the volume of natural gas condensate and produced water routed to each storage tank to use in subsequently determining the volume of natural gas condensate and produced water processed through the station as required in this section of the permit to calculate aggregate VOC and total HAP emissions from the natural gas condensate and produced water storage tanks.

(d) The Permittee shall conduct extended laboratory analysis of the natural gas condensate stored in the tanks at least once every consecutive 12-month period. The analysis shall include the natural gas condensate temperature and pressure at which the sample was taken.

E. Requirements for Emissions Control Systems

1. Closed-Vent Systems

(a) Each closed-vent system shall route all emissions from the TEG dehydration system still vent or the natural gas condensate and produced water storage tanks through a closed-vent system to a flare or enclosed combustion device, as applicable, designed and operated as specified in this section of the permit.

(b) The Permittee shall design, install, continuously operate, and maintain each closed-vent system such that it is compliant with the following requirements:

(i) The closed-vent system shall route all gases, vapors, and fumes emitted from the TEG dehydration system still vent or the natural gas condensate and produced water storage tanks to the flare or enclosed combustion device, as applicable;

(ii) All vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain and collect gases, vapors, and fumes and transport them to the emissions control devices shall be maintained and operated during any time the device is operating;

(iii) The closed-vent system shall be designed to operate with no detectable emissions;

(iv) If the closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the flare or enclosed combustion device, the Permittee shall meet the one of following requirements for each bypass device:

(A) At the inlet to the bypass device that could divert the stream away from the flare or enclosed combustion device and into the atmosphere, properly install, calibrate, maintain, and operate a flow indicator that is capable of taking periodic readings and sounding an alarm when the bypass device is open such that the stream is being, or could be, diverted away from the flare and into the atmosphere; or

(B) Secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

(v) The Permittee shall minimize leaks of hydrocarbon emissions from all vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain, collect, and transport gases, vapors, and fumes to the flare or enclosed combustion device.

2. Flare and Enclosed Combustion Device

(a) The Permittee shall design, install, continuously operate, and maintain a flare and an enclosed combustion device such that the mass content of the uncontrolled VOC emissions from the TEG dehydration system still vent and uncontrolled VOC and total

HAP emissions from the natural gas condensate and produced water storage tanks, as applicable, are reduced by at least 95.0 percent by weight.

(b) The Permittee shall ensure that the flare and enclosed combustion device have sufficient capacity to achieve at least a 95.0 percent VOC and total HAP emission control efficiency for the minimum and maximum hydrocarbon volumetric flow rate and BTU content routed to the device.

(c) The Permittee shall ensure that the flare is designed and operated in accordance with the requirements of 40 CFR 63.11(b).

(d) The Permittee shall ensure that the flare and enclosed combustion device are:

(i) Operated properly at all times that TEG dehydration system still vent emissions or natural gas condensate and produced water storage tank emissions, as applicable, are routed to it;

(ii) Operated with a liquid knock-out system to collect any condensable vapors (to prevent liquids from going through the control device);

(iii) Equipped with a flash-back flame arrestor;

(iv) Equipped with one of the following:

(A) A continuous burning pilot flame, a thermocouple, and a malfunction alarm and notification system if the pilot flame fails; or

(B) An electronically controlled auto-ignition system with a malfunction alarm and notification system if the pilot flame fails while TEG dehydration system still vent emissions or produced water storage tank emissions, as applicable, are routed to it.;

(v) Maintained in a leak-free condition; and

(vi) Operated with no visible smoke emissions.

(e) The Permittee shall follow the manufacturer's recommended maintenance schedule and operational procedures, or recommended maintenance schedule and operational procedures developed by the vendor or Permittee, to ensure optimum performance of the closed-vent systems, flare, and enclosed combustion device.

3. Other Control Devices: Upon written approval by the EPA, the Permittee may use a control device other than that listed above that is capable of reducing the mass content of VOC and total HAP in the hydrocarbon emissions routed to it by at least 95.0 percent, provided that:

(a) In operating such control device, the Permittee follows the manufacturer's, vendor's, or Permittee's written operating instructions, procedures and maintenance schedules to ensure good air pollution control practices for minimizing hydrocarbon emissions;

(b) The Permittee ensures there is sufficient capacity to reduce the mass content of VOC in the hydrocarbon emissions routed to such other control device by at least 95.0 percent for the minimum and maximum natural gas volumetric flow rate and BTU content routed to the device; and

(c) The Permittee operates such a control device to reduce the mass content of VOC in the hydrocarbon emissions routed to it by at least 95.0 percent.

4. Testing Requirements

(a) The Permittee shall ensure that the enclosed combustion device is:

(i) A model demonstrated by a manufacturer to meet the total VOC and total HAP control efficiency requirements of this permit using the procedures specified in 40 CFR part 63, subpart HH for combustion control devices by the due date of the first annual report as specified in the Reporting Requirements section of this permit; or

(ii) Demonstrated by the Permittee to meet the VOC and total HAP control efficiency requirements of this permit by using the procedures specified in this section by the due date of the first annual report specified in Reporting Requirements section of this permit.

(b) The Permittee shall demonstrate that the closed-vent systems operate with no detectable emissions, using the procedures specified in EPA Method 21 at 40 CFR part 60, Appendix A as follows:

(i) The detection instrument shall meet the performance criteria of Method 21, except that the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the fluid and not for each individual organic compound in the stream;

(ii) The detection instrument shall be calibrated before use on each day of its use as specified in Method 21;

(iii) Calibration gases shall be zero air (less than 10 parts per million by volume (ppmv) hydrocarbon in air) and a mixture of methane in air at a concentration less than 10,000 ppmv;

(iv) If the Permittee chooses to adjust the detection instrument readings to account for background organic concentration level, the background level shall be determined according to the procedures in Method 21;

(v) The Permittee shall determine if a potential leak interface operates with no detectable emissions as follows:

(A) The maximum organic concentration value is compared directly to the applicable value in paragraph (C) below if choosing not to adjust the detection instrument readings for the background organic concentration level; or

(B) If choosing to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (iv) above is compared with the applicable value for the potential leak interface as specified in paragraph (C) below.

(C) A potential leak interface is determined to operate with no detectable emissions if the VOC concentration value measured by the detection instrument is less than 500 ppmv.

(c) The Permittee shall demonstrate that the flare and enclosed combustion device operate with no visible emissions, except for periods not to exceed a total of 2 minutes during any hour using the procedures specified in EPA Method 22 at 40 CFR part 60, Appendix A as follows:

(i) The observation period shall be 1 hour;

(ii) If the flare or enclosed combustion device fails the visible emissions test, the Permittee shall follow the manufacturer's, vendor's, or Permittee's repair instructions, as outlined in the device inspection and maintenance plan, to return the unit to compliant operation. All repairs and maintenance activities shall be recorded in a maintenance and repair log and must be available for inspection;

(iii) Upon return to operation from repair and maintenance activity, the flare shall pass a Method 22 visual emissions test;

(iv) If the flare fails a follow-up Method 22 visible emissions test, the Permittee shall repeat the procedures in paragraphs (ii) and (iii) of this section until the flare passes a follow-up Method 22 visible emissions test; and

(v) The monthly VOC and HAP emissions calculations for the TEG dehydration system required in this permit shall account for the time periods between each failed visible emissions test and subsequent compliant visible emissions test assuming the TEG dehydration system still vent emissions were uncontrolled.

(d) The Permittee may submit to the EPA a written request for approval of alternate test methods, but shall only use those alternate test methods after obtaining written approval from the EPA.

5. Monitoring Requirements

(a) The Permittee shall monitor each closed-vent system for leaks of hydrocarbon emissions from all vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain, collect, and transport gases, vapors, and fumes to the flare and enclosed combustion device as follows:

(i) Within 90 days of the effective date of this permit, conduct an initial inspection according to the procedures specified in Condition I.E.4.(b) of this permit to demonstrate that the closed-vent system operates with no detectable emissions. Subsequent inspections shall be conducted at least once every 12 consecutive calendar months thereafter.

(ii) Within 90 days of the effective date of this permit, conduct an initial visual inspection of the closed-vent system for defects that could result in air emissions

and document each inspection. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices. Subsequent inspections shall be conducted at least once every calendar quarter thereafter. The inspections shall be based on audio, visual, and olfactory procedures; and

(iii) Any leaks detected in the closed-vent system shall be addressed immediately unless the repair requires resources not currently available. If the resources are not available, the leak shall be repaired no later than 15 days after initial detection of the leak; and

(iv) Upon completion of any repairs, conduct a Method 21 detectable emissions tests as specified in this permit to demonstrate there are no detectable emissions.

(b) The Permittee shall monitor the flare and enclosed combustion device to confirm proper operation as follows:

(i) Within 90 days of the effective date of this permit, conduct an initial inspection to ensure proposer operation according to the manufacturer's, vendor's, or Permittee's recommendations. Subsequent inspections shall be conducted at least once every 6 consecutive calendar months thereafter;

(ii) Visually inspect the pilot light on the device every time a field operator is on location, once per calendar week at a minimum, to ensure that it is lit; and

(iii) Visually confirm that no smoke is present during operation of the smokeless device whenever a field operator is on location, once per calendar week at a minimum. If visible smoke is observed, conduct a Method 22 visible emissions test as specified in this permit to demonstrate there are no visible emissions.

(c) Where sufficient to meet the monitoring requirements the Permittee may use a supervisory control and data acquisition (SCADA) system to monitor and record the required data.

F. Recordkeeping Requirements

The Permittee shall document compliance with the VOC emissions limits and the VOC emissions control efficiency requirements in this permit for the TEG dehydration system and natural gas condensate and produced water storage tanks by keeping the following records:

1. All manufacturer, vendor, or Permittee specifications for the TEG dehydration system, natural gas condensate and produced water storage tanks, closed-vent systems, flare, enclosed combustion device, and any monitoring equipment;

2. The site-specific design input parameters provided by the manufacturer, vendor, or Permittee, and used to properly size the closed-vent system, flare, or enclosed combustion device to assure the minimum 95.0 percent VOC control efficiency requirements;

3. The results of all required tests;

4. All wet gas and natural gas condensate extended laboratory analyses;

5. The actual monthly average natural gas flow rate to the TEG dehydration system;

6. The monthly volume of natural gas condensate or produced water handled by each storage tank;

7. The date, time, and length of any events in which the TEG dehydration system still vent or natural gas condensate and produced water storage tank streams were bypassing the flare or enclosed combustion device, or were not otherwise controlled;

8. All inspections of the closed-vent system, natural gas condensate and produced water storage tanks, flare, enclosed combustion device, and any defects observed and the corrective action taken. All inspection records shall include, at a minimum, the following information:

   (a) The date of the inspection;
   (b) The findings of the inspection;
   (c) Any required repairs; and
   (d) The inspector's name and signature.

9. All maintenance conducted on the flare and enclosed combustion device;

10. Any deviations from the operating parameters specified in the manufacturer, vendor, or Permittee site-specific designs for the emissions control systems. The records shall include the control system's total operating time during the calendar month in which the exceedance occurred, the date, time and length of time that the parameters were exceeded, and the corrective actions taken and any preventative measures adopted to operate the control system within that operating parameter;

11. Any instances in which the pilot flame is not present in the flare or the enclosed combustion device while hydrocarbon emissions are vented to it, the date and times that the pilot was not present and the corrective actions taken or any preventative measures adopted to improve the operation of the pilot flame;

12. Any instances in which the thermocouple (or other heat sensing monitoring device) installed to detect the presence of a flame in an enclosed combustor or engineered flare while hydrocarbon emissions are vented to it is not operational, the time period during which it was not operational, and the corrective measures taken;

13. Any instances of monitoring system breakdowns or other events that result in invalid data, maintenance, and repairs;

14. Any time periods in which detectable emissions or visible emissions are observed emanating from an emissions control device; and

15. The total monthly and consecutive 12-month VOC emissions calculations for the TEG dehydration system still vent and VOC and total HAP emissions calculations for the natural gas condensate and produced water storage tanks.

G. Requirements for Records Retention

1. The Permittee shall retain all records required by this permit for a period of at least 5 years from

the date the record was created.

2. Records shall be kept in the vicinity of the facility, such as at the facility, the location that has day-to-day operational control over the facility, or the location that has day-to-day responsibility for compliance of the facility.

H. Requirements for Reporting

1. Annual Emission Reports

   (a) The Permittee shall submit a written annual report of the actual annual emissions from all emission units at the facility covered by this permit each year no later than April 1st. The annual report shall cover the period for the previous calendar year. All reports shall be certified to truth and accuracy by the person primarily responsible for CAA compliance for the Permittee.

   (b) The report shall include VOC and total HAP emissions, as applicable.

   (c) The report shall be submitted to:

   U.S. Environmental Protection Agency, Region 8
   Office of Partnerships and Regulatory Assistance
   Tribal Air Permitting Program, Mail Code 8P-AR
   1595 Wynkoop Street
   Denver, Colorado 80202

   The report may be submitted via electronic mail to R8AirPermitting@epa.gov.

2. All other documents required to be submitted under this permit, with the exception of the Annual Emission Reports, shall be submitted to:

   U.S. Environmental Protection Agency, Region 8
   Office of Enforcement, Compliance & Environmental Justice
   Air Toxics and Technical Enforcement Program, Mail Code 8ENF-AT
   1595 Wynkoop Street
   Denver, Colorado 80202

   Documents may be submitted via electronic mail to R8AirReportEnforcement@epa.gov.

3. The Permittee shall promptly submit to the EPA a written report of any deviations of emission or operational limits specified in this permit and a description of any corrective actions or preventative measures taken. A "prompt" deviation report is one that is post marked or submitted via electronic mail to r8airreportenforcement@epa.gov as follows:

   (a) Within 30 days from the discovery of a deviation that would cause the Permittee to exceed the emission limits or operational limits if left un-corrected for more than 5 days after discovering the deviation; and

(b) By April 1st for the discovery of a deviation of recordkeeping or other permit conditions during the preceding calendar year that do not affect the Permittee's ability to meet the emission limits.

4. The Permittee shall submit a written report of any required performance tests to the EPA within 60 days after completing the tests.

5. The Permittee shall submit any record or report required by this permit upon EPA request.

II. General Provisions

A. Conditional Approval

Pursuant to the authority of 40 CFR 49.151, the EPA hereby conditionally grants this permit to construct. This authorization is expressly conditioned as follows:

1. *Document Retention and Availability:* This permit and any required attachments shall be retained and made available for inspection upon request at the location set forth herein.

2. *Permit Application:* The Permittee shall abide by all representations, statements of intent and agreements contained in the application submitted by the Permittee. The EPA shall be notified 10 days in advance of any significant deviation from this permit application as well as any plans, specifications or supporting data furnished.

3. *Permit Deviations:* The issuance of this permit may be suspended or revoked if the EPA determines that a significant deviation from the permit application, specifications, and supporting data furnished has been or is to be made. If the proposed source is constructed, operated, or modified not in accordance with the terms of this permit, the Permittee will be subject to appropriate enforcement action.

4. *Compliance with Permit:* The Permittee shall comply with all conditions of this permit, including emission limitations that apply to the affected emissions units at the permitted facility/source. Noncompliance with any permit term or condition is a violation of this permit and may constitute a violation of the CAA and is grounds for enforcement action and for a permit termination or revocation.

5. *Fugitive Emissions:* The Permittee shall take all reasonable precautions to prevent and/or minimize fugitive emissions during the construction period.

6. *NAAQS and PSD Increments:* The permitted source shall not cause or contribute to a NAAQS violation or a PSD increment violation.

7. *Compliance with Federal and Tribal Rules, Regulations, and Orders:* Issuance of this permit does not relieve the Permittee of the responsibility to comply fully with all other applicable federal and tribal rules, regulations, and orders now or hereafter in effect.

8. *Enforcement:* It is not a defense, for the Permittee, in an enforcement action, to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

9. *Modifications of Existing Emissions Units/Limits:* For proposed modifications, as defined at 40 CFR 49.152(d), that would increase an emissions unit's allowable emissions of pollutants above its existing permitted annual allowable emissions limit, the Permittee shall first obtain a permit modification pursuant to the MNSR regulations approving the increase. For a proposed modification that is not otherwise subject to review under the PSD or MNSR regulations, such proposed increase in the annual allowable emissions limit shall be approved through an administrative permit revision as provided at 40 CFR 49.159(f).

10. *Relaxation of Legally and Practically Enforceable Limits:* At such time that a new or modified source within this permitted facility/source or modification of this permitted facility/source becomes a major stationary source or major modification solely by virtue of a relaxation in any legally and practically enforceable limitation which was established after August 7, 1980, on the capacity of the permitted facility/source to otherwise emit a pollutant, such as a restriction on hours of operation, then the requirements of the PSD regulations shall apply to the source or modification as though construction had not yet commenced on the source or modification.

11. *Revise, Reopen, Revoke and Reissue, or Terminate for Cause:* This permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee, for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. The EPA may reopen this permit for a cause on its own initiative, e.g., if this permit contains a material mistake or the Permittee fails to assure compliance with the applicable requirements.

12. *Severability Clause:* The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.

13. *Property Rights:* This permit does not convey any property rights of any sort or any exclusive privilege.

14. *Information Requests:* The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating this permit or to determine compliance with this permit. For any such information claimed to be confidential, the Permittee shall also submit a claim of confidentiality in accordance with 40 CFR part 2, subpart B.

15. *Inspection and Entry:* The EPA or its authorized representatives may inspect this permitted facility/source during normal business hours for the purpose of ascertaining compliance with all conditions of this permit. Upon presentation of proper credentials, the Permittee shall allow the EPA or its authorized representative to:

    (a) Enter upon the premises where this permitted facility/source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of this permit;

    (b) Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of this permit;

(c) Inspect, during normal business hours or while this permitted facility/source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements; and

(e) Record any inspection by use of written, electronic, magnetic and photographic media.

16. *Permit Effective Date:* This permit is effective immediately upon issuance unless comments resulted in a change in the proposed permit, in which case the permit is effective 30 days after issuance. The Permittee may notify the EPA, in writing, that this permit or a term or condition of it is rejected. Such notice should be made within 30 days of receipt of this permit and should include the reason or reasons for rejection.

17. *Permit Transfers:* Permit transfers shall be made in accordance with 40 CFR 49.159(f). The Air Program Director shall be notified in writing at the address shown below if the company is sold or changes its name.

U.S. Environmental Protection Agency, Region 8
Office of Partnerships and Regulatory Assistance
Tribal Air Permitting Program, 8P-AR
1595 Wynkoop Street
Denver, Colorado 80202

18. *Invalidation of Permit:* Unless this permitted source of emissions is an existing source, this permit becomes invalid if construction is not commenced within 18 months after the effective date of this permit, construction is discontinued for 18 months or more, or construction is not completed within a reasonable time. The EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between the constructions of the approved phases of a phased construction project. The Permittee shall commence construction of each such phase within 18 months of the projected and approved commencement date.

19. *Notification of Start-Up:* The Permittee shall submit a notification of the anticipated date of initial start-up of this permitted source to the EPA within 60 days of such date, unless this permitted source of emissions is an existing source.

B. Authorization

Authorized by the United States Environmental Protection Agency, Region 8

Carl Daly 11/29/2016

Carl Daly, Director
Air Program

Date

Tesoro Logistics GP, LLC
1801 California Street, Suite 1200
Denver, CO 80202

July 28, 2016

Tribal NSR Permit Contact
c/o Air Program (8P-AR)
U.S. EPA, Region 8
1595 Wynkoop Street
Denver, Colorado 80202

RE: Ponderosa Compressor Station
Draft Synthetic Minor Permit #SMNSR-UO-002178-2015.002 – Public Comments

Dear Sir or Madam:

As is requested in Draft Synthetic Minor Permit #SMNSR-UO-002178-2015.002 for the Ponderosa Compressor Station located in Uinta Basin, Utah, the following written public comments are being provided by Tesoro Logistics, on behalf of QEP Field Services Company.

1. **I.A. General Information – Corporate Office Location**
    a. Address should be changed to:
    Tesoro Logistics-Rockies
    1801 California Street, Suite 1200
    Denver, Colorado 80202
    b. Contact Name: Daniel Pring
    Contact Email: Daniel.d.pring@tsocorp.com

2. **I.D.5. Testing and Monitoring Requirements – (a)(i) Quarterly Inspections**
    a. The tanks are being filled constantly while the facility is operational. The quarterly inspections will be conducted on a set calendar schedule unless the facility is inactive.

3. **Technical Support Document II.Table 2. – Facility-Wide Emissions**
    a. "Proposed Allowable Emissions (tpy)" for SO_2 should be 1.01 instead of 1.04 as was submitted in the permit application.

4. **Technical Support Document III.B. – VOC Emissions Reductions**
    a. Emissions restrictions will result in a VOC reduction from 124.27 tpy to 6.00 tpy from the TEG dehydrator, instead of 122.25 tpy to 6.00 tpy.

A highlighted facility emissions sheet verifying corrections 4 and 5 above is attached to this letter.

If you have any questions concerning this report, please contact me by phone at (303) 454-6682 or by email at daniel.d.pring@tsocorp.com.

Sincerely,

Daniel Pring
Supervisor, Environmental-Logistics

Ponderosa Compressor Station

Emission Summary Sheet

Current Actual Emissions (2014)

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NO_x	CO	VOC	SO_2	$PM_{10, 2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri.	Benzene	E-benzene	Formald.	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	38.69	24.59	6.86	0.78	1.60	0.00	0.00	0.00	0.00	0.00	0.00	28340.87	13.36	15.93	28370.16	0.00	0.00	0.01	0.17	0.00	0.03	0.02	**0.23**
(2) 400 bbl. Condensate Tanks	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.09	0.00	2.29	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.01**
(1) 300 bbl. Produced Water Tank	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Miscellaneous Venting[1]	0.00	0.00	11.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98	1691.34	0.00	1693.31	0.00	0.03	0.00	0.00	0.22	0.03	0.00	**0.27**
Tank Combustor (pilot plus combustion vapors)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.56	0.01	0.01	14.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Truck Loadouts	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fugitive Equipment Leak:	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	**0.36**
Total Pollutants	**38.70**	**24.60**	**23.02**	**0.78**	**1.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**28,358**	**1,718**	**16**	**30,411**	**0.03**	**0.05**	**0.01**	**0.17**	**0.38**	**0.15**	**0.08**	**0.87**
Total Criteria Pollutants (Minus Fugitive Leaks)[2]	**38.70**	**24.60**	**18.80**	**0.78**	**1.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

Current Allowable Emissions (2014 Uncontrolled

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NO_x	CO	VOC	SO_2	$PM_{10, 2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri.	Benzene	E-benzene	Formald.	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	38.69	24.59	6.86	0.78	1.60	0.00	0.00	0.00	0.00	0.00	0.00	28340.87	0.53	0.05	28370.16	0.00	0.00	0.01	0.17	0.00	0.03	0.02	**0.23**
(2) 400 bbl. Condensate Tanks	0.00	0.00	8.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	1.71	0.00	42.85	0.02	0.02	0.00	0.00	0.13	0.03	0.00	**0.21**
(1) 300 bbl. Produced Water Tank	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Miscellaneous Venting[1]	0.00	0.00	11.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98	67.65	0.00	1693.31	0.00	0.03	0.00	0.00	0.22	0.03	0.00	**0.27**
Tank Combustor (pilot)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.56	0.00	0.00	14.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Truck Loadouts	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fugitive Equipment Leak:	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	**0.36**
Total Pollutants	**38.70**	**24.60**	**31.02**	**0.78**	**1.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**28,358**	**83**	**0**	**30,452**	**0.04**	**0.08**	**0.01**	**0.17**	**0.50**	**0.18**	**0.08**	**1.06**
Total Criteria Pollutants (Minus Fugitive Leaks)[2]	**38.70**	**24.60**	**26.81**	**0.78**	**1.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

Post-Construction Potential Emissions (Uncontrolled

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NOx	CO	VOC	SO_2	$PM_{10, 2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri.	Benzene	E-benzene	Formald.	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	50.24	31.93	8.91	1.01	2.08	0.00	0.00	0.00	0.00	0.00	0.00	36,804.69	0.69	0.07	36,842.73	0.00	0.00	0.01	0.22	0.00	0.04	0.02	**0.30**
Dehydration Unit with Flash Tank	0.00	0.00	122.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.05	202.36	0.00	5,094.95	0.00	15.29	0.00	0.00	3.79	22.46	0.00	**41.55**
TEG Reboiler Burner	0.39	0.33	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	514.53	0.01	0.00	515.07	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.01**
(2) 400 bbl. Condensate Tanks	0.00	0.00	11.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	2.68	0.00	67.34	0.03	0.04	0.00	0.00	0.20	0.04	0.01	**0.32**
(1) 300 bbl. Produced Water Tank	0.00	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.26	0.00	6.61	0.00	0.00	0.00	0.00	0.02	0.00	0.00	**0.03**
Tank Combustor (pilot[	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.37	0.00	0.00	14.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Flare (pilot)	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.04	0.00	0.00	31.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Miscellaneous Venting[1]	0.00	0.00	11.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94	66.24	0.00	1,657.95	0.00	0.03	0.00	0.00	0.21	0.03	0.00	**0.27**
Truck Loadouts	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fugitive Equipment Leak:	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	**0.36**
Total Pollutants	**50.67**	**32.29**	**159.32**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**37,403**	**285**	**0**	**44,561**	**0.05**	**15.38**	**0.02**	**0.22**	**4.39**	**22.67**	**0.09**	**42.82**
Total Criteria Pollutants (Minus Fugitive Leaks)[2]	**50.67**	**32.29**	**155.10**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

Post-Construction Allowable Emissions (Federally Enforceable without Syn Minor limits

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NOx	CO	VOC	SO_2	$PM_{10, 2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri.	Benzene	E-benzene	Formald.	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	50.24	31.93	8.91	1.01	2.08	0.00	0.00	0.00	0.00	0.00	0.00	36,804.69	0.69	0.07	36,842.73	0.00	0.00	0.00	0.22	0.00	0.04	0.02	**0.29**
Dehydration Unit with Flash Tank	0.00	0.00	124.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.05	202.36	0.00	5,094.95	0.01	0.75	0.00	0.00	0.19	1.06	0.00	**2.01**
TEG Reboiler Burner	0.39	0.33	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	514.53	0.01	0.00	515.07	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.01**
(2) 400 bbl. Condensate Tanks	0.00	0.00	11.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	2.68	0.00	67.34	0.03	0.04	0.00	0.00	0.20	0.04	0.01	**0.32**
(1) 300 bbl. Produced Water Tank	0.00	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.26	0.00	6.61	0.00	0.00	0.00	0.00	0.02	0.00	0.00	**0.03**
Tank Combustor (pilot[	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.37	0.01	0.01	14.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Flare (pilot and combustion of vapors)	0.73	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	642.64	0.00	0.00	642.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Miscellaneous Venting[1]	0.00	0.00	11.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94	66.24	0.00	1,657.95	0.00	0.03	0.00	0.00	0.21	0.03	0.00	**0.27**
Truck Loadouts	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fugitive Equipment Leak:	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	**0.36**
Total Pollutants	**51.37**	**32.47**	**161.33**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**38,015**	**285**	**0**	**45,172**	**0.06**	**0.84**	**0.01**	**0.22**	**0.78**	**1.27**	**0.09**	**3.28**
Total Criteria Pollutants (Minus Fugitive Leaks)[2]	**51.37**	**32.47**	**157.12**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

Post-Construction Allowable Emissions (Federally Enforceable with requested Syn Minor limits

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NOx	CO	VOC	SO_2	$PM_{10, 2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri.	Benzene	E-benzene	Formald.	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	50.24	31.93	8.91	1.01	2.08	0.00	0.00	0.00	0.00	0.00	0.00	36,804.69	0.69	0.07	36,842.73	0.00	0.00	0.00	0.22	0.00	0.04	0.02	**0.29**
Dehydration Unit with Flash Tank	0.00	0.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.05	10.12	0.00	288.99	0.01	0.75	0.00	0.00	0.19	1.06	0.00	**2.01**
TEG Reboiler Burner	0.39	0.33	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	514.53	0.01	0.00	515.07	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.01**
(2) 400 bbl. Condensate Tanks	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.13	0.00	3.57	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.02**
(1) 300 bbl. Produced Water Tank	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Tank Combustor (pilot and combustion of vapors	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.37	0.01	0.01	14.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Flare (pilot and combustion of vapors)	0.73	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.57	0.00	0.00	64.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Miscellaneous Venting[1]	0.00	0.00	11.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94	66.24	0.00	1,657.95	0.00	0.03	0.00	0.00	0.21	0.03	0.00	**0.27**
Truck Loadouts	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fugitive Equipment Leak:	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	**0.36**
Total Pollutants	**51.44**	**32.49**	**31.19**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**37,437**	**90**	**0**	**39,718**	**0.04**	**0.81**	**0.01**	**0.22**	**0.57**	**1.22**	**0.08**	**2.95**
Total Criteria Pollutants (Minus Fugitive Leaks)[2]	**51.44**	**32.49**	**26.97**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

Notes:

[1] Miscellaneous Venting emissions include those from Turbine Startups, Turbine Shutdowns, and Turbine Seals.

[2] Fugitive emissions from equipment leaks are not included in the total criteria pollutant emissions because facility is not a listed source pursuant to CAA section 302(j).

Smith, Claudia

From: Shepherd, Don <don_shepherd@nps.gov>
Sent: Tuesday, July 12, 2016 12:23 PM
To: Smith, Claudia
Subject: Re: Notice of Public Comment Period – Proposed Permit to Construct on the Uintah and Ouray Indian Reservation

Claudia--it works now--thanks!

On Tue, Jul 12, 2016 at 11:11 AM, Smith, Claudia <Smith.Claudia@epa.gov> wrote:

> Don,
>
> It appears the web page reverted to a previously published version for some unknown reason. I have republished the more current version, so you should be able to access the documents now. Thank you for pointing out the glitch.
>
> Thanks,
>
> Claudia
>
> **From:** Shepherd, Don [mailto:don_shepherd@nps.gov]
> **Sent:** Tuesday, July 12, 2016 10:34 AM
> **To:** Smith, Claudia <Smith.Claudia@epa.gov>
> **Subject:** Re: Notice of Public Comment Period – Proposed Permit to Construct on the Uintah and Ouray Indian Reservation
>
> Claudia--i could not find a link to the documents.
>
> On Thu, Jun 30, 2016 at 4:20 PM, Smith, Claudia <Smith.Claudia@epa.gov> wrote:
>
> > In accordance with the regulations at 40 CFR 49.157, the EPA is hereby providing notification of the availability for public comment of the proposed Clean Air Act synthetic minor permit to construct for the following existing source located on the Uintah and Ouray Indian Reservation:
> >
> > Tesoro Logistics-Rockies - Ponderosa Compressor Station

Electronic copies of the proposed permit, technical support document, application and other supporting permit information may be viewed online at http://www.epa.gov/caa-permitting/caa-permit-public-comment-opportunities-region-8.

Paper copies of the proposed permit, technical support document, application, and other supporting permit information may be obtained by contacting the Federal and/or Tribal contacts identified on the attached public notice bulletin.

Comments may be sent by mail to:

US EPA Region 8

Air Program Office

1595 Wynkoop Street, 8P-AR

Denver, CO 80202

Attn: Federal Minor NSR Coordinator

or

Electronically to R8AirPermitting@epa.gov

In accordance with the regulations at §49.157, the Agency is providing a 30-day period from July 1, 2016 to August 1, 2016, for public comment on this proposed permit. Comments must be received by 5:00 p.m. MST August 1, 2016, to be considered in the issuance of the final permit. If a public hearing is held regarding this permit, you will be sent a copy of the public hearing notice at least 30 days in advance of the hearing date.

Claudia Young Smith

Environmental Scientist

Air Program, Mail Code 8P-AR

US Environmental Protection Agency Region 8

1595 Wynkoop Street

Denver, Colorado 80202

Phone: (303) 312-6520

Fax: (303) 312-6064

http://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region

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Don Shepherd

National Park Service

Air Resources Division

12795 W. Alameda Pkwy.

Lakewood, CO 80228

Phone: 303-969-2075

Fax: 303-969-2822

E-Mail: don_shepherd@nps.gov

"the man who really counts in the world is the doer, not the mere critic" TR 1891

--

Don Shepherd
National Park Service
Air Resources Division
12795 W. Alameda Pkwy.
Lakewood, CO 80228
Phone: 303-969-2075
Fax: 303-969-2822
E-Mail: don_shepherd@nps.gov
"the man who really counts in the world is the doer, not the mere critic" TR 1891

Smith, Claudia

From: Minnie Grant <minnieg@utetribe.com>
Sent: Friday, July 01, 2016 5:01 PM
To: Smith, Claudia
Subject: RE: Administrative Permit Docket for Proposed Synthetic Minor NSR Permit: Tesoro Logistics - Ponderosa CS

Claudia,
I have not received anything so, I am not aware of your correspondence. minnie

---

From: Smith, Claudia [mailto:Smith.Claudia@epa.gov]
Sent: Friday, July 01, 2016 4:19 PM
To: Bruce Pargeets
Cc: Minnie Grant
Subject: Administrative Permit Docket for Proposed Synthetic Minor NSR Permit: Tesoro Logistics - Ponderosa CS

Mr. Pargeets,

On Monday we mailed a paper copy and electronic copy on CD of the administrative permit docket for the Proposed Synthetic Minor NSR Permit for the Tesoro Logistics-Rockies Ponderosa Compressor Station. Can you please let me know whether or not you received that package? The public comment period began today. I have listed Minnie Grant as the contact for interested members of the public who want to view the documents in the Fort Duchesne area. If you received the package, can you please make sure that Minnie gets it?

Thank you,

Claudia Young Smith
Environmental Scientist
Air Program, Mail Code 8P-AR
US Environmental Protection Agency Region 8
1595 Wynkoop Street
Denver, Colorado 80202

Phone: (303) 312-6520
Fax: (303) 312-6064
http://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region
****

Smith, Claudia

From: Smith, Claudia
Sent: Friday, July 01, 2016 4:13 PM
To: 'Minnie Grant'
Subject: RE: Proposed Synthetic Minor NSR Permit for Ponderosa Compressor Station
Attachments: Tesoro Logistics Ponderosa CS Proposed SMNSR Permit Admin Docket.pdf

Hi, Minnie,

I will try to contact Bruce and find out if he received the package. If so, I will ask him to deliver it to you to make available if any member of the public requests to view it. In the meantime, I have attached a PDF of the docket. Did you get your concurrence copy of the cover letter transmitting the paper and CD copies of the permit docket to Bruce?

Thanks,

Claudia

From: Minnie Grant [mailto:minnieg@utetribe.com]
Sent: Friday, July 01, 2016 4:08 PM
To: Smith, Claudia <Smith.Claudia@epa.gov>
Subject: RE: Proposed Synthetic Minor NSR Permit for Ponderosa Compressor Station

Claudia,
I am not in charge of Bruce Pargeets mail so I do not know what he receives or does not receive. You will have to contact Bruce. Thank-you minnie

---

From: Smith, Claudia [mailto:Smith.Claudia@epa.gov]
Sent: Friday, July 01, 2016 7:41 AM
To: Minnie Grant
Subject: RE: Proposed Synthetic Minor NSR Permit for Ponderosa Compressor Station

Hi, Minnie,

I am hoping by now that Bruce Pargeets would have brought you the docket for this proposed permit to make available if anyone from the public requests to review it. I mailed it on Monday. Please let me know if Bruce did not receive the package.

Thank you,

Claudia

From: Smith, Claudia
Sent: Thursday, June 30, 2016 4:19 PM
To: 'Knoll, Patrick J' <Patrick.J.Knoll@tsocorp.com>
Cc: Rothery, Deirdre <Rothery.Deirdre@epa.gov>; Okubo, Noreen <Okubo.Noreen@epa.gov>; Minnie Grant <minnieg@utetribe.com>; Bruce Pargeets <bpargeets@utetribe.com>; 'charles.d.bates@tsocorp.com' <charles.d.bates@tsocorp.com>
Subject: Proposed Synthetic Minor NSR Permit for Ponderosa Compressor Station

Mr. Knoll,

I have attached the requested proposed permit, the accompanying technical support document, and the public notice bulletin for the Ponderosa Compressor Station. We will also be posting the application, proposed permit, technical support document, public notice bulletin, and other supporting permit information in PDF format on our website at http://www.epa.gov/caa-permitting/caa-permit-public-comment-opportunities-region-8 by the start of the public comment period.

In accordance with the regulations at 40 CFR 49.157, we are providing a 30-day period from July 1, 2016 to August 1, 2016 for public comment on this proposed permit. Comments must be received by 5:00pm MST August 1, 2016, to be considered in the issuance of the final permit.

Please submit any written comments you may have concerning the terms and conditions of this permit. You can send them directly to me at smith.claudia@epa.gov, or to r8airpermitting@epa.gov. Should the EPA not accept any or all of these comments, you will be notified in writing and will be provided with the reasons for not accepting them.

Thank you,

Claudia Young Smith
Environmental Scientist
Air Program, Mail Code 8P-AR
US Environmental Protection Agency Region 8
1595 Wynkoop Street
Denver, Colorado 80202

Phone: (303) 312-6520
Fax: (303) 312-6064
http://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region
****

Smith, Claudia

From: Smith, Claudia
Sent: Thursday, June 30, 2016 4:21 PM
Subject: Notice of Public Comment Period – Proposed Permit to Construct on the Uintah and Ouray Indian Reservation
Attachments: Bulletin Board Notice - Tesoro Ponderosa CS SMNSR.pdf

In accordance with the regulations at 40 CFR 49.157, the EPA is hereby providing notification of the availability for public comment of the proposed Clean Air Act synthetic minor permit to construct for the following existing source located on the Uintah and Ouray Indian Reservation:

Tesoro Logistics-Rockies - Ponderosa Compressor Station

Electronic copies of the proposed permit, technical support document, application and other supporting permit information may be viewed online at http://www.epa.gov/caa-permitting/caa-permit-public-comment-opportunities-region-8.

Paper copies of the proposed permit, technical support document, application, and other supporting permit information may be obtained by contacting the Federal and/or Tribal contacts identified on the attached public notice bulletin.

Comments may be sent by mail to:

US EPA Region 8
Air Program Office
1595 Wynkoop Street, 8P-AR
Denver, CO 80202
Attn: Federal Minor NSR Coordinator

or

Electronically to R8AirPermitting@epa.gov

In accordance with the regulations at §49.157, the Agency is providing a 30-day period from July 1, 2016 to August 1, 2016, for public comment on this proposed permit. Comments must be received by 5:00 p.m. MST August 1, 2016, to be considered in the issuance of the final permit. If a public hearing is held regarding this permit, you will be sent a copy of the public hearing notice at least 30 days in advance of the hearing date.

Claudia Young Smith
Environmental Scientist
Air Program, Mail Code 8P-AR
US Environmental Protection Agency Region 8
1595 Wynkoop Street
Denver, Colorado 80202

Phone: (303) 312-6520
Fax: (303) 312-6064
http://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region

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Smith, Claudia

From: Smith, Claudia
Sent: Thursday, June 30, 2016 4:19 PM
To: 'Knoll, Patrick J'
Cc: Rothery, Deirdre; Okubo, Noreen; Minnie Grant; Bruce Pargeets; 'charles.d.bates@tsocorp.com'
Subject: Proposed Synthetic Minor NSR Permit for Ponderosa Compressor Station
Attachments: Bulletin Board Notice - Tesoro Ponderosa CS SMNSR.pdf; Tesoro Logistics Ponderosa CS Proposed SMNSR Permit-TSD.pdf

Mr. Knoll,

I have attached the requested proposed permit, the accompanying technical support document, and the public notice bulletin for the Ponderosa Compressor Station. We will also be posting the application, proposed permit, technical support document, public notice bulletin, and other supporting permit information in PDF format on our website at http://www.epa.gov/caa-permitting/caa-permit-public-comment-opportunities-region-8 by the start of the public comment period.

In accordance with the regulations at 40 CFR 49.157, we are providing a 30-day period from July 1, 2016 to August 1, 2016 for public comment on this proposed permit. Comments must be received by 5:00pm MST August 1, 2016, to be considered in the issuance of the final permit.

Please submit any written comments you may have concerning the terms and conditions of this permit. You can send them directly to me at smith.claudia@epa.gov, or to r8airpermitting@epa.gov. Should the EPA not accept any or all of these comments, you will be notified in writing and will be provided with the reasons for not accepting them.

Thank you,

Claudia Young Smith
Environmental Scientist
Air Program, Mail Code 8P-AR
US Environmental Protection Agency Region 8
1595 Wynkoop Street
Denver, Colorado 80202

Phone: (303) 312-6520
Fax: (303) 312-6064
http://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region
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Public Notice: Request For Comments

Proposed Air Quality Permit to Construct
Tesoro Logistics-Rockies
Ponderosa Compressor Station

Notice issued: July 1, 2016

Written comments due:
5 p.m., August 1, 2016

Where is the facility located?

Ponderosa Compressor Station: Uintah and Ouray Indian Reservation
Uintah County, Utah
SW/SW Sec. 29, NW/NW Sec. 32,
NE/NE Sec. 3, T8S, R22E
Latitude 40.08807 N
Longitude -109.453332

What is being proposed?
This permit action will apply to an existing facility operating on the Uintah and Ouray Indian Reservation in Utah.

The facility is designed to compress and dehydrate a comingled liquid stream received from nearby field production wells. The facility currently operates one (1) existing tri-ethylene glycol dehydration unit, two (2) condensate storage tanks and one (1) produced water storage tank. Tesoro has requested enforceable limits on volatile organic compound (VOC) emissions for the dehydrator and the three storage tanks. Tesoro operates a flare to control emissions from the TEG dehydration system still vent for compliance with applicable requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Oil and Natural Gas Production Facilities at 40 CFR part 63, subpart HH (NESHAP HH) for major sources of hazardous air pollutants (HAP). Tesoro also voluntarily operates an enclosed combustion device to control VOC emissions from the three (3) storage tanks. Tesoro is seeking to establish federal enforceability for total VOC emissions reductions that occur as a result of the applicable HAP emissions control requirements and the voluntary operation of the enclosed combustion device on the storage tanks. The permit the EPA is proposing to issue reflects the incorporation of the requested requirements.

Proposed Permit Requirements:
The permit proposes requirements to route emissions from the still vent of the existing dehydrator to a flare, and to route emissions from the storage tanks to an enclosed combustion device, to limit the emissions of volatile organic compounds (VOC).

What are the effects on air quality?
This action will have no adverse air quality impacts. The emissions at this existing facility will not be increasing due to this permit action. In addition, this action does not authorize the construction of any new emission sources, or emission increases from existing sources, nor does it otherwise authorize any other physical modifications to the facility or its operations.

Where can I send comments?
EPA accepts comments by mail, fax and e-mail.

US EPA Region 8 Air Program, 8P-AR
Attn: Federal Minor NSR Coordinator
1595 Wynkoop Street,
Denver, CO 80202
R8AirPermitting@epa.gov
Fax: 303-312-6064

How can I review documents?
You can review a paper or electronic copy of the proposed permits and related documents at the following locations:

Ute Indian Tribe Energy and Minerals Department Office
988 South 7500 East, Annex Building
Fort Duchesne, Utah 84026
Contact: Minnie Grant, Air Coordinator, at (435) 725-4900
or minnieg@utetribe.com

US EPA Region 8 Office:
1595 Wynkoop Street, Denver, CO 80202
Hours: Mon-Fri 8:00 a.m. – 5:00 p.m.
Contact: Claudia Smith, Permit Engineer, at 303-312-6520
or smith.claudia@epa.gov

US EPA Region 8 Website:
https://www.epa.gov/caa-permitting/caa-permit-public-comment-opportunities-region-8

Permit number:
SMNSR-UO-002178-2015.002

What happens next?
The EPA will review and consider all comments received during the comment period. Following this review, the EPA may issue the permits as proposed, issue modified permits based on comments, or deny the permits.

Tribal Minor New Source Review in Indian Country

United States Environmental Protection Agency

Region 8
Air Program
1595 Wynkoop Street
Denver, CO 80202
Phone 800-227-8917

https://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

Ref: 8P-AR

JUN 2 7 2016

Patrick Knoll
Environmental Specialist
Tesoro Logistics
1801 California Street, Suite 1200
Denver, Colorado 80202

Re: Tesoro Logistics-Rockies Ponderosa Compressor Station
Permit # SMNSR-UO-002178-2015.002
Proposed Synthetic Minor New Source Review Permit

Dear Mr. Knoll:

The U.S. Environmental Protection Agency Region 8 has completed its review of Tesoro Logistics-Rockies' application requesting a synthetic minor permit pursuant to the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR part 49 for the Ponderosa Compressor Station.

Enclosed are the proposed permit and the corresponding technical support document. The regulations at 40 CFR 49.157 require that the affected community and the general public have the opportunity to submit written comments on any proposed MNSR permit. All written comments submitted within 30 calendar days after the public notice is published will be considered by the EPA in making its final permit decision. Enclosed is a copy of the public notice which will be published on the EPA's website located at: https://www.epa.gov/caa-permitting/caa-permit-public-comment-opportunities-region-8, on July 1, 2016. The public comment period will end at 5:00 p.m. on August 1, 2016.

The conditions contained in the proposed permit will become effective and enforceable by the EPA if the permit is issued final. If you are unable to accept any term or condition of the draft permit, please submit your written comments, along with the reason(s) for non-acceptance to:

Tribal NSR Permit Contact
c/o Air Program (8P-AR)
U.S. EPA, Region 8
1595 Wynkoop Street
Denver, Colorado 80202

or

R8AirPermitting@epa.gov

If you have any questions concerning the enclosed proposed permit or technical support document, please contact Claudia Smith of my staff at (303) 312-6520.

Sincerely,

Monica Morales
Acting Director
Air Program

Enclosures

Cc:

Bruce Pargeets, Acting Director, Energy, Minerals and Air, Ute Indian Tribe
Minnie Grant, Air Coordinator, Energy, Minerals, and Air, Ute Indian Tribe
Honorable Shaun Chapoose, Chairman, Ute Indian Business Committee (w/o enclosures)
Edred Secakuku, Vice Chairman, Ute Indian Business Committee (w/o enclosures)
Reannin Tapoof, Executive Assistant, Ute Indian Business Committee (w/o enclosures)

United States Environmental Protection Agency
Region 8, Air Program
1595 Wynkoop Street
Denver, CO 80202

Air Pollution Control
Synthetic Minor Source Permit to Construct

40 CFR 49.151

 # SMNSR-UO-002178-2015.002

Permit to Construct to establish legally and practically enforceable limitations and requirements on sources at an existing facility

Permittee:

Tesoro Logistics-Rockies

Permitted Facility:

Ponderosa Compressor Station
Uintah and Ouray Indian Reservation
Uintah County, Utah

Summary

On September 8, 2015, the EPA received an application from Tesoro Logistics-Rockies (Tesoro), on behalf of QEP Field Services, LLC (QEPFS), requesting a synthetic minor permit for the existing Ponderosa Compressor Station in accordance with the requirements of the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR part 49. Tesoro requested legally and practically enforceable emissions and operational limitations that recognize emissions control equipment installed and operating on existing emissions units.

This permit action applies to an existing facility operating on Indian country lands within the Uintah and Ouray Indian Reservation in Utah.

This permit does not authorize the construction of any new emission sources, or emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. This permit is only intended to incorporate requested enforceable emission limits and operational restrictions from the MNSR application. Tesoro requested requirements to control emissions of volatile organic compounds (VOC) from one (1) tri-ethylene glycol (TEG) natural gas dehydration system using an open flame vapor combustion unit (flare) and to control emissions of VOC and hazardous air pollutants (HAP) from two (2) condensate and one (1) produced water storage tanks using an enclosed vapor combustion device (enclosed combustion device).

Upon compliance with this permit, Tesoro will have legally and practically enforceable restrictions on emissions that can be used when determining the applicability of other Clean Air Act (CAA) permitting requirements, such as under the Prevention of Significant Deterioration (PSD) Permit Program at 40 CFR part 52 and the Title V Operating Permit Program at 40 CFR part 71 (Part 71 Permit Program).

The EPA has determined that issuance of this MNSR permit will not contribute to National Ambient Air Quality Standards (NAAQS) violations, or have adverse effects on ambient air quality.

Table of Contents

I. Conditional Permit to Construct

A. General Information

Facility: Tesoro Logistics-Rockies – Ponderosa Compressor Station
Permit number: SMNSR-UO-002178-2015.002
SIC Code and SIC Description: 1311- Crude Petroleum and Natural Gas

Site Location:
Ponderosa Compressor Station
SW/SW S28, SE/SE S29, NW/NW S32, NE/NE S3
Township 8S, Range 22E
Uintah and Ouray Indian Reservation
Uintah County, Utah
Latitude 40.08807, Longitude -109.453332

Corporate Office Location
Tesoro Logistics-Rockies
1050 17th Street, Suite 1700
Denver, Colorado 80265

The equipment listed in this permit shall be operated by Tesoro Logistics-Rockies at the location described above.

B. Applicability

1. This federal Permit to Construct is being issued under authority of the MNSR Permit Program.

2. The requirements in this permit have been created, at the Permittee's request to establish legally and practically enforceable restrictions for limiting TEG dehydration system VOC emissions and condensate and produced water storage tank VOC and total HAP emissions.

3. Any conditions established for this facility or any specific units at this facility pursuant to any permit issued under the authority of the PSD Permit Program or the MNSR Permit Program shall continue to apply.

4. By issuing this permit, the EPA does not assume any risk of loss which may occur as a result of the operation of the permitted facility by the Permittee, Owner, and/or Operator, if the conditions of this permit are not met by the Permittee, Owner, and/or Operator.

C. Requirements for the TEG Dehydration System

1. Construction and Operational Limits

   (a) The Permittee shall install and operate emission controls as specified in this permit on one (1) TEG natural gas dehydration system meeting the following specifications:

      (i) Limited to a maximum throughput of 55 million standard cubic feet per day (MMscfd) of natural gas;
      (ii) Equipped with no more than one (1) natural gas-fired TEG reboiler with a maximum rated heat input of 1 million British thermal units per hour (MMBtu/hr);
      (iii) Equipped with no more than one (1) BTEX condenser, one (1) TEG/gas separation unit, and one (1) flash tank; and

(iv) Equipped with no more than one (1) TEG recirculation pump limited to a maximum pump rate of 11.00 gallons per minute (gpm).

(b) Only the dehydration unit that is operated and controlled as specified in this permit is approved for installation and operation under this permit.

2. Emissions Limits

(a) Emissions of VOC from the TEG dehydration system still vent shall not exceed 6.00 tons in any consecutive 12-month period.

(b) The emission limit shall apply at all times unless otherwise specified in this permit.

3. Control and Operational Requirements

(a) The Permittee shall route all emissions from the TEG dehydration system still vent through a closed-vent system to an open flame vapor combustion device (flare) designed, operated, and monitored as specified in the Requirements for Emissions Control Systems section of this permit.

(b) The Permittee shall follow the manufacturer's recommended maintenance schedule and operational procedures, or recommended maintenance schedule and operational procedures developed by the vendor or Permittee, to ensure optimum performance of the TEG dehydration system, closed-vent system, and flare.

4. Emissions Calculation Requirements

(a) VOC emissions for the TEG dehydration system still vent must be calculated, in tons, and recorded at the end of each month, beginning with the first calendar month that this permit is effective.

(b) Prior to 12 full months of VOC emissions calculations, the Permittee shall, within 7 calendars days of the end of each month, add the emissions for that month to the calculated emissions for all previous months since the effective date of the permit and record the total. Thereafter, the Permittee must, within 7 calendar days of the end of each month, add the emissions for that month to the calculated emissions for the preceding 11 months and record a new 12-month total.

(c) VOC emissions shall be calculated, in tons, using a generally accepted simulation model or software (examples include ProMax and GRI-GLYCalc™ Version 4.0 or higher). Inputs to the model shall be representative of actual average monthly operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled, "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).

5. Testing Requirements

(a) The Permittee shall perform testing and inspections of the closed-vent system and flare, as specified in the Requirements for Emissions Control Systems section of this permit.

(b) The Permittee shall conduct extended laboratory analysis of the inlet wet gas stream to the TEG dehydration system (extended wet gas analysis) at least once every consecutive 12-month period. Alternatively, wet gas from the facility inlet separator can be taken for use in a process simulation software package. The analysis shall include the inlet gas temperature and pressure at which the sample was taken.

6. Monitoring Requirements

(a) The Permittee shall install, operate, and maintain a meter that continuously measures the natural gas flowrate from the TEG dehydration system. The meter shall be inspected on a monthly basis to ensure proper operation per the manufacturer's specifications.

(b) The Permittee shall convert monthly natural gas flowrate to a daily average by dividing the monthly flowrate by the number of days in the month that the TEG dehydration system processed natural gas. The Permittee shall document the actual monthly average natural gas flowrate.

D. Requirements for Natural Gas Condensate and Produced Water Storage Tanks

1. Construction and Operational Limits

(a) The Permittee shall install, maintain, and operate emission controls as specified in this permit on two (2) 400 barrel (bbl) natural gas condensate storage tanks and one (1) 300 bbl produced water storage tank.

(b) Only the natural gas condensate and produced water storage tanks operated and controlled as specified in this permit are approved for installation and operation under this permit.

2. Emissions Limits

(a) Aggregate emissions from the two (2) 400 bbl natural gas condensate storage tanks and the one (1) produced water storage tank shall not exceed:

(i) VOC: 0.63 tons in any consecutive 12-month period; and
(ii) Total HAP: 0.02 tons in any consecutive 12-month period.

(b) Emissions limits shall apply at all times unless otherwise specified in this permit.

3. Control and Operational Requirements

(a) The Permittee shall route all emissions from the natural gas condensate and produced water storage tanks through a closed-vent system to an enclosed combustion device, both designed, operated, tested, and monitored as specified in the Requirements for Emissions Control Systems section of this permit.

(b) Covers

(i) The Permittee shall equip all openings on each storage tank with a cover to ensure that all hydrocarbon emissions are efficiently being routed through a closed-vent system to a combustion device as specified in the Requirements for Emissions Control Systems section of this permit.

(ii) The Permittee shall ensure that each cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves, and gauge wells) form a continuous impermeable barrier over the entire surface area of the tanks.

(iii) Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in a tank on which the cover is installed, except during those times when it is necessary to use an opening as follows:

(A) To add material to, or remove material from the tank (this includes openings necessary to equalize or balance the internal pressure of the tank following changes in the level of the material in the tank);
(B) To inspect or sample the material in the tank; or
(C) To inspect, maintain, repair, or replace equipment located inside the tank.

(iv) Each thief hatch cover shall be weighted and properly seated.

(v) Pressure relief valves shall be set to release at a pressure that will ensure that all hydrocarbon emissions are routed through the closed-vent system to an enclosed combustion device, as specified in the Requirements for Emissions Control Systems section of this permit, under normal operating conditions.

(c) The Permittee shall follow the manufacturer's recommended maintenance schedule and operational procedures, or maintenance schedule and operational procedures developed by the vendor or Permittee, to ensure optimum performance of the natural gas condensate and produced water storage tanks, closed-vent system, and enclosed combustion device.

4. Emissions Calculation Requirements

(a) Aggregate VOC and total HAP emissions from the natural gas condensate and produced water storage tanks covered by this permit must be calculated, in tons, and recorded at the end of each month, beginning with the first calendar month that this permit is effective.

(b) Prior to 12 full months of VOC and total HAP emissions calculations, the Permittee must, within 7 calendars days of the end of each month, add the emissions for that month to the calculated emissions for all previous months since the effective date of the permit and record the total. Thereafter, the Permittee must, within 7 calendar days of the end of each month, add the emissions for that month to the calculated emissions for the preceding 11 months and record a new 12-month total.

(c) VOC and total HAP emissions shall be calculated, in tons and shall be determined using: the measured monthly volume of natural gas condensate and produced water routed to the tanks; the most recent extended laboratory analysis of the natural gas condensate stored in the tanks as required in this permit; a generally accepted simulation model or software (examples include E&P Tanks and ProMax); and the most recent tested VOC and total HAP control efficiency of the control device being used, as required in this permit in Section I.E. Requirements for Emissions Control Systems. Inputs to the model shall be representative of actual average monthly throughput and operating conditions of the storage tanks. Other calculation methods may be used upon prior written approval by the EPA.

5. Testing and Monitoring Requirements

(a) The Permittee shall perform visual inspections of the natural gas condensate and produced water storage tank covers, thief hatches, seals, and pressure relief valves to ensure proper condition and functioning at least once every calendar quarter, as follows:

(i) The quarterly inspections shall be performed while the tanks are being filled.
(ii) Any damaged equipment shall be repaired immediately unless the repair requires resources not currently available. If the resources are not available, the repair shall be completed no later than 15 days after initial identification of the damage.
(iii) All repairs and maintenance activities shall be recorded in a maintenance and repair log and must be available for inspection.

(b) The Permittee shall perform testing and inspections of the closed-vent system and enclosed combustion device, as specified in the Requirements for Emissions Control Systems section of this permit, to ensure that the pressure and vacuum relief set-points of the storage tanks are not being exceeded in a way that has resulted, or may result, in venting of hydrocarbon emissions and possible damage to equipment.

(c) The Permittee shall measure the volume of natural gas condensate and produced water routed to each storage tank to use in subsequently determining the volume of natural gas condensate and produced water processed through the station as required in this section of the permit to calculate aggregate VOC and total HAP emissions from the natural gas condensate and produced water storage tanks.

(d) The Permittee shall conduct extended laboratory analysis of the natural gas condensate stored in the tanks at least once every consecutive 12-month period. The analysis shall include the natural gas condensate temperature and pressure at which the sample was taken.

E. Requirements for Emissions Control Systems

1. Closed-Vent Systems

(a) Each closed-vent system shall route all emissions from the TEG dehydration system still vent or the natural gas condensate and produced water storage tanks through a closed-vent system to a flare or enclosed combustion device, as applicable, designed and operated as specified in this section of the permit.

(b) The Permittee shall design, install, continuously operate, and maintain each closed-vent system such that it is compliant with the following requirements:

(i) The closed-vent system shall route all gases, vapors, and fumes emitted from the TEG dehydration system still vent or the natural gas condensate and produced water storage tanks to the flare or enclosed combustion device, as applicable;

(ii) All vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain and collect gases, vapors, and fumes and transport them to the emissions control devices shall be maintained and operated during any time the device is operating;

(iii) The closed-vent system shall be designed to operate with no detectable emissions;

(iv) If the closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the flare or enclosed combustion device, the Permittee shall meet the one of following requirements for each bypass device:

(A) At the inlet to the bypass device that could divert the stream away from the flare or enclosed combustion device and into the atmosphere, properly install, calibrate, maintain, and operate a flow indicator that is capable of taking periodic readings and sounding an alarm when the bypass device is open such that the stream is being, or could be, diverted away from the flare and into the atmosphere; or

(B) Secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

(v) The Permittee shall minimize leaks of hydrocarbon emissions from all vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain, collect, and transport gases, vapors, and fumes to the flare or enclosed combustion device.

2. Flare and Enclosed Combustion Device

(a) The Permittee shall design, install, continuously operate, and maintain a flare and an enclosed combustion device such that the mass content of the uncontrolled VOC emissions from the TEG dehydration system still vent and uncontrolled VOC and total

HAP emissions from the natural gas condensate and produced water storage tanks, as applicable, are reduced by at least 95.0 percent by weight.

(b) The Permittee shall ensure that the flare and enclosed combustion device have sufficient capacity to achieve at least a 95.0 percent VOC and total HAP emission control efficiency for the minimum and maximum hydrocarbon volumetric flow rate and BTU content routed to the device.

(c) The Permittee shall ensure that the flare is designed and operated in accordance with the requirements of 40 CFR 63.11(b).

(d) The Permittee shall ensure that the flare and enclosed combustion device are:

(i) Operated properly at all times that TEG dehydration system still vent emissions or natural gas condensate and produced water storage tank emissions, as applicable, are routed to it;

(ii) Operated with a liquid knock-out system to collect any condensable vapors (to prevent liquids from going through the control device);

(iii) Equipped with a flash-back flame arrestor;

(iv) Equipped with one of the following:

(A) A continuous burning pilot flame, a thermocouple, and a malfunction alarm and notification system if the pilot flame fails; or
(B) An electronically controlled auto-ignition system with a malfunction alarm and notification system if the pilot flame fails while TEG dehydration system still vent emissions or produced water storage tank emissions, as applicable, are routed to it.;

(v) Maintained in a leak-free condition; and

(vi) Operated with no visible smoke emissions.

(e) The Permittee shall follow the manufacturer's recommended maintenance schedule and operational procedures, or recommended maintenance schedule and operational procedures developed by the vendor or Permittee, to ensure optimum performance of the closed-vent systems, flare, and enclosed combustion device.

3. Other Control Devices: Upon written approval by the EPA, the Permittee may use a control device other than that listed above that is capable of reducing the mass content of VOC and total HAP in the hydrocarbon emissions routed to it by at least 95.0 percent, provided that:

(a) In operating such control device, the Permittee follows the manufacturer's, vendor's, or Permittee's written operating instructions, procedures and maintenance schedules to ensure good air pollution control practices for minimizing hydrocarbon emissions;

(b) The Permittee ensures there is sufficient capacity to reduce the mass content of VOC in the hydrocarbon emissions routed to such other control device by at least 95.0 percent for the minimum and maximum natural gas volumetric flow rate and BTU content routed to the device; and

(c) The Permittee operates such a control device to reduce the mass content of VOC in the hydrocarbon emissions routed to it by at least 95.0 percent.

4. Testing Requirements

(a) The Permittee shall ensure that the enclosed combustion device is:

(i) A model demonstrated by a manufacturer to meet the total VOC and total HAP control efficiency requirements of this permit using the procedures specified in 40 CFR part 63, subpart HH for combustion control devices by the due date of the first annual report as specified in the Reporting Requirements section of this permit; or

(ii) Demonstrated by the Permittee to meet the VOC and total HAP control efficiency requirements of this permit by using the procedures specified in in this section by the due date of the first annual report specified in Reporting Requirements section of this permit.

(b) The Permittee shall demonstrate that the closed-vent systems operate with no detectable emissions, using the procedures specified in EPA Method 21 at 40 CFR part 60, Appendix A as follows:

(i) The detection instrument shall meet the performance criteria of Method 21, except that the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the fluid and not for each individual organic compound in the stream;

(ii) The detection instrument shall be calibrated before use on each day of its use as specified in Method 21;

(iii) Calibration gases shall be zero air (less than 10 parts per million by volume (ppmv) hydrocarbon in air) and a mixture of methane in air at a concentration less than 10,000 ppmv;

(iv) If the Permittee chooses to adjust the detection instrument readings to account for background organic concentration level, the background level shall be determined according to the procedures in Method 21;

(v) The Permittee shall determine if a potential leak interface operates with no detectable emissions as follows:

(A) The maximum organic concentration value is compared directly to the applicable value in paragraph (C) below if choosing not to adjust the detection instrument readings for the background organic concentration level; or

(B) If choosing to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (iv) above is compared with the applicable value for the potential leak interface as specified in paragraph (C) below.

(C) A potential leak interface is determined to operate with no detectable emissions if the VOC concentration value measured by the detection instrument is less than 500 ppmv.

(c) The Permittee shall demonstrate that the flare and enclosed combustion device operate with no visible emissions, except for periods not to exceed a total of 2 minutes during any hour using the procedures specified in EPA Method 22 at 40 CFR part 60, Appendix A as follows:

(i) The observation period shall be 1 hour;

(ii) If the flare or enclosed combustion device fails the visible emissions test, the Permittee shall follow the manufacturer's, vendor's, or Permittee's repair instructions, as outlined in the device inspection and maintenance plan, to return the unit to compliant operation. All repairs and maintenance activities shall be recorded in a maintenance and repair log and must be available for inspection;

(iii) Upon return to operation from repair and maintenance activity, the flare shall pass a Method 22 visual emissions test;

(iv) If the flare fails a follow-up Method 22 visible emissions test, the Permittee shall repeat the procedures in paragraphs (ii) and (iii) of this section until the flare passes a follow-up Method 22 visible emissions test; and

(v) The monthly VOC and HAP emissions calculations for the TEG dehydration system required in this permit shall account for the time periods between each failed visible emissions test and subsequent compliant visible emissions test assuming the TEG dehydration system still vent emissions were uncontrolled.

(d) The Permittee may submit to the EPA a written request for approval of alternate test methods, but shall only use those alternate test methods after obtaining written approval from the EPA.

5. <u>Monitoring Requirements</u>

(a) The Permittee shall monitor each closed-vent system for leaks of hydrocarbon emissions from all vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain, collect, and transport gases, vapors, and fumes to the flare and enclosed combustion device as follows:

(i) Within 90 days of the effective date of this permit, conduct an initial inspection according to the procedures specified in Condition II.C.5.(b) of this permit to demonstrate that the closed-vent system operates with no detectable emissions. Subsequent inspections shall be conducted at least once every 12 consecutive calendar months thereafter.

(ii) Within 90 days of the effective date of this permit, conduct an initial visual inspection of the closed-vent system for defects that could result in air emissions

and document each inspection. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices. Subsequent inspections shall be conducted at least once every calendar quarter thereafter. The inspections shall be based on audio, visual, and olfactory procedures; and

(iii) Any leaks detected in the closed-vent system shall be addressed immediately unless the repair requires resources not currently available. If the resources are not available, the leak shall be repaired no later than 15 days after initial detection of the leak; and

(iv) Upon completion of any repairs, conduct a Method 21 detectable emissions tests as specified in this permit to demonstrate there are no detectable emissions.

(b) The Permittee shall monitor the flare and enclosed combustion device to confirm proper operation as follows:

(i) Within 90 days of the effective date of this permit, conduct an initial inspection to ensure proposer operation according to the manufacturer's, vendor's, or Permittee's recommendations. Subsequent inspections shall be conducted at least once every 6 consecutive calendar months thereafter;

(ii) Visually inspect the pilot light on the device every time a field operator is on location, once per calendar week at a minimum, to ensure that it is lit; and

(iii) Visually confirm that no smoke is present during operation of the smokeless device whenever a field operator is on location, once per calendar week at a minimum. If visible smoke is observed, conduct a Method 22 visible emissions test as specified in this permit to demonstrate there are no visible emissions.

(c) Where sufficient to meet the monitoring requirements the Permittee may use a SCADA system to monitor and record the required data.

F. Recordkeeping Requirements

The Permittee shall document compliance with the VOC emissions limits and the VOC emissions control efficiency requirements in this permit for the TEG dehydration system and natural gas condensate and produced water storage tanks by keeping the following records:

1. All manufacturer, vendor, or Permittee specifications for the TEG dehydration system, natural gas condensate and produced water storage tanks, closed-vent systems, flare, enclosed combustion device, and any monitoring equipment;

2. The site-specific design input parameters provided by the manufacturer, vendor, or Permittee, and used to properly size the closed-vent system, flare, or enclosed combustion device to assure the minimum 95.0 percent VOC control efficiency requirements;

3. The results of all required tests;

4. All wet gas and natural gas condensate extended laboratory analyses;

5. The actual monthly average natural gas flow rate to the TEG dehydration system;

6. The monthly volume of natural gas condensate or produced water handled by each storage tank;

7. The date, time, and length of any events in which the TEG dehydration system still vent or natural gas condensate and produced water storage tank streams were bypassing the flare or enclosed combustion device, or were not otherwise controlled;

8. All inspections of the closed-vent system, natural gas condensate and produced water storage tanks, flare, enclosed combustion device, and any defects observed and the corrective action taken. All inspection records shall include, at a minimum, the following information:

   (a) The date of the inspection;
   (b) The findings of the inspection;
   (c) Any required repairs; and
   (d) The inspector's name and signature.

9. All maintenance conducted on the flare and enclosed combustion device;

10. Any deviations from the operating parameters specified in the manufacturer, vendor, or Permittee site-specific designs for the emissions control systems. The records shall include the control system's total operating time during the calendar month in which the exceedance occurred, the date, time and length of time that the parameters were exceeded, and the corrective actions taken and any preventative measures adopted to operate the control system within that operating parameter;

11. Any instances in which the pilot flame is not present in the flare or the enclosed combustion device while hydrocarbon emissions are vented to it, the date and times that the pilot was not present and the corrective actions taken or any preventative measures adopted to improve the operation of the pilot flame;

12. Any instances of in which the thermocouple (or other heat sensing monitoring device) installed to detect the presence of a flame in an enclosed combustor or engineered flare while hydrocarbon emissions are vented to it is not operational, the time period during which it was not operational, and the corrective measures taken;

13. Any instances of monitoring system breakdowns or other events that result in invalid data, maintenance, and repairs;

14. Any time periods in which detectable emissions or visible emissions are observed emanating from an emissions control device; and

15. The total monthly and consecutive 12-month VOC emissions calculations for the TEG dehydration system still vent and VOC and total HAP emissions calculations for the natural gas condensate and produced water storage tanks.

G. Requirements for Records Retention

1. The Permittee shall retain all records required by this permit for a period of at least 5 years from the date the record was created.

2. Records shall be kept in the vicinity of the facility, such as at the facility, the location that has day-to-day operational control over the facility, or the location that has day-to-day responsibility for compliance of the facility.

H. Requirements for Reporting

1. Annual Emission Reports

(a) The Permittee shall submit a written annual report of the actual annual emissions from all emission units at the facility covered by this permit each year no later than April 1st. The annual report shall cover the period for the previous calendar year. All reports shall be certified to truth and accuracy by the person primarily responsible for CAA compliance for the Permittee.

(b) The report shall include VOC and total HAP emissions, as applicable.

(c) The report shall be submitted to:

U.S. Environmental Protection Agency, Region 8
Office of Partnerships and Regulatory Assistance
Tribal Air Permitting Program, Mail Code 8P-AR
1595 Wynkoop Street
Denver, Colorado 80202

The report may be submitted via electronic mail to R8AirPermitting@epa.gov.

2. All other documents required to be submitted under this permit, with the exception of the Annual Emission Reports, shall be submitted to:

U.S. Environmental Protection Agency, Region 8
Office of Enforcement, Compliance & Environmental Justice
Air Toxics and Technical Enforcement Program, Mail Code 8ENF-AT
1595 Wynkoop Street
Denver, Colorado 80202

Documents may be submitted via electronic mail to R8AirReportEnforcement@epa.gov.

3. The Permittee shall promptly submit to the EPA a written report of any deviations of emission or operational limits specified in this permit and a description of any corrective actions or preventative measures taken. A "prompt" deviation report is one that is post marked or submitted via electronic mail to r8airreportenforcement@epa.gov as follows:

(a) Within 30 days from the discovery of a deviation that would cause the Permittee to exceed the emission limits or operational limits if left un-corrected for more than 5 days after discovering the deviation; and

(b) By April 1st for the discovery of a deviation of recordkeeping or other permit conditions during the preceding calendar year that do not affect the Permittee's ability to meet the emission limits.

4. The Permittee shall submit a written report of any required performance tests to the EPA within 60 days after completing the tests.

5. The Permittee shall submit any record or report required by this permit upon EPA request.

II. General Provisions

A. Conditional Approval

Pursuant to the authority of 40 CFR 49.151, the EPA hereby conditionally grants this permit to construct. This authorization is expressly conditioned as follows:

1. *Document Retention and Availability:* This permit and any required attachments shall be retained and made available for inspection upon request at the location set forth herein.

2. *Permit Application:* The Permittee shall abide by all representations, statements of intent and agreements contained in the application submitted by the Permittee. The EPA shall be notified 10 days in advance of any significant deviation from this permit application as well as any plans, specifications or supporting data furnished.

3. *Permit Deviations:* The issuance of this permit may be suspended or revoked if the EPA determines that a significant deviation from the permit application, specifications, and supporting data furnished has been or is to be made. If the proposed source is constructed, operated, or modified not in accordance with the terms of this permit, the Permittee will be subject to appropriate enforcement action.

4. *Compliance with Permit:* The Permittee shall comply with all conditions of this permit, including emission limitations that apply to the affected emissions units at the permitted facility/source. Noncompliance with any permit term or condition is a violation of this permit and may constitute a violation of the CAA and is grounds for enforcement action and for a permit termination or revocation.

5. *Fugitive Emissions:* The Permittee shall take all reasonable precautions to prevent and/or minimize fugitive emissions during the construction period.

6. *NAAQS and PSD Increments:* The permitted source shall not cause or contribute to a NAAQS violation or a PSD increment violation.

7. *Compliance with Federal and Tribal Rules, Regulations, and Orders:* Issuance of this permit does not relieve the Permittee of the responsibility to comply fully with all other applicable federal and tribal rules, regulations, and orders now or hereafter in effect.

8. *Enforcement:* It is not a defense, for the Permittee, in an enforcement action, to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

9. *Modifications of Existing Emissions Units/Limits:* For proposed modifications, as defined at 40 CFR 49.152(d), that would increase an emissions unit allowable emissions of pollutants above its existing permitted annual allowable emissions limit, the Permittee shall first obtain a permit modification pursuant to the MNSR regulations approving the increase. For a proposed modification that is not otherwise subject to review under the PSD or MNSR regulations, such proposed increase in the annual allowable emissions limit shall be approved through an administrative permit revision as provided at 40 CFR 49.159(f).

10. *Relaxation of Legally and Practically Enforceable Limits:* At such time that a new or modified source within this permitted facility/source or modification of this permitted facility/source becomes a major stationary source or major modification solely by virtue of a relaxation in any legally and practically enforceable limitation which was established after August 7, 1980, on the capacity of the permitted facility/source to otherwise emit a pollutant, such as a restriction on hours of operation, then the requirements of the PSD regulations shall apply to the source or modification as though construction had not yet commenced on the source or modification.

11. *Revise, Reopen, Revoke and Reissue, or Terminate for Cause:* This permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee, for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. The EPA may reopen this permit for a cause on its own initiative, e.g., if this permit contains a material mistake or the Permittee fails to assure compliance with the applicable requirements.

12. *Severability Clause:* The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.

13. *Property Rights:* This permit does not convey any property rights of any sort or any exclusive privilege.

14. *Information Requests:* The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating this permit or to determine compliance with this permit. For any such information claimed to be confidential, the Permittee shall also submit a claim of confidentiality in accordance with 40 CFR part 2, subpart B.

15. *Inspection and Entry:* The EPA or its authorized representatives may inspect this permitted facility/source during normal business hours for the purpose of ascertaining compliance with all conditions of this permit. Upon presentation of proper credentials, the Permittee shall allow the EPA or its authorized representative to:

    (a) Enter upon the premises where this permitted facility/source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of this permit;

    (b) Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of this permit;

(c) Inspect, during normal business hours or while this permitted facility/source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements; and

(e) Record any inspection by use of written, electronic, magnetic and photographic media.

16. *Permit Effective Date:* This permit is effective immediately upon issuance unless comments resulted in a change in the proposed permit, in which case the permit is effective 30 days after issuance. The Permittee may notify the EPA, in writing, that this permit or a term or condition of it is rejected. Such notice should be made within 30 days of receipt of this permit and should include the reason or reasons for rejection.

17. *Permit Transfers:* Permit transfers shall be made in accordance with 40 CFR 49.159(f). The Air Program Director shall be notified in writing at the address shown below if the company is sold or changes its name.

U.S. Environmental Protection Agency, Region 8
Office of Partnerships and Regulatory Assistance
Tribal Air Permitting Program, 8P-AR
1595 Wynkoop Street
Denver, Colorado 80202

18. *Invalidation of Permit:* Unless this permitted source of emissions is an existing source, this permit becomes invalid if construction is not commenced within 18 months after the effective date of this permit, construction is discontinued for 18 months or more, or construction is not completed within a reasonable time. The EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between the constructions of the approved phases of a phased construction project. The Permittee shall commence construction of each such phase within 18 months of the projected and approved commencement date.

19. *Notification of Start-Up:* The Permittee shall submit a notification of the anticipated date of initial start-up of this permitted source to the EPA within 60 days of such date, unless this permitted source of emissions is an existing source.

B. Authorization

Authorized by the United States Environmental Protection Agency, Region 8

_____

Monica Morales, Acting Director Date
Air Program

United States Environmental Protection Agency
Region 8 Air Program
Air Pollution Control Synthetic Minor Source Permit to Construct
Technical Support Document for
Proposed Permit #SMNSR-UO-002178-2015.002

Tesoro Logistics-Rockies
Ponderosa Compressor Station
Uintah and Ouray Indian Reservation
Uintah County, Utah

In accordance with the requirements of the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR part 49, this Federal permit to construct is being issued under authority of the Clean Air Act (CAA). The EPA has prepared this technical support document describing the conditions of this permit and presents information that is germane to this permit action.

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I. Introduction

On September 8, 2015, the EPA received an application from Tesoro Logistics-Rockies (Tesoro), on behalf of QEP Field Services, LLC (QEPFS), requesting a synthetic minor permit for the existing Ponderosa Compressor Station in accordance with the requirements of the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR part 49.

This proposed permit action applies to an existing facility operating on Indian country lands within the Uintah and Ouray Indian Reservation in Utah.

This permit does not authorize the construction of any new emission sources, or emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. This permit is only intended to incorporate requested enforceable emission limits and operational restrictions from the MNSR application. Tesoro requested legally and practically enforceable requirements to control emissions of volatile organic compounds (VOC) from: one (1) tri-ethylene glycol (TEG) natural gas dehydration system using an open flame vapor combustion unit (flare); and two (2) condensate and one (1) produced water storage tanks using an enclosed vapor combustion device (enclosed combustion device). Tesoro operates the flare control emissions from the TEG dehydration system still vent for compliance with applicable requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Oil and Natural Gas Production Facilities at 40 CFR part 63, subpart HH (NESHAP HH) for major sources of hazardous air pollutants (HAP). Tesoro operates the enclosed combustion device on the three (3) storage tanks voluntarily. Tesoro is seeking to establish federal enforceability for total VOC emissions reductions that occur as a result of the applicable HAP emissions control requirements and the voluntary control of emissions from the storage tanks.

Upon compliance with this permit, Tesoro will have legally and practically enforceable restrictions on emissions that can be used when determining the applicability of other CAA permitting requirements, such as under the Prevention of Significant Deterioration (PSD) Permit Program at 40 CFR part 52 and the Title V Operating Permit Program at 40 CFR part 71 (Part 71 Permit Program).

II. Facility Description

At the Ponderosa Compressor Station, a comingled liquid stream flows from production wells in the field via pipeline to an onsite separator. The separator separates the stream into its individual phases of natural gas and liquids.

The natural gas phase exits the separator and flows to a compressor which compresses the gas before entering a TEG dehydration system. The compressor is driven by a natural gas-fired turbine.

Upon entering the TEG dehydration system, the natural gas bubbles up through the TEG in a process vessel called a contactor. During this process water vapor is removed from the natural gas to a concentration determined by a sales contract with the operator of the natural gas sales pipeline. The pipeline quality natural gas then exits the contactor, is metered, and is routed offsite. The TEG exits the contactor and is first routed through a flash tank separator. The flash vapors are routed to the flare to be combusted for destruction of hydrocarbon gases, particularly VOC and HAP. The TEG is then regenerated using heat in a vessel called a reboiler. A natural gas-fired heater heats the TEG to a set temperature that boils the impurities out of the TEG. The vapors from the reboiler are also routed to the flare. The regenerated TEG is circulated back through the contactor.

The liquid phase exits the separator and is routed to one (1) 400-barrel (bbl) condensate storage tank onsite that serves to separate the liquid stream into natural gas condensate and produced water. From there, the natural gas condensate flows to one (1) adjoining 400-bbl condensate storage tank and the produced water flows to one (1) 300-bbl produced water storage tank. Once adequate volumes are accumulated in the adjoining natural gas condensate storage tank, the condensate is trucked offsite to be sold. Likewise, once adequate volumes are accumulated in the produced water storage tank, the produced water is trucked offsite for further processing or treatment. The natural gas condensate and produced water storage tank vapors are routed to the enclosed combustion device for combustion and destruction of hydrocarbon gases, particularly VOC and HAP.

There are fugitive emissions associated with the potential leaking of gases, vapors, and fumes from connections, fittings, seals, flanges and valves. Pneumatic equipment onsite is powered by instrument air. Emissions also occur during the loading of tank trucks for sale of natural gas condensate and processing or treatment of produced water.

The emissions units identified in Table 1 are currently installed and operating at the facility. The information provided in this table is for informational purposes only and is not intended to be viewed as enforceable restrictions or open for public comment. The units and control requirements identified here either existed prior to any pre-construction permitting requirements or were approved/required through other mechanisms, as identified. Table 2, Facility-wide Emissions, provides an accounting of current potential emissions (accounting for enforceable NESHAP HH control requirements) and proposed allowable emissions (accounting for emissions limitations requested by Tesoro and proposed in this permit action) in tons per year (tpy).

Table 1. Existing Emission Units

Unit Description	Controls	Original Preconstruction Approval Date &/or Approval Details
One (1) natural gas-fired turbine	None	No pre-construction approval required for the installation of the turbine. Installed prior to the promulgation of the MNSR Permit Program.
Two (2) 400 bbl atmospheric natural gas condensate storage tanks	Enclosed Combustion Device	Installed prior to the promulgation of the MNSR Permit Program. Pre-construction approval and emission control requirements imposed through applicable requirements of NESHAP HH.
One (1) 300 bbl atmospheric produced water storage tank	Enclosed Combustion Device	Installed prior to the promulgation of the MNSR Permit Program. Pre-construction approval and emission control requirements imposed through applicable requirements of NESHAP HH.
One (1) 55 MMscfd* TEG dehydration system consisting of: One (1) 1.00 MMBtu/hr TEG reboiler; One (1) TEG/gas separation unit One (1) flash tank; and One (1) 11.0 gallon per minute (gpm) TEG pump.	Flare	Installed prior to the promulgation of the MNSR Permit Program. Pre-construction approval and emission control requirements imposed through applicable requirements of NESHAP HH.
Condensate and Produced Water Truck Loading Stations	None	No pre-construction approval required for the installation of the truck loading racks. Installed prior to the promulgation of the MNSR Permit Program.
Fugitive Equipment Leaks	None	No pre-construction approval required for fugitive equipment leaks. Facility constructed prior to the promulgation of the MNSR Permit Program.
Miscellaneous Venting (turbine startups, shutdowns, and seals)	None	No pre-construction approval required for miscellaneous venting. Turbine installed prior to the promulgation of the MNSR Permit Program.

* MMBtu/hr = million British thermal units per hour; MMscfd = million standard cubic feet per day.

Table 2. Facility-wide Emissions

Pollutant	Current Potential Emissions (tpy)	Proposed Allowable Emissions (tpy)
PM	2.11	2.11
PM_{10}	2.11	2.11
$PM_{2.5}$	2.11	2.11
SO_2	1.01	1.04
NO_X	51.37	51.44
CO	32.47	32.49
VOC	161.33	31.19
Greenhouse Gases		
CO_2 (mass basis)	38,015	37,437
CH_4 (mass basis)	285	90
N_2O (mass basis)	0	0
HFCs (mass basis)	NA	NA
PFCs (mass basis)	NA	NA
SF_6 (mass basis)	NA	NA
GHG_{total} (mass basis)	NA	NA
CO_2e (Total)	**45,172**	**39,718**
Hazardous Air Pollutants (HAP)		
Acetaldehyde	NA	NA
Acrolein	NA	NA
Benzene	0.84	0.81
Ethylbenzene	0.01	0.01
Toluene	1.27	1.22
n-Hexane	0.78	0.57
Xylene	0.09	0.08
Formaldehyde	0.22	0.22
2,2,4-Trimethylpentane	0.06	0.04
Cyclohexane	NA	NA
Total HAP*	**3.28**	**2.95**

PM – Particulate Matter
PM_{10} – Particulate Matter less than 10 microns in size
$PM_{2.5}$ – Particulate Matter less than 2.5 microns in size
SO_2 – Sulfur Dioxide
NO_X – Nitrogen Oxides
CO – Carbon Monoxide
VOC – Volatile Organic Compounds
CO_2 – Carbon dioxide
CH_4 – Methane
N_2O – Nitrous oxide
HFCs – Hydrofluorocarbons
PFCs – Perfluorocarbons
SF_6 – Sulfur hexafluoride
CO_2e – Equivalent CO_2. A measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP)

HFCs, PFCs, and SF_6 emissions are not created during oil and natural gas production operations.

NA – Not Available

*Total HAPs is inclusive of, but not limited to the individual HAPs listed above.

III. Proposed Synthetic Minor Permit Action

A. Synthetic Minor Permitting

For CAA construction permit programs, including the MNSR Permit Program, "potential to emit" (PTE) is defined as the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable as a practical matter.

"Enforceable as a practical matter" means that an emission limitation or other standard is both legally and practicably enforceable as follows:

(1) An emission limitation or other standard is legally enforceable if the reviewing authority has the right to enforce it.

(2) Practical enforceability for an emission limitation or for other standards (design standards, equipment standards, work practices, operational standards, and pollution prevention techniques) in a permit for a source is achieved if the permit's provisions specify:

(i) A limitation or standard and the emissions units or activities at the source subject to the limitation or standard;
(ii) The time period for the limitation or standard (e.g., hourly, daily, monthly, and/or annual limits such as rolling annual limits); and
(iii) The method to determine compliance, including appropriate monitoring, recordkeeping, reporting, and testing.

Independently enforceable applicable requirements, such as New Source Performance Standards (NSPS) and NESHAP are considered enforceable to the extent that the source is in compliance with the standard. In addition, reductions in non-targeted pollutants resulting from compliance with an independently enforceable applicable requirement may be counted as restrictions on PTE, provided the emission reduction of the non-targeted pollutant is enforceable as a practical matter.

The TEG dehydration system is subject to the requirements for major HAP sources in NESHAP HH. NESHAP HH applies enforceable restrictions to reduce emissions of certain HAP that are also VOC. However, the TEG dehydration system also emits other VOC that are not HAP regulated by NESHAP HH. The requirements of NESHAP HH are only enforceable as a practical matter for those specific HAP targeted by the rule that are also VOC. Therefore, in order for the control requirements to be enforceable as a practical matter for all VOC emitted from the TEG dehydration system, there must be emissions limitations (emissions limit, operational limitations, and associated monitoring, recordkeeping, and reporting requirements) related specifically to total VOC emissions.

The restrictions in the proposed permit will ensure that the facility will meet the relevant regulations and be consistent with applicable guidance.

Specifically, in response to Tesoro's request, the EPA is proposing conditions for the following emissions sources at the facility:

(1) 55 MMscfd TEG dehydration system, closed-vent system, and flare; and
(2) Two (2) 400-bbl natural gas condensate storage tanks, one (1) 300-bbl produced water storage tank, closed-vent system, and enclosed combustion device.

B. TEG Dehydration System and Controls

The oil and natural gas industry commonly uses the glycol absorption process to remove naturally occurring water from raw natural gas. Most commonly, the glycol absorbent used is TEG. The TEG dehydration process produces VOC and HAP emissions from pressure reduction of rich glycol (immediately post absorption and prior to stripping and regeneration) and from the stripping of the rich glycol to regenerate lean glycol to be reused in the process. The HAP emissions consist primarily of benzene, toluene, ethylbenzene and n-hexane.

The primary form of emission control is to capture and route the emissions from the still vent through a closed-vent system to an enclosed combustor, flare, or other combustion device to destroy the hydrocarbon content of the vapors. Tesoro uses a flare to meet the applicable NESHAP HH requirement to reduce the total HAP emissions from the TEG dehydration unit still vent by at least 95.0 % by weight.

The flare is designed by the manufacturer to destroy at least 95.0 % of the total VOC and HAP emissions from the still vent. Tesoro has requested enforceable permit restrictions on the dehydration system to recognize the use of the flare as designed and operated to meet the manufacturer guaranteed 95 % VOC control efficiency. Tesoro requested a VOC emissions limit to accompany the requirement to reduce emissions by 95.0 %.

We are proposing the emissions, operational, testing, monitoring, recordkeeping, and reporting requirements in Table 3 for the TEG dehydration system and flare. The proposed requirements are consistent with the requirements in NESHAP HH for major sources of HAP, which apply to the TEG dehydration system at the facility. We added any necessary additional testing, monitoring, and recordkeeping requirements where necessary, pursuant to 40 CFR 49.151(ii)(C), to ensure that the requested emission limits are legally and practically enforceable for control of total VOC emissions.

Table 3. Proposed TEG Dehydration System Emission, Operational, Testing, Monitoring, Recordkeeping, and Reporting Requirements

Type	**Proposed Requirement**
Construction and Operation	Route all emissions from the still vent through a closed vent system to a flare capable of reducing uncontrolled VOC emissions by at least 95.0 % by weight and capable of meeting the VOC emissions limit in the permit.
Emissions Limit	Limit emissions from the still vent to 6.00 tpy VOC.
Performance Testing	• Annual extended laboratory analysis of the inlet wet gas stream to the TEG dehydration system, or alternatively, analysis of wet gas from the facility inlet separator for use in process simulation software package. • Initial EPA Method 21 detectable emissions testing of the closed-vent system, plus. Subsequent tests at least every 12 months of operation thereafter. • Initial EPA Method 22 visible emissions testing of the flare. Subsequent tests upon every observation of visible smoke thereafter.
Monitoring	• Continuously measure natural gas flow rate and convert monthly flowrate to daily average. • Semiannual inspections of flare to ensure proper operations according to manufacturer recommendations. • Weekly pilot light inspection. • Weekly visible emissions inspection.
Recordkeeping	• All flare specifications and site-specific design input parameters. • All maintenance and monitoring conducted • All performance test results. • Results of all extended wet gas laboratory analyses. • Actual monthly average natural gas flowrates.

	• Total monthly and consecutive 12-month VOC emissions calculations for the TEG dehydration system still vent. • All deviations from permit conditions.
Reporting	Submit a summary of all monthly and 12-month rolling VOC emissions calculations and all maintenance, monitoring/inspections, and performance tests conducted in each annual report to the EPA.

The proposed emission restrictions will result in a reduction in VOC emissions from the TEG dehydration system still vent from 122.25 tpy to 6.00 tpy of VOC from the dehydration system. These controlled emissions are based on the dehydration system operating a maximum of 8,760 hours in a year, at a maximum capacity of 55 MMscfd, and maximum glycol recirculation pump rate of 11.0 gpm.

A. Natural Gas Condensate and Produced Water Storage Tanks and Controls

The oil and natural gas industry commonly uses atmospheric storage tanks for hydrocarbon-containing materials such as natural gas condensate and produced water. To control storage tanks that have the potential for flashing emissions, flashing emissions are captured and routed through a closed-vent system to either a combustion control device, a natural gas sales pipeline, or to be used for other beneficial purposes, such as fueling onsite equipment. Tesoro routes captured storage tank emissions through a closed-vent system to an enclosed combustion device capable of reducing the mass content of VOC and HAP by at least 95.0 % by weight.

Based on our review of Tesoro's permit application, we are proposing the construction, operation, emissions, testing, monitoring, recordkeeping, and reporting requirements in Table 4 for the two (2) natural gas condensate and one (1) produced water storage tanks and the associated enclosed combustion device.

Table 4. Proposed Storage Tank Construction, Operation, Emissions, Testing, Monitoring, Recordkeeping, and Reporting Requirements

Type	**Proposed Requirement**
Construction and Operation	Route all emissions from the natural gas condensate and produced water storage tanks through a closed vent system to an enclosed combustion device capable of reducing VOC and total HAP emissions by at least 95.0 % by weight.
Emissions Limit	Limit aggregate emissions from the two (2) natural gas condensate and one (1) produced water storage tanks to: • 0.63 tpy VOC; and • 0.02 tpy total HAP
Performance Testing	• Annual extended laboratory analysis of the natural gas condensate stored in the tanks. • Initial EPA Method 21 detectable emissions testing of the closed-vent system, plus. Subsequent tests at least every 12 months of operation thereafter.

	• Initial EPA Method 22 visible emissions testing of the enclosed combustion device (unless model tested by the manufacturer according to 40 CFR part 63, subpart HH). Subsequent tests upon every observation of visible smoke thereafter.
Monitoring	• Measure volume of natural gas condensate and produced water routed to each storage tank each month. • Semiannual inspections of enclosed combustion device to ensure proper operations according to manufacturer recommendations. • Weekly pilot light inspection. • Weekly visible emissions inspection.
Recordkeeping	• All control device specifications and site-specific design input parameters. • All maintenance and monitoring conducted. • All performance test results. • Results of all natural gas condensate laboratory analyses. • Monthly volume of natural gas and condensate handled by the storage tanks. • Total monthly and consecutive 12-month VOC and total HAP emissions calculations. • All deviations from permit conditions.
Reporting	Submit a summary of all monthly and 12-month rolling VOC and total HAP emissions calculations and all maintenance, inspection/monitoring, and performance tests conducted in each annual report to the EPA.

These proposed limits will result in aggregate totals of 0.63 tpy of VOC and 0.02 tpy total HAP for the two (2) natural gas condensate storage tanks and one (1) produced water storage tank. The potential controlled emissions are based on the enclosed combustion device operating for 8,760 hours in a year and at a 95.0 % VOC and total HAP control efficiency.

IV. Air Quality Review

The MNSR regulations at 40 CFR 49.154(d) require that an Air Quality Impact Assessment (AQIA) modeling analysis be performed if there is reason to be concerned that new construction would cause or contribute to a National Ambient Air Quality Standard (NAAQS) or PSD increment violation. If an AQIA reveals that the proposed construction could cause or contribute to a NAAQS or PSD increment violation, such impacts must be addressed before a pre-construction permit can be issued.

The emissions at this existing facility will not be increasing due to this permit action and the emissions will continue to be well controlled at all times. In addition, this permit action does not authorize the construction of any new emission sources, or emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations and the

requirements of NESHAP HH are being met at this facility. We have concluded that issuance of this MNSR permit will not contribute to NAAQS violations, or have adverse effects on ambient air quality; therefore, we have determined that an AQIA modeling analysis is not required for this action.

V. Tribal Consultations and Communications

We offer tribal government leaders an opportunity to consult on each permit action. We requested the tribal government leaders to respond to our offer to consult within 30 days of receiving the offer. We offered the Chairperson of the Ute Indian Tribe an opportunity to consult on this permit action via letter dated April 12, 2016. To date, the EPA has not received a request for such consultation.

All minor source applications (synthetic minor, minor modification to an existing facility, new true minor, and general permit) are submitted to both the tribe and the EPA per the application instructions (see https://www.epa.gov/caa-permitting/tribal-nsr-permitting-region-8). The tribe has 10 business days from the receipt of the application to communicate to the EPA any preliminary questions and comments on the application. In the event an AQIA is submitted (voluntarily or at our request), we email a copy of that document to the tribe within 5 business days from the date that we receive it.

Additionally, we notify the tribe of the public comment period for the proposed permit and provide copies of the notice of public comment opportunity to post in various locations of their choosing on the Reservation. We also notify the tribe of the issuance of the final permit.

VI. Environmental Justice

On February 11, 1994, the President issued Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The Executive Order calls on each federal agency to make environmental justice a part of its mission by “identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations.”

The EPA defines “Environmental Justice” as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and polices. The EPA’s goal with respect to Environmental Justice in permitting is to enable overburdened communities to have full and meaningful access to the permitting process and to develop permits that address environmental justice issues to the greatest extent practicable under existing environmental laws. *Overburdened* is used to describe the minority, low-income, tribal and indigenous populations or communities in the United States that potentially experience disproportionate environmental harms and risks as a result of greater vulnerability to environmental hazards.

This discussion describes our efforts to identify environmental justice communities and assess potential effects in connection with issuing this permit in Uintah County, Utah, on Indian country lands within the exterior boundaries of the Uintah and Ouray Indian Reservation.

A. Environmental Impacts to Potentially Overburdened Communities

This permit action does not authorize the construction of any new air emission sources, or air emission increases from existing units, nor does it otherwise authorize any other physical modifications to the associated facility or its operations. The air emissions at the existing facility will not increase due to the

associated action and the emissions will continue to be well controlled at all times. We have determined that issuance of this MNSR permit will not contribute to NAAQS violations, or have adverse effects on ambient air quality.

For purposes of Executive Order 12898 on environmental justice, the EPA has recognized that compliance with the NAAQS is "emblematic of achieving a level of public health protection that, based on the level of protection afforded by a primary NAAQS, demonstrates that minority or low-income populations will not experience disproportionately high and adverse human health or environmental effects due to the exposure to relevant criteria pollutants." *In re Shell Gulf of Mexico, Inc. & Shell Offshore, Inc.*, 15 E.A.D., slip op. at 74 (EAB 2010). This is because the NAAQS are health-based standards, designed to protect public health with an adequate margin of safety, including sensitive populations such as children, the elderly, and asthmatics.

As a result, we conclude that issuance of the aforementioned permit will not have disproportionately high or adverse human health effects on communities in the vicinity of the Uintah and Ouray Indian Reservation.

B. Enhanced Public Participation

Given the presence of potentially overburdened communities in the vicinity of the facility, we are providing an enhanced public participation process for this permit.

1. Interested parties can subscribe to an EPA email list that notifies them of public comment opportunities on the Indian country lands within the Uintah and Ouray Indian Reservation for proposed air pollution control permits by visiting https://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region, and clicking the link to "sign up to be notified by email of Region 8 CAA permit public comment opportunities."

2. All minor source applications (synthetic minor, modification to an existing facility, new true minor or general permit) are submitted to both the tribe and the EPA per the application instructions (see https://www.epa.gov/caa-permitting/tribal-nsr-permits-region-8).

3. The tribe has 10 business days to communicate to the EPA any preliminary questions and comments on the application.

4. In the event an AQIA is submitted (voluntarily or at our request), we email a copy of that document to the tribe within 5 business days from the date we receive it.

5. We notify the tribe of the public comment period for the proposed permit and provide copies of the notice of public comment opportunity to post in various locations of their choosing on the Reservation. We also notify the tribe of the issuance of the final permit.

6. We offer the tribal government leaders an opportunity to consult on each proposed permit action. The tribal government leaders are asked to respond to the EPA's offer to consult within 30 days of receiving the letter.

VII. Authority

Requirements under 40 CFR part 49 to obtain a permit apply to new and modified minor stationary sources, and minor modifications at existing major stationary sources ("major" as defined in 40 CFR 52.21). In addition, the MNSR permitting program provides a mechanism for an otherwise major stationary source to voluntarily accept restrictions on its potential to emit to become a synthetic minor source. We are charged with direct implementation of these provisions where there is no approved tribal implementation plan for implementation of the MNSR regulations. Pursuant to Section 301(d)(4) of the CAA (42 U.S.C. Section 7601(d)), we are authorized to implement the MNSR regulations at 40 CFR part 49 in Indian country. The Ponderosa Compressor Station is located on Indian country lands within the exterior boundaries of the Uintah and Ouray Indian Reservation in Utah. The exact location is Latitude 40.08807, Longitude -109.453332, in Uintah County, Utah.

VIII. Public Notice

A. Public Comment Period

In accordance with 40 CFR 49.157, we must provide public notice and a 30-day public comment period to ensure that the affected community and the general public have reasonable access to the application and proposed permit information. The application, the proposed permit, this technical support document, and all supporting materials for the proposed permit are available at:

Ute Indian Tribe
Energy and Minerals Department
P.O. Box 70
988 South 7500 East, Annex Building
Fort Duchesne, Utah 84026
Contact: Minnie Grant, Air Coordinator, 435-725-4900 or minnieg@utetribe.com

and

U.S. EPA
Region 8 Air Program Office
1595 Wynkoop Street (8P-AR)
Denver, Colorado 80202-1129
Contact: Claudia Smith, Air Permit Engineer, 303-312-6520 or smith.claudia@epa.gov

All documents are available for review at our office Monday through Friday from 8:00 a.m. to 4:00 p.m. (excluding Federal holidays). Additionally, the proposed permit and technical support document can be reviewed on our website at: https://www.epa.gov/caa-permitting/caa-permit-public-comment-opportunities-region-8.

Any person may submit written comments on the proposed permit and may request a public hearing during the public comment period. These comments must raise any reasonably ascertainable issues with supporting arguments by the close of the public comment period (including any public hearing). Comment may be sent to the EPA address above, or sent via an email to r8airpermitting@epa.gov, with the topic "Comments on SMNSR Permit for the Tesoro Logistics Ponderosa Compressor Station".

B. Public Hearing

A request for a public hearing must be in writing and must state the nature of the issues proposed to be raised at the hearing. We will hold a hearing whenever there is, on the basis of requests, a significant degree of public interest in a proposed permit. We may also hold a public hearing at our discretion, whenever, for instance, such a hearing might clarify one or more issues involved in the permit decision.

C. Final Permit Action

In accordance with 40 CFR 49.159, a final permit becomes effective 30 days after permit issuance, unless: (1) a later effective date is specified in the permit; (2) appeal of the final permit is made as detailed in the next section; or (3) we may make the permit effective immediately upon issuance if no comments resulted in a change or denial of the proposed permit. We will send notice of the final permit action to any individual who commented on the proposed permit during the public comment period. In addition, the source will be added to a list of final permit actions which is posted on our website at: https://www.epa.gov/caa-permitting/caa-permits-issued-epa-region-8. Anyone may request a copy of the final permit at any time by contacting the Tribal Air Permit Program at (800) 227–8917 or by sending an email to r8airpermitting@epa.gov.

D. Appeals to the Environmental Appeals Board

In accordance with 40 CFR 49.159, within 30 days after a final permit decision has been issued, any person who filed comments on the proposed permit or participated in the public hearing may petition the Environmental Appeals Board (EAB) to review any condition of the permit decision. The 30-day period within which a person may request review under this section begins when we have fulfilled the notice requirements for the final permit decision. Motions to reconsider a final order by the EAB must be filed within 10 days after service of the final order. A petition to the EAB is under Section 307(b) of the CAA, a prerequisite to seeking judicial review of the final agency action. For purposes of judicial review, final agency action occurs when we issue or deny a final permit and agency review procedures are exhausted.

MEMO TO FILE

DATE: June 27, 2016

SUBJECT: Uintah and Ouray Indian Reservation, Ponderosa Compressor Station; Tesoro Logistics-Rockies, Environmental Justice

FROM: Victoria Parker-Christensen, EPA Region 8 Air Program

TO: Source Files:
205c AirTribal, UO, Tesoro Logistics-Rockies Ponderosa CS
SMNSR-UO-002078-2015.002, 9/8/2015
FRED # 108007

On February 11, 1994, the President issued Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The Executive Order calls on each federal agency to make environmental justice a part of its mission by "identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations."

The EPA defines "Environmental Justice" as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and polices. The EPA's goal with respect to Environmental Justice in permitting is to enable overburdened communities to have full and meaningful access to the permitting process and to develop permits that address environmental justice issues to the greatest extent practicable under existing environmental laws. *Overburdened* is used to describe the minority, low-income, tribal and indigenous populations or communities in the United States that potentially experience disproportionate environmental harms and risks as a result of greater vulnerability to environmental hazards.

This discussion describes our efforts to identify environmental justice communities and assess potential effects in connection with issuing this permit in Uintah County, Utah, on Indian country lands within the Uintah and Ouray Indian Reservation.

Region 8 Air Program Determination

Based on the findings described in the following sections of this memorandum, we conclude that issuance of the aforementioned permit is not expected to have disproportionately high or adverse human health effects on overburdened communities in the vicinity of the facility.

Permit Request

The EPA received an application from Tesoro Logistics-Rockies (Tesoro), on behalf of QEP Field Services, LLC (QEPFS), requesting a synthetic minor permit for the existing Ponderosa Compressor Station in accordance with the requirements of the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR Part 49. Tesoro requested legally and practically enforceable emissions and

operational limitations that recognize volatile organic compound (VOC) emissions control equipment being installed and operating on existing emissions units.

This permit does not authorize the construction of any new air emission sources, or air emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. This permit is only intended to incorporate requested enforceable emission limits and operational restrictions from the MNSR application. Tesoro requested requirements to control VOC emissions from one (1) tri-ethylene glycol (TEG) dehydration system using an open flame vapor combustion unit (flare) and from two (2) condensate and one (1) produced water storage tanks using an enclosed vapor combustion device (enclosed combustor).

Upon compliance with this permit, Tesoro will have legally and practically enforceable restrictions on emissions that can be used when determining the applicability of other Clean Air Act (CAA) permitting requirements, such as under the Prevention of Significant Deterioration (PSD) Permit Program at 40 CFR Part 52 and the Title V Operating Permit Program at 40 CFR Part 71 (Part 71).

The facility is located at:

SW/SW S28, SE/SE S29, NW/NW S32, NE/NE S3 Township 8S, Range 22E
Latitude 40.08807, Longitude -109.453332

Air Quality Review

The MNSR regulations at 40 CFR 49.154(d) require that an Air Quality Impact Assessment (AQIA) modeling analysis be performed if there is reason to be concerned that new construction would cause or contribute to a National Ambient Air Quality Standard (NAAQS) or PSD increment violation. If an AQIA reveals that the proposed construction could cause or contribute to a NAAQS or PSD increment violation, such impacts must be addressed before a pre-construction permit can be issued. Because the permit actions do not authorize the construction of any new air emission sources, or air emission increases from existing units we have determined that an AQIA modeling analysis is not required for this action.

For purposes of Executive Order 12898 on environmental justice, the EPA has recognized that compliance with the NAAQS is "emblematic of achieving a level of public health protection that, based on the level of protection afforded by a primary NAAQS, demonstrates that minority or low-income populations will not experience disproportionately high and adverse human health or environmental effects due to the exposure to relevant criteria pollutants." *In re Shell Gulf of Mexico, Inc. & Shell Offshore, Inc.*, 15 E.A.D., slip op. at 74 (EAB 2010). This is because the NAAQS are health-based standards, designed to protect public health with an adequate margin of safety, including sensitive populations such as children, the elderly, and asthmatics.

The EPA has determined that issuance of this MNSR permit will not contribute to National Ambient Air Quality Standards (NAAQS) violations, or have potentially adverse effects on ambient air quality.

Environmental Impacts to Potentially Overburdened Communities

This permit action does not authorize the construction of any new air emission sources, or air emission increases from existing units, nor does it otherwise authorize any other physical modifications to the associated facility or its operations. The air emissions at the existing facility will not increase due to the associated action.

Furthermore, the permit contains a provision stating, "*The permitted source shall not cause or contribute to a National Ambient Air Quality Standard violation or a PSD increment violation.*" Noncompliance with this permit provision is a violation of the permit and is grounds for enforcement action and for permit termination or revocation. As a result, we conclude that issuance of the aforementioned permit will not have disproportionately high or adverse human health effects on communities in the vicinity of the Uintah and Ouray Indian Reservation.

Tribal Consultation and Enhanced Public Participation

Given the presence of potentially overburdened communities in the vicinity of the facility, we are providing an enhanced public participation process for this permit.

1. Interested parties can subscribe to an EPA listserve that notifies them of public comment opportunities on the Uintah and Ouray Indian Reservation for proposed air pollution control permits via email at http://www2.epa.gov/region8/air-permit-public-comment-opportunities.

2. All minor source applications (synthetic minor, modification to an existing facility, new true minor or general permit) are submitted to both the Tribe and us per the application instructions (see http://www2.epa.gov/region8/tribal-minor-new-source-review-permitting).

3. The Tribe has 10 business days to respond to us with questions and comments on the application.

4. In the event an AQIA is triggered, we email a copy of that document to the Tribe within 5 business days from the date we receive it.

5. We notify the Tribe of the public comment period for the proposed permit and provide copies of the notice of public comment opportunity to post in various locations of their choosing on the Reservation. We also notify the Tribe of the issuance of the final permit.

MEMO TO FILE

DATE: June 27, 2016

SUBJECT: Uintah and Ouray Indian Reservation, Ponderosa Compressor Station; Tesoro Logistics-Rockies, Endangered Species Act

FROM: Victoria Parker-Christensen, EPA Region 8 Air Program

TO: Source Files:
205c AirTribal, UO, Tesoro Logistics-Rockies Ponderosa CS
SMNSR-UO-002078-2015.002, 9/8/2015
FRED # 108007

Pursuant to Section 7 of the Endangered Species Act (ESA), 16 U.S.C. §1536, and its implementing regulations at 50 CFR, part 402, the EPA is required to ensure that any action authorized, funded, or carried out by the Agency is not likely to jeopardize the continued existence of any Federally-listed endangered or threatened species or result in the destruction or adverse modification of such species' designated critical habitat. Under ESA, those agencies that authorize, fund, or carry out the federal action are commonly known as "action agencies." If an action agency determines that its federal action "may affect" listed species or critical habitat, it must consult with the U.S. Fish and Wildlife Service (FWS). If an action agency determines that the federal action will have no effect on listed species or critical habitat, the agency will make a "no effect" determination. In that case, the action agency does not initiate consultation with the FWS and its obligations under Section 7 are complete.

In complying with its duty under ESA, the EPA, as the action agency, examined the potential effects on listed species and designated critical habitat relating to issuing this Clean Air Act (CAA) synthetic minor New Source Review permit in Uintah County, Utah, on Indian country lands within the Uintah and Ouray Indian Reservation.

Region 8 Air Program Determination

The EPA has concluded that the proposed synthetic minor NSR permit actions will have "*No effect"* on listed species or critical habitat. This proposed permit action does not authorize the construction of any new air emission sources, or air emission increases from existing units, nor does it otherwise authorize any other physical modifications to the associated facility or its operations. Because the EPA has determined that the federal action will have no effect, the agency made a *"No effect"* determination, did not initiate consultation with the FWS and its obligations under Section 7 are complete.

Permit Request

The EPA received an application from Tesoro Logistics-Rockies (Tesoro), on behalf of QEP Field Services, LLC, requesting a synthetic minor permit for the existing Ponderosa Compressor Station in accordance with the requirements of the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR Part 49. Tesoro requested legally and practically enforceable emissions and operational

limitations that recognize volatile organic compound (VOC) emissions control equipment being installed and operating on existing emissions units.

This permit does not authorize the construction of any new air emission sources, or air emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. This permit is only intended to incorporate requested enforceable emission limits and operational restrictions from the MNSR application. Tesoro requested requirements to control VOC emissions from one (1) tri-ethylene glycol dehydration system using an open flame vapor combustion unit (flare) and from two (2) condensate and one (1) produced water storage tanks using an enclosed vapor combustion device (enclosed combustor).

Upon compliance with this permit, Tesoro will have legally and practically enforceable restrictions on emissions that can be used when determining the applicability of other CAA permitting requirements, such as under the Prevention of Significant Deterioration Permit Program at 40 CFR Part 52 and the Title V Operating Permit Program at 40 CFR Part 71. The EPA has determined that issuance of this MNSR permit will not contribute to National Ambient Air Quality Standards (NAAQS) violations, or have potentially adverse effects on ambient air quality.

The facility is located at:

SW/SW S28, SE/SE S29, NW/NW S32, NE/NE S3 Township 8S, Range 22E
Latitude 40.08807, Longitude -109.453332

Conclusion

The EPA has concluded that the proposed synthetic minor NSR permit action will have "*No effect"* on listed species or critical habitat. This proposed permit action does not authorize the construction of any new air emission sources, or air emission increases from existing units, nor does it otherwise authorize any other physical modifications to the associated facility or its operations. The emissions, approved at present, from each existing facility will not increase due to the associated permit action. Because the EPA has determined that the federal action will have no effect, the agency will make a *"No effect"* determination. In that case, the EPA does not initiate consultation with the FWS and its obligations under Section 7 are complete.

MEMO TO FILE

DATE: June 27, 2016

SUBJECT: Uintah and Ouray Indian Reservation, Ponderosa Compressor Station; Tesoro Logistics-Rockies, National Historic Preservation Act

FROM: Victoria Parker-Christensen, EPA Region 8 Air Program

TO: Source Files:
205c AirTribal, UO, Tesoro Logistics-Rockies Ponderosa CS
SMNSR-UO-002078-2015.002, 9/8/2015
FRED # 108007

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment with regard to such undertakings. Under the ACHP's implementing regulations at 36 C.F.R. Part 800, Section 106 consultation is generally with state and tribal historic preservation officials in the first instance, with opportunities for the ACHP to become directly involved in certain cases. An "undertaking" is "a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval." 36 C.F.R. § 800.16(y).

Under the NHPA Section 106 implementing regulations, if an undertaking is a type of activity that has the potential to cause effects on historic properties, assuming any are present, then federal agencies consult with relevant historic preservation partners to determine the area of potential effect (APE) of the undertaking, to identify historic properties that may exist in that area, and to assess and address any adverse effects that may be caused on historic properties by the undertaking. If an undertaking is a type of activity that does not have the potential to cause effects on historic properties, the federal agency has no further obligations. 36 C.F.R. § 800.3(a)(1).

This memorandum describes EPA's efforts to assess potential effects on historic properties in connection with to issuing this Clean Air Act (CAA) synthetic minor New Source Review permit in Uintah County, Utah, on Indian country lands within the Uintah and Ouray Indian Reservation. As explained further below, EPA is finding that the proposed action does not have the potential to cause effects on historic properties, even assuming such historic properties are present.

Permit Request

The EPA received an application from Tesoro Logistics-Rockies (Tesoro), on behalf of QEP Field Services, LLC, requesting a synthetic minor permit for the existing Ponderosa Compressor Station in accordance with the requirements of the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR Part 49. Tesoro requested legally and practically enforceable emissions and operational

limitations that recognize volatile organic compound (VOC) emissions control equipment being installed and operating on existing emissions units.

This permit does not authorize the construction of any new air emission sources, or air emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. This permit is only intended to incorporate requested enforceable emission limits and operational restrictions from the MNSR application. Tesoro requested requirements to control VOC emissions from one (1) tri-ethylene glycol dehydration system using an open flame vapor combustion unit (flare) and from two (2) condensate and one (1) produced water storage tanks using an enclosed vapor combustion device (enclosed combustor).

Upon compliance with this permit, Tesoro will have legally and practically enforceable restrictions on emissions that can be used when determining the applicability of other CAA permitting requirements, such as under the Prevention of Significant Deterioration Permit Program at 40 CFR Part 52 and the Title V Operating Permit Program at 40 CFR Part 71. The EPA has determined that issuance of this MNSR permit will not contribute to National Ambient Air Quality Standards (NAAQS) violations, or have potentially adverse effects on ambient air quality.

The facility is located at:

SW/SW S28, SE/SE S29, NW/NW S32, NE/NE S3 Township 8S, Range 22E
Latitude 40.08807, Longitude -109.453332

Finding of No Potential to Cause Effects

The EPA has reviewed the proposed actions for potential impacts on historic properties. Because the activities authorized by the EPA permits does not authorize the construction of any new air emission sources, or air emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations, the Agency finds that this project does not have the potential to cause effects on historic properties, even assuming any are present.

State and Tribal Consultation

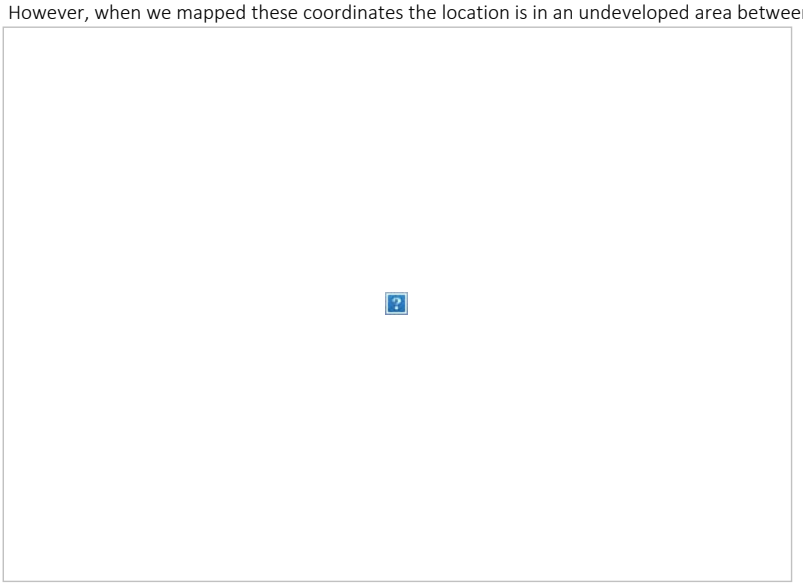
Because this undertaking is a type of activity that does not have the potential to cause effects on historic properties, the EPA has no further obligations under Section 106 of the National Historic Preservation Act or 36 C.F.R. part 800.

From: Knoll, Patrick J
To: Smith, Claudia
Cc: Parker-Christensen, Victoria
Subject: RE: Ponderosa Compressor Station Latitude and Longitude - please confirm location
Date: Thursday, April 21, 2016 9:47:31 AM
Attachments: removed.txt

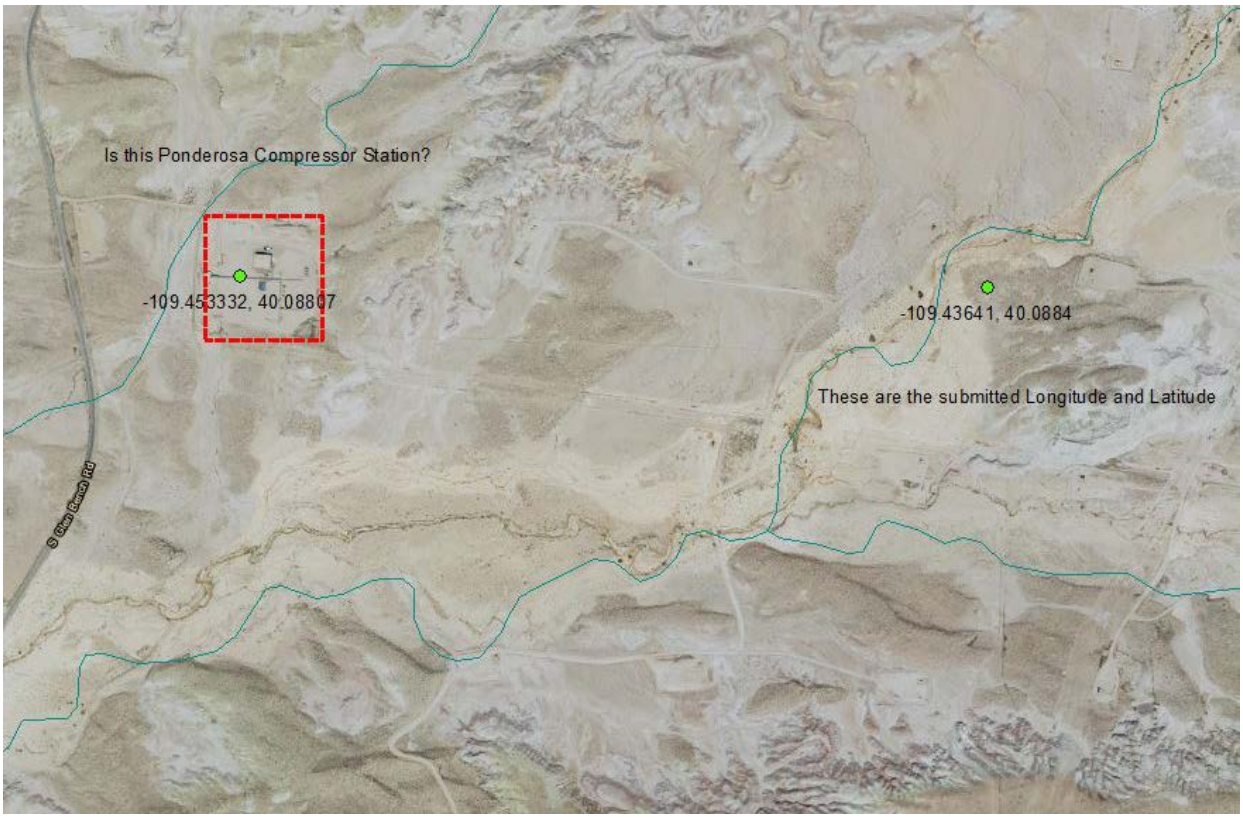
Claudia,
The facility located at Latitude: 40.08807 and Longitude: -109.453332 is the Ponderosa Compressor Station. I apologize for the confusion.
Thanks,
Pat

From: Smith, Claudia [mailto:Smith.Claudia@epa.gov]
Sent: Thursday, April 21, 2016 9:32 AM
To: Knoll, Patrick J
Cc: Parker-Christensen, Victoria
Subject: Ponderosa Compressor Station Latitude and Longitude - please confirm location

Patrick,
Tesoro may have submitted incorrect latitude and longitude for the Ponderosa Compressor Station. Can you confirm or correct the coordinates?
The latitude and longitude submitted to the EPA for the Ponderosa Compressor Station are Latitude: 40.0884 and Longitude: -109.43641. However, when we mapped these coordinates the location is in an undeveloped area between two small operations.



We did an internet search on Ponderosa Compressor Station and the location is given as Latitude: 40.08807 and Longitude: -109.453332 , see http://www.yourmapper.com/details/176/117765/ponderosa-compressor-station.htm These coordinates correspond to a facility near to the submitted location, see green dot in the red box in the picture below.



Thank you,
Claudia Young Smith
Environmental Scientist
Air Program, Mail Code 8P-AR
US Environmental Protection Agency Region 8
1595 Wynkoop Street
Denver, Colorado 80202
Phone: (303) 312-6520
Fax: (303) 312-6064
http://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region
****

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/aboutepa/epa-region-8-mountains-and-plains

Ref: 8P-AR

APR 12 2016

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Honorable Shaun Chapoose, Chairman
Ute Indian Tribe
P.O. Box 70
Fort Duchesne, Utah 84026

Re: Notification of Consultation and Coordination with Respect to the Issuance of Air Pollution Control Permit Pursuant to the Tribal Minor New Source Review (MNSR) Permit Program for an Existing Natural Gas Compressor Station on the Uintah and Ouray Indian Reservation

Dear Chairman Chapoose:

The U.S. Environmental Protection Agency Region 8 is initiating consultation and coordination with the Ute Indian Tribe with respect to issuance of a Clean Air Act air pollution control MNSR permit for an existing natural gas compressor station on Indian country lands within the Uintah and Ouray Indian Reservation in Duchesne County, Utah. In accordance with the MNSR Permit Program at 40 CFR Part 49, operator Tesoro Logistics GP, LLC - Rockies (Tesoro), is requesting a permit with federally enforceable air pollutant emission limits (synthetic minor MNSR permit) for the existing Ponderosa Compressor Station, which is owned by QEP Field Services, LLC.

The Ponderosa Compressor Station compresses and treats (dehydrates) field natural gas received from production sites (well pads) in the area. Tesoro submitted a synthetic minor MNSR permit application for the station to recognize the installation and operation of a flare on a tri-ethylene glycol dehydration unit and an enclosed combustion device to control combined emissions from two condensate storage tanks and one produced water storage tank operating at the facility to control emissions.

This consultation and coordination process is being conducted based on the *EPA Policy on Consultation and Coordination with Indian Tribes* (www.epa.gov/tribal/consultation/consult-policy.htm). The EPA invites you and your designated consultation representative(s) to participate in this process. The EPA's anticipated timeline for the consultation and coordination period extends to 30 days after you receive this letter.

In addition to offering government-to-government consultation, the EPA plans to regularly coordinate and communicate with the Ute Tribe's Acting Energy, Minerals and Air Director, Bruce Pargeets, for facilities located on Indian country lands within the Uintah and Ouray Indian Reservation. If you would prefer to designate an alternative representative for communication on air pollution control permitting matters, please notify us of that person's name and contact information. We will keep the tribal government informed and will seek your input on these permits.

The EPA welcomes the opportunity to consult and coordinate with the Tribe. If you choose to consult about this permitting action, we will work with your tribal government to develop a consultation plan including a description of the process we would follow, opportunity for your input, and timeline for us to provide feedback and to complete the consultation. We will send a draft consultation plan for your review as soon as practical after we receive your reply to this letter. The agency's goal will be to ensure that you have an opportunity to provide tribal input into this permit action.

We request that you reply in writing to this letter within the next 30 days if the Tribe desires to consult on this permit action. The official EPA contact person for this consultation and coordination process is Claudia Smith, a permit engineer on my staff.

Thank you very much for your attention to this matter. Please contact me at (303) 312-6392 or your staff can contact Claudia Smith at (303) 312-6520 or smith.claudia@epa.gov should you have any questions on this action. We look forward to hearing from you on this important matter.

Sincerely,

Darcy O'Connor
Acting Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

cc:
Edred Secakuku, Vice Chairman, Uintah and Ouray Business Committee
Tony Small, Councilman, Uintah and Ouray Business Committee
Ronald Wopsock, Councilman, Uintah and Ouray Business Committee
Justin Cummings Vanberhoop, Councilman, Uintah and Ouray Business Committee
Bruce Ignacio, Councilman, Uintah and Ouray Business Committee
Reannin Tapoof, Executive Assistant, Uintah and Ouray Business Committee
Tom Fredericks, Esq., Fredericks Peebles & Morgan LLP
Bruce Pargeets, Acting Director, Energy, Minerals and Air, Ute Indian Tribe
Minnie Grant, Air Coordinator, Energy, Minerals, and Air, Ute Indian Tribe

SMNSR-VO-CO2078-2015.002
Synthetic Minor NSR Permit

TESORO LOGISTICS
Tesoro Logistics GP, LLC
1050 17th Street, Suite 1700
Denver, CO 80265

September 3, 2015

Federal Minor NSR Permit Coordinator
U.S. EPA, Region 8
1595 Wynkoop St, 8P-AR
Denver, CO 80202-1129

Re: U.S. EPA Federal Minor New Source Review Program in Indian County, 40 CFR 49.151
Ponderosa Compressor Station Application for Synthetic Minor Permit

Dear Sir or Madam,

Tesoro Logistics-Rockies (TLLP), operator of the Ponderosa Compressor Station (Ponderosa CS) is submitting this synthetic minor permit application package to the U.S Environmental Protection Agency (USEPA) Region VIII on behalf of QEP Field Services, LLC (QEPFS) for the purpose of obtaining a Synthetic Minor Part 49 permit that reflects current equipment and operations at the Ponderosa CS. This 40 *Code of Federal Regulations* (CFR) Part 49 Synthetic Minor Operating Permit application includes detailed information on facility operations and associated emissions of all regulated pollutants of concern.

The Ponderosa CS has not required a construction or operating permit since its inception. As required by 40 CFR 49.151, a tribal registration was submitted for this facility, to the U.S. EPA Region 8 office, on February 22, 2013. This registration accounted for the following sources of emissions:

- One (1) Solar Taurus 70 turbine with site rating of 7,691 brake horsepower (bhp)
- Two (2) 400 barrel condensate storage tanks
- One (1) 300 barrel produced water storage tank
- One (1) enclosed vapor combustion device (tank combustor)
- Truck loadout emissions
- Miscellaneous venting emissions
- Equipment leak emissions (fugitives)

The new sources of emissions that have been added to the existing Ponderosa CS are:

- One (1) 55 million standard cubic feet per day (MMSCFD) dehydration unit with BTEX condenser and flash tank separator
- One (1) 1.0 million British thermal units per hour (MMBtu/hr) reboiler heater
- One (1) open flame vapor combustion unit (Flare)

This synthetic minor permit application will include all sources shown above.

This application is not a pre-construction application seeking reductions of regulatory obligations (e.g. per 40 CFR Part 63 Subpart HH or 40 CFR Part 71 [Title V]) prior to construction. The modifications to this facility, described in this submittal, have been completed. As such, TLLP is submitting this application only to document and obtain federal enforceability for VOC reductions as a co-benefit of hazardous air pollutant (HAP) emission control requirements.

The application includes the following components:

- Form NEW
- Form NEW Section D Attachments
    - FORM SYNMIN
    - Narrative description of the proposed production processes
    - Process flow chart
    - List and descriptions of all proposed emission units and air pollution-generating activities
    - Type and quantity of fuels
    - Type and quantity of raw materials used or final product produced
    - Proposed operating schedule
    - List and description of all proposed emission controls, control efficiencies, emission limits, and monitoring for each emission unit and air pollution generating activity.
    - Criteria Pollutant Emissions
    - Air Quality Review
    - ESA (Endangered Species Act) Review
    - NHPA (National Historic Preservation Act) Review
- Form SYNMIN Section B Attachments
    - Item 1 - The proposed limitation and a description of its effect on current actual, allowable and the potential to emit.
    - Item 2 - The proposed testing, monitoring, recordkeeping, and reporting requirements to be used to demonstrate and assure compliance with the proposed limitation.
    - Item 3 - A description of estimated efficiency of air pollution control equipment under present or anticipated operating conditions, including documentation of the manufacturer specifications and guarantees.
    - Item 4 - Estimates of the Post-Change Allowable Emissions that would result from compliance with the proposed limitation, including all calculations for the estimates.
    - Item 5 – Estimates of the potential emissions of Greenhouse Gas (GHG) pollutants.
- Emissions Inventory

If you have any questions regarding this submittal, do not hesitate to contact me at (303) 640-4273 or patrick.j.knoll@tsocorp.com.

Sincerely,

Patrick Knoll
Environmental Specialist

OMB Control No. Pending

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
FEDERAL MINOR NEW SOURCE REVIEW PROGRAM IN INDIAN COUNTRY
40 CFR 49.151

Application for New Construction

(Form NEW)

Please check all that apply to show how you are using this form:

- ☐ **Proposed Construction of a New Source**
- ☑ **Proposed Construction of New Equipment at an Existing Source**
- ☐ **Proposed Modification of an Existing Source**
- ☐ **Other – Please Explain**

Use of this information request form is voluntary and not yet approved by the Office of Management and Budget. The following is a check list of the type of information that Region 8 will use to process information on your proposed project. While submittal of this form is not required, it does offer details on the information we will use to complete your requested approval and providing the information requested may help expedite the process. Use of application forms for this program is currently under Office of Management and Budget review and these information request forms will be replaced/updated after that review is completed.

Please submit information to following two entities:

Federal Minor NSR Permit Coordinator
U.S. EPA, Region 8
1595 Wynkoop Street, 8P-AR
Denver, CO 80202-1129
R8airpermitting@epa.gov

For more information, visit:
http://www2.epa.gov/region8/tribal-minor-new-source-review-permitting

The Tribal Environmental Contact for the specific reservation:

If you need assistance in identifying the appropriate Tribal Environmental Contact and address, please contact:

R8airpermitting@epa.gov

A. GENERAL SOURCE INFORMATION

1. (a) **Company Name** (Who owns this facility?) QEP Field Services, LLC (b) **Operator Name** (Is the company that operates this facility different than the company that owns this facility? What is the name of the company?) Tesoro Logistics- Rockies	2. **Facility Name** Ponderosa Compressor Station
3. Type of Operation Natural Gas Compression	4. Portable Source? ☐ Yes ☑ No 5. Temporary Source? ☐ Yes ☑ No
6. NAICS Code 211111	7. SIC Code 1311
8. Physical Address (Or, home base for portable sources) NA	

9. Reservation*	10. County*	11a. Latitude (decimal format)*	11b. Longitude (decimal format)*
Uintah and Ouray	Uintah	40.0884	109.4364
12a. Quarter Quarter Section*	**12b. Section***	**12c. Township***	**12d. Range***
SW/SW, SE/SE, NW/NW, NE/NE	28, 29, 32, 33	8 South	22 East

*Provide all proposed locations of operation for portable sources

B. PREVIOUS PERMIT ACTIONS (Provide information in this format for each permit that has been issued to this source. Provide as an attachment if additional space is necessary)

Facility Name on the Permit
NA
Permit Number (xx-xxx-xxxxx-xxxx.xx)
NA
Date of the Permit Action
NA

Facility Name on the Permit
Permit Number (xx-xxx-xxxxx-xxxx.xx)
Date of the Permit Action

Facility Name on the Permit
Permit Number (xx-xxx-xxxxx-xxxx.xx)
Date of the Permit Action

Facility Name on the Permit
Permit Number (xx-xxx-xxxxx-xxxx.xx)
Date of the Permit Action

Facility Name on the Permit
Permit Number (xx-xxx-xxxxx-xxxx.xx)
Date of the Permit Action

C. CONTACT INFORMATION

Company Contact (Who is the primary contact for the company that owns this facility?) Charles Bates	Title District Manager
Mailing Address 1050 17th Street, Suite 1700 Denver CO 80265	
Email Address Charles.D.Bates@tsocorp.com	
Telephone Number (303) 260-1160	Facsimile Number

Operator Contact (Is the company that operates this facility different than the company that owns this facility? Who is the primary contact for the company that operates this facility?) Charles Bates	Title District Manager
Mailing Address 1050 17th Street, Suite 1700 Denver CO 80265	
Email Address Charles.D.Bates@tsocorp.com	
Telephone Number (303) 260-1160	Facsimile Number

Permitting Contact (Who is the person primarily responsible for Clean Air Act permitting for the company? We are seeking one main contact for the company. Please do not list consultants.) Patrick Knoll	Title Environmental Air Specialist
Mailing Address 1050 17th Street, Suite 1700 Denver CO 80265	
Email Address patrick.j.knoll@tsocorp.com	
Telephone Number (303) 640-4273	Facsimile Number

Compliance Contact (Is the person responsible for Clean Air Act compliance for this company different than the person responsible for Clean Air Act permitting? Who is the person primarily responsible for Clean Air Act compliance for the company? We are seeking one main contact for the company. Please do not list consultants.) Same as permitting contact shown above	Title
Mailing Address	
Email Address	
Telephone Number	Facsimile Number

E. TABLE OF ESTIMATED EMISSIONS

The following tables provide the total emissions in tons/year for all pollutants from the calculations required in Section D of this form, as appropriate for the use specified at the top of the form.

E(i) – Proposed New Source

Pollutant	Potential Emissions (tpy)	Proposed Allowable Emissions (tpy)	
PM	2.1	2.1	PM - Particulate Matter PM_{10} - Particulate Matter less than 10 microns in size $PM_{2.5}$ - Particulate Matter less than 2.5 microns in size SO_2 - Sulfur Oxides NOx - Nitrogen Oxides CO - Carbon Monoxide VOC - Volatile Organic Compound Pb - Lead and lead compounds Fluorides - Gaseous and particulates H_2SO_4 - Sulfuric Acid Mist H_2S - Hydrogen Sulfide TRS - Total Reduced Sulfur RSC - Reduced Sulfur Compounds
PM_{10}	2.1	2.1	
$PM_{2.5}$	2.1	2.1	
SO_2	1.0	1.0	
NO_x	51.4	51.4	
CO	32.5	32.5	
VOC	161.3	31.2	
Pb	0	0	
Fluorides	0	0	
H_2SO_4	0	0	
H_2S	0	0	
TRS	0	0	
RSC	0	0	

Emissions calculations must include fugitive emissions if the source is one the following listed sources, pursuant to CAA Section 302(j):

(a) Coal cleaning plants (with thermal dryers);
(b) Kraft pulp mills;
(c) Portland cement plants;
(d) Primary zinc smelters;
(e) Iron and steel mills;
(f) Primary aluminum ore reduction plants;
(g) Primary copper smelters;
(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
(i) Hydrofluoric, sulfuric, or nitric acid plants;
(j) Petroleum refineries;
(k) Lime plants;
(l) Phosphate rock processing plants;
(m) Coke oven batteries;
(n) Sulfur recovery plants;
(o) Carbon black plants (furnace process);
(p) Primary lead smelters;
(q) Fuel conversion plants;
(r) Sintering plants;
(s) Secondary metal production plants;
(t) Chemical process plants
(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
(w) Taconite ore processing plants;
(x) Glass fiber processing plants;
(y) Charcoal production plants;
(z) Fossil fuel-fired steam electric plants of more that 250 million British thermal units per hour heat input, and
(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

E(ii) – Proposed New Construction at an Existing Source or Modification of an Existing Source

Pollutant	Current Actual Emissions (tpy)	Current Allowable Emissions (tpy)	Post-Change Potential Emissions (tpy)	Post-Change Allowable Emissions (tpy)
PM	1.6	1.6	2.1	2.1
PM_{10}	1.6	1.6	2.1	2.1
$PM_{2.5}$	1.6	1.6	2.1	2.1
SO_2	0.78	0.78	1.0	1.0
NO_x	38.7	38.7	51.4	51.4
CO	24.6	24.6	32.5	32.5
VOC	23.0	31.0	161.3	31.2
Pb	0.0	0.0	0.0	0.0
Fluorides	0.0	0.0	0.0	0.0
H_2SO_4	0.0	0.0	0.0	0.0
H_2S	0.0	0.0	0.0	0.0
TRS	0.0	0.0	0.0	0.0
RSC	0.0	0.0	0.0	0.0

PM - Particulate Matter
PM_{10} - Particulate Matter less than 10 microns in size
$PM_{2.5}$ - Particulate Matter less than 2.5 microns in size
SO_2 - Sulfur Oxides
NOx - Nitrogen Oxides
CO - Carbon Monoxide
VOC - Volatile Organic Compound
Pb - Lead and lead compounds
Fluorides - Gaseous and particulates
H_2SO_4 - Sulfuric Acid Mist
H_2S - Hydrogen Sulfide
TRS - Total Reduced Sulfur
RSC - Reduced Sulfur Compounds

The public reporting and recordkeeping burden for this collection of information is estimated to average 20 hours per response, unless a modeling analysis is required. If a modeling analysis is required, the public reporting and recordkeeping burden for this collection of information is estimated to average 60 hours per response .Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEDERAL MINOR NEW SOURCE REVIEW PROGRAM IN INDIAN COUNTRY

40 CFR 49.151

Application for New Construction

Form NEW Section D Attachments

- FORM SYNMIN
- Narrative description of the proposed production processes
- Process flow chart
- List and descriptions of all proposed emission units and air pollution-generating activities
- Type and quantity of fuels
- Type and quantity of raw materials used or final product produced
- Proposed operating schedule
- List and description of all proposed emission controls, control efficiencies, emission limits, and monitoring for each emission unit and air pollution generating activity.
- Criteria Pollutant Emissions
- Air Quality Review
- ESA (Endangered Species Act) Review
- NHPA (National Historic Preservation Act) Review

OMB Control No. Pending

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
FEDERAL MINOR NEW SOURCE REVIEW PROGRAM IN INDIAN COUNTRY
40 CFR 49.151

Application For Synthetic Minor Limit

(Form SYNMIN)

Use of this information request form is voluntary and not yet approved by the Office of Management and Budget. The following is a check list of the type of information that Region 8 will use to process information on your proposed project. While submittal of this form is not required, it does offer details on the information we will use to complete your requested approval and providing the information requested may help expedite the process. Use of application forms for this program is currently under Office of Management and Budget review and these information request forms will be replaced/updated after that review is completed.

Please submit information to following two entities:

Federal Minor NSR Permit Coordinator
U.S. EPA, Region 8
1595 Wynkoop Street, 8P-AR
Denver, CO 80202-1129
R8airpermitting@epa.gov

For more information, visit:
http://www2.epa.gov/region8/tribal-minor-new-source-review-permitting

The Tribal Environmental Contact for the specific reservation:

If you need assistance in identifying the appropriate Tribal Environmental Contact and address, please contact:

R8airpermitting@epa.gov

A. GENERAL INFORMATION

Company Name (Who owns this facility?) Tesoro Logistics- Rockies	**Facility Name** Ponderosa Compressor Station
Company Contact (Who is the primary contact for the company that owns this facility?) Charles Bates	Title District Manager
Mailing Address 1050 17th Street, Suite 1700, Denver, CO 80265	
Email Address Charles.D.Bates@tsocorp.com	
Telephone Number (303) 260-1160	Facsimile Number

B. ATTACHMENTS

For each criteria air pollutant, hazardous air pollutant and for all emission units and air pollutant-generating activities to be covered by a limitation, include the following:

☑ **Item 1** - The proposed limitation and a description of its effect on current actual, allowable and the potential to emit.
☑ **Item 2** - The proposed testing, monitoring, recordkeeping, and reporting requirements to be used to demonstrate and assure compliance with the proposed limitation.
☑ **Item 3** - A description of estimated efficiency of air pollution control equipment under present or anticipated operating conditions, including documentation of the manufacturer specifications and guarantees.
☑ **Item 4** - Estimates of the Post-Change Allowable Emissions that would result from compliance with the proposed limitation, including all calculations for the estimates.
☑ **Item 5** – Estimates of the potential emissions of Greenhouse Gas (GHG) pollutants.

Narrative Description

At the Ponderosa Compressor Station, a comingled liquid stream (containing natural gas, condensate, and water) flows from the field via pipeline to a separator on location. In the separator, the stream is separated into its individual phases (natural gas and liquids).

The natural gas phase exits the separator and is routed as follows:

> The gas stream exits the separator and flows to a compressor which compresses the gas before entering the dehydration unit. The compressor is driven by a Solar Taurus 70 turbine which is fueled with natural gas.
>
> Upon entering the glycol dehydration unit, the natural gas bubbles up through triethylene glycol (TEG) in a process vessel known as a contactor. During this process water vapor is removed from the gas to a concentration determined by a sales contract. The pipeline quality natural gas then exits the contactor, is metered, and is routed off location.
>
> The TEG exits the contactor and is first routed through a flash tank separator. The flash vapors are sent to the emission control device (flare) to be combusted. The TEG is then regenerated using heat in a vessel known as a reboiler. A gas fired heater heats the TEG to a set temperature that boils the impurities out of the TEG. The vapors from the reboiler are routed to the emission control device (flare). The regenerated TEG is circulated back through the contactor.

The liquid phase exits the separator and is routed as follows:

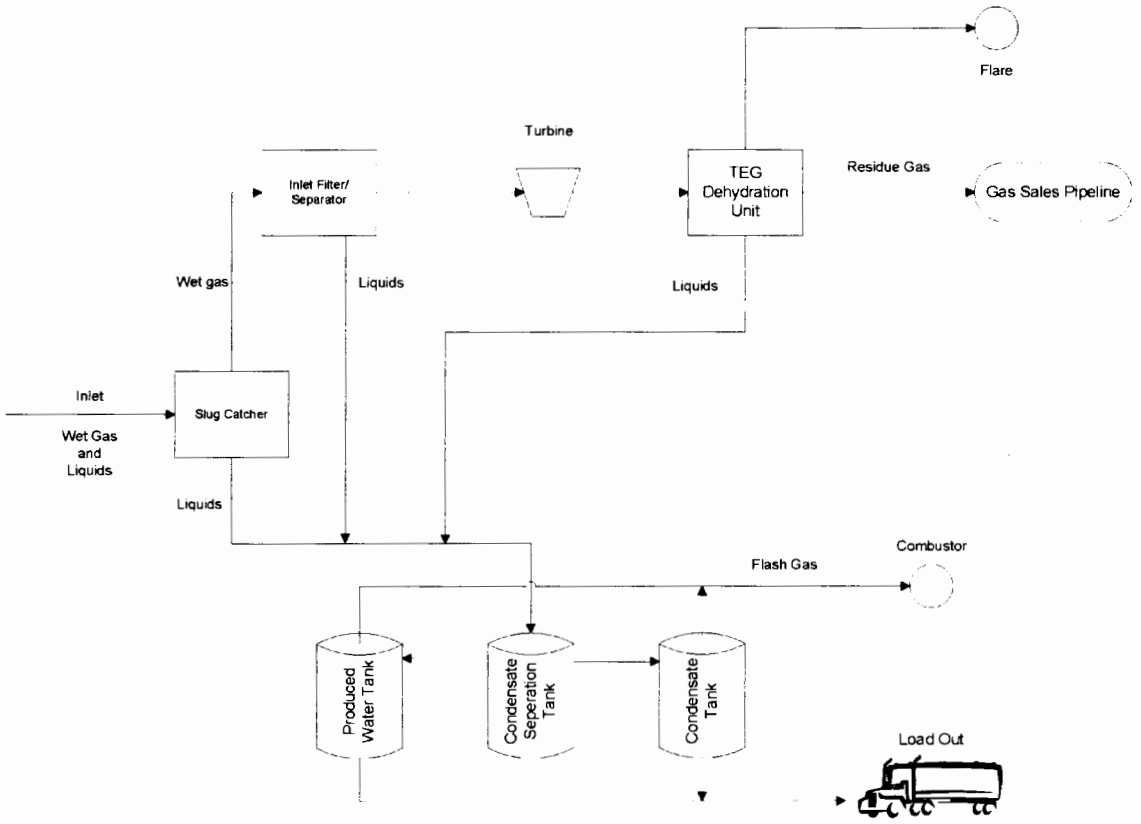
> The condensate flows to one (1) 400 barrel (bbl) condensate tank on location that acts as a separator. From there, the condensate flows to one (1) adjoining 400 barrel (bbl) and the produced water flows to one (1) adjoining 300 barrel (bbl) produced water tank.
>
> Once adequate volumes are accumulated in the adjoining condensate tank, the condensate is trucked off location to be sold. Likewise, once adequate volumes are accumulated, the produced water is trucked off location for further processing or treatment.
>
> The condensate and produced water tank vapors are routed to the emission control device (combustor) for destruction.

There are fugitive emissions associated with the potential seeping of gas from connections, seals, flanges and valves. Instrument air is utilized onsite for energizing pneumatic equipment.

Tank truck loading emissions also occur during the loading of the tank trucks for sales.

The condensate and produced water is submerge-filled as it is loaded in to the truck. As the condensate and produced water are pumped into the truck, the fluids displace the vapors. The displacement causes the vapors to vent from inside the truck to the atmosphere.

Process Flow Chart

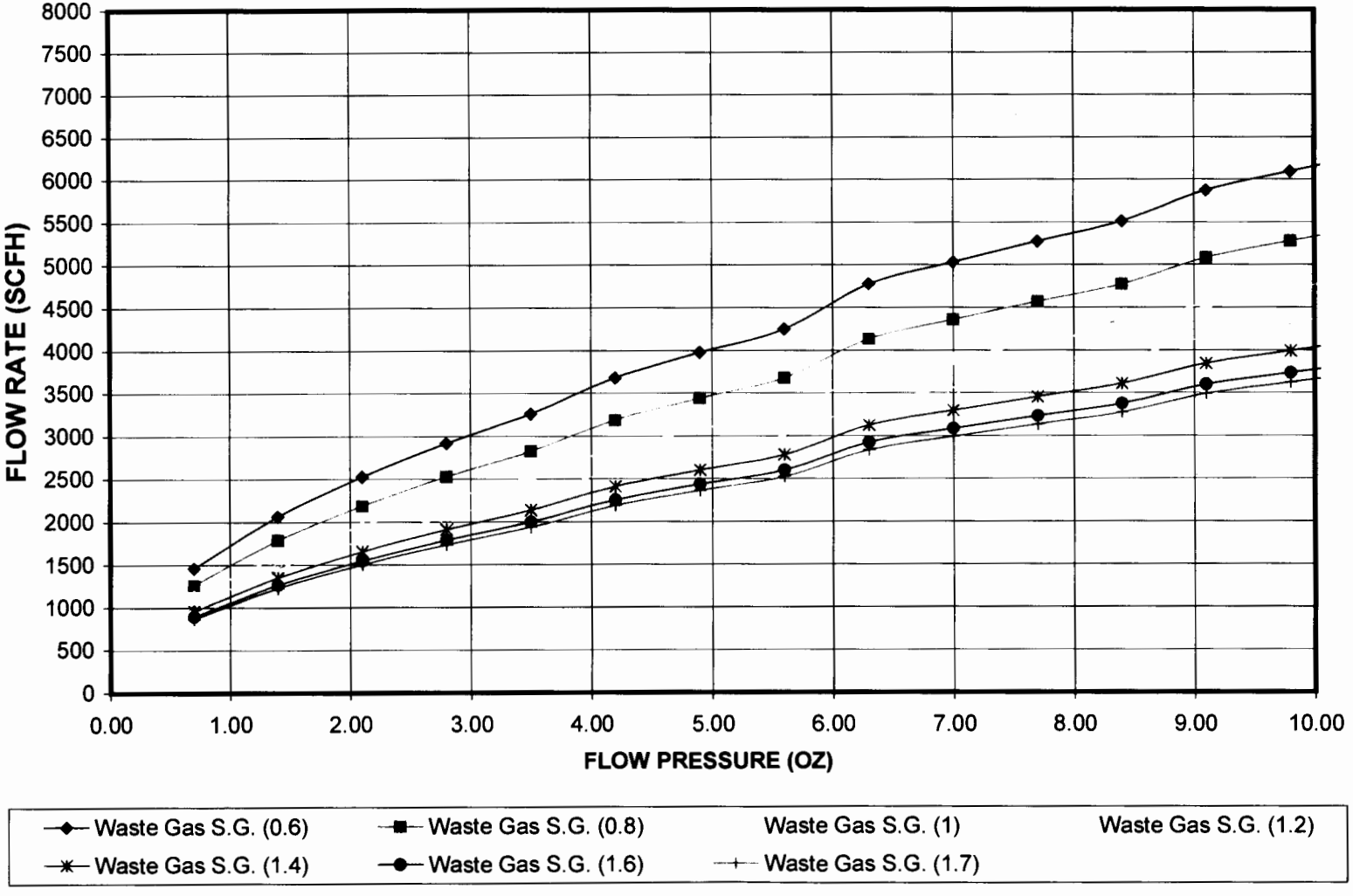


List and Description of all Proposed Emission Units and Air Pollution-Generating Activities

The Ponderosa Compressor Station (Ponderosa CS) has not required a construction or operating permit since its inception. As required by 40 CFR 49.151, a tribal registration was submitted for this facility, to the U.S. EPA Region 8 office, on February 22, 2013. This registration accounted for the following sources of emissions:

- One (1) Solar Taurus 70 turbine with site rating of 7,691 brake horsepower (bhp)
- Two (2) 400 barrel condensate storage tanks
- One (1) 300 barrel produced water storage tank
- One (1) enclosed vapor combustion device (tank combustor)

TEC 4CS FLOW CURVE



Tornado Technologies Inc.
#100 2635 - 37 Ave N.E.
Calgary , Alberta Canada T1Y 5Z6
Toll Free: 1-888-882-3882

CUSTOMER DATA SHEET

Client: xxx
Site: DJ BASIN GAS
Filename: TEC 4CS ENCAL-DJ designplus NOx.xls

Date: Jan-16-2008
Model: TEC 4CS

TEC Design Flow Specifications

	Imperial	Metric
Maximum Design Flowrate	3625 *scf/hr.*	103 *scm/hr*
Minimum Design Flowrate	385 *scf/hr.*	11 *scm/hr*
Waste Gas Turn Down Ratio	10.0 : 1	10.0 : 1
Ambient Pressure	310.2 *Inches H2O*	788 *cm H2O*
Ambient Air Temperature	70 *deg. F*	21 *deg. C*

TEC Design Data

	Imperial	Metric
Incinerator OD	3.935 *feet*	1.199 *meters*
Combustion Chamber Height	20.03 *feet*	6.105 *meters*
Total Height	25.03 *feet*	7.629 *meters*
Foot Print Side Length	54 *inches*	1.372 *meters*

Supplied Waste Gas Data

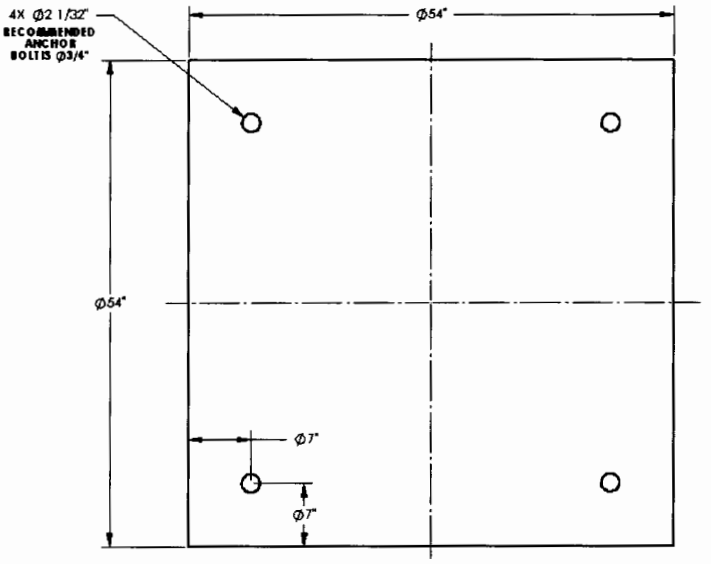
	Imperial	Metric
Maximum Waste Gas Inlet Flowrate	3600 *scf/hr.*	102 *scm/hr*
Minimum Waste Gas Inlet Flowrate	360 *scf/hr.*	10 *scm/hr*
Pseudo Waste GasTemp. (Max Flow)	64.6 *deg. F*	18.08 *deg. C*
Pseudo Waste GasTemp. (Min Flow)	60.8 *deg. F*	15.99 *deg. C*
Spec. Grav. Relative to Air (Max Flow)	1.5528	1.5528

Combustion Data (Based on Maximum Input)

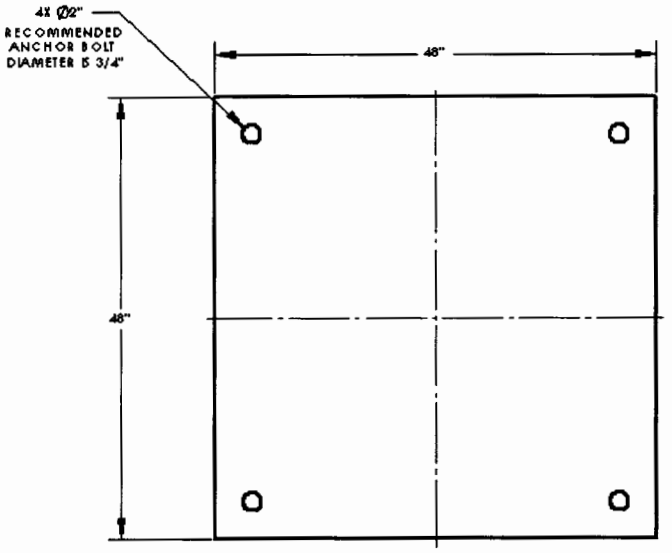
	Imperial	Metric
Stack Top Temperature	1600 *deg. F*	871 *deg. C*
Minimum Residence Time	0.53 *sec*	0.53 *sec*
Chamber Exit Velocity	34.33 *ft/s*	10.47 *m/s*
Chamber ID	3.58 *feet*	1.09 *meters*
Calorific Value of Waste & Pilot Gas	2308 *BTU/acf*	85.95 *MJ/acm*
Products of Combustion POC	1244768 *acf/hr.*	35248 *acm/hr*
Stoichiometric Air (Max. Flow)	119594 *acf/hr.*	3387 *acm/hr*
Excess Air (Max. Flow)	184714 *acf/hr.*	5231 *acm/hr*
Stack O2 Reading (Volume)	13.37%	13.37%
CO2 Emission (Mass)	1271 *lbs/hr.*	160.1 *gm/s.*
NOx Emission (Mass)	1.005 *lbs/hr.*	0.1 *gm/s.*
NOx Concentration	35 ppm	
SO2 Emission (Volume)	0.0000 *scf/s*	0.0000 *scm/s*
SO2 Emission (Mass)	0.00 *lbs/hr.*	0.00 *gm/s.*
Chamber Heat Flux	830869 *BTU/(sq.ft-hr)*	9.43 *GJ/(sq.m-hr)*

Base plate Geometry

TEC4-CS



TEC3-CS

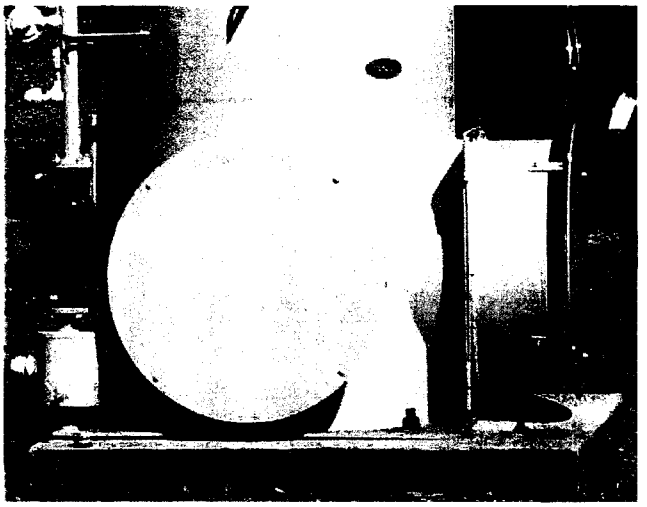


Specifications

Parameters	TEC4-CS	TEC3-CS
Maximum Unit Capacity[1]:	86,400 scf/day (2 decs /Day)	45,696 scf/day (1.3 decs /Day)
Maximum Heat Release[1]:	9.0 MMBTU/hr (2.635 kW/hr)	4.38 MMBTU/hr (1.282 kW/hr)
Turn Down Ratio:	30:1	30:1
Maximum Burner Capacity:	3600 SCFH (102 SCMH)	1904 SCFH (53.9 SCMH)
Minimum Burner Capacity:	120 SCFH (3.4 SCMH)	63.5 SCFH (1.79 SCMH)
Burner Manifold Press. Range:	0.5-10 Oz (0.216-4.31 kPa)	0.5-10 Oz (0.216-4.31 kPa)
Pilot Consumption:	25 SCFH (0.708 SCMH)	25 SCFH (0.708 SCMH)
Pilot Ignition[2]:	Piezoelectric Igniter	Piezoelectric Igniter
Pilot Burner:	Standing Pilot	Standing Pilot
Diameter:	4 Feet (1.22 Meters)	3 Feet (0.914 Meters)
Combustion Chamber Height:	20 Feet (6.10 Meters)	20 Feet (6.10 Meters)
Overall Height:	25 Feet (7.6 Meters)	25 Feet (7.6 Meters)
Overall Weight:	3178 lbs (1441 kg)	2524 lbs (1144 kg)
Overturning Wind Moment at Base[3]:	29,703 ft-lbs (176 kN-m)	23,103 ft-lbs (137 kN-m)

1 Based upon 2300 BTU/scfh gas, actual unit capacity will vary depending on waste gas heating value.
2 Optional solar power or 12/24 VDC ignition packages are available
3 Based on 90 mph (145 kph) wind load.

Concrete Pad Mounting Option



Hinge door inlet air arrestor inspection access.

TEC4-CS Concrete Pad

Concrete Pad Dimension Size:	6' x 6' x 4"
Rebar Center-Center Distance:	12 inch
Concrete Pad Weight:	1741 lbs
Base Plate Width:	54 inch
Base Plate Length:	54 inch

Design Features

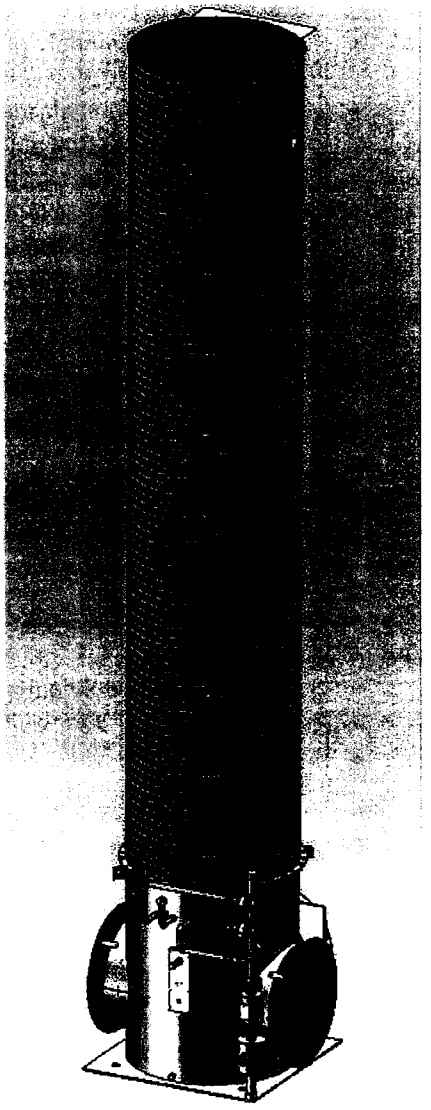
- Specifically designed for the combustion of rich, low pressure gas and containing the flame within the combustion chamber.
- Low pressure, atmospheric burners capable of providing a quiet, stable flame front and predictable maximum heat release.
- Utilizes a highly reliable pilot and manual ignition system used in the industry for the past 15 years in hundreds of applications and environments.
- Includes combustion air inlet arrestor's mounted on a vertical plane to reduce fouling of the elements while also allowing the unit to be located in "hazardous" classified areas near process equipment.
- The maximum contact surface temperature anywhere on the unit is less than 150 degrees F.
- The maximum surface temperature anywhere on the unit is well below the auto ignition temperature of 835 degrees F. and can never be a unsafe ignition source.
- The combustion chamber height has been designed to conceal the expected maximum flame length as well as provide for adequate residence time to completely oxidize all combustibles prior to exiting the unit.
- The refractory lining allows the unit to withstand thermal shock therefore no preheat period is required in operation. This also permits for the application of custom non high temperature paint colors.
- The unit includes a Tornado Technologies Inline Deflagration Arrestor so as to protect equipment upstream of the unit from flashback occurrences.
- A slug catcher with a drain fitting is installed on the waste gas inlet to collect condensate carry over.
- Thermally insulated structure to protect equipment and provide operator safety during operation.
- Low Service Factor Costs
- Low IR Exposure
- Light Weight-Free Standing design allows for ease of handling.
- SS bird screen on stack exit.
- Free Standing, 90 MPH engineered wind load design.

TEC4-CS Base Section

THERMAL OXIDIZER

The **TEC4-CS & TEC3-CS** have been designed to burn low volumes of waste gas in either continuous or intermittent flow conditions with gas compositions that contain 1% or less H_2S.

- They are best suited to handle intermittent flow rates from various flow streams and contain the flame with in their chambers.
- Each design utilizes up to three burner manifolds along with a zone control system that adjusts to varying flow rates to maintain proper levels of destruction at all times.
- Stack heights are designed to completely conceal the combustion flame.
- The units are designed for smokeless operation.
- High destruction efficiency (99.95%+).
- Easily adaptable design to meet specific site requirements.



Applications

- Solution Gas Disposal
- Casing Gas Disposal
- Tank Vapor Disposal,
- Sour Off Gas Disposal
- Fugitive Emissions
- Odor Control

- Truck load out emissions
- Miscellaneous venting emissions
- Equipment leak emissions (fugitives)

The following new sources of emissions have been added to the existing Ponderosa CS:

- One (1) 55 million standard cubic feet per day (MMSCFD) dehydration unit with BTEX condenser and flash tank separator
- One (1) 1.0 million British thermal units per hour (MMBtu/hr) reboiler heater
- One (1) open flame vapor combustion unit (Flare)

Type and Quantity of Fuels

All combustion equipment is natural gas-fired. Actual and proposed fuel usages is provided in the tables below:

Actual Natural Gas Fuel Usage 2014				
Source	Sulfur Content (lb SO_2/MMBtu)	SCF/hr	MSCFD	MSCF/yr
Turbine	0.0	49,313	1,184	431,978
Combustor	0.0	25	0.6	219
Total		49,338	1,184	432,197

Potential Natural Gas Fuel Usage				
Source	Sulfur Content (lb SO_2/MMBtu)	SCF/hr	MSCFD	MSCF/yr
Turbine	0.0	64,039	1,537	560,986
Flare	0.0	54	1.3	473
Combustor	0.0	25	0.6	219
Reboiler	0.0	895	21	7,840
Total		65,014	1,560	569,518

Type and Quantity of Raw Materials

The raw product, wet natural gas, is compressed and dehydrated at the facility. The facility has the capacity to produce 55 MMscf of dry, compressed natural gas a day.

Proposed Operating Schedule

24 hours per day, 7 days per week, 52 weeks per year.

Proposed Emissions Controls

The following emission controls are in use at Ponderosa CS:

- One (1) enclosed vapor combustion device (tank combustor) with a designed destruction efficiency of 95%
- One (1) open flame vapor combustion unit (Flare) designed in compliance with 40CFR Part 63.18

Criteria Pollutant Emissions:

Detailed emissions calculations are provided in the attached "Emissions Inventory".

Air Quality Review:

The Ponderosa Compressor Station is located in Uintah county. This area is designated attainment or unclassifiable for all critera pollutants.

Endangered Species Act (ESA):

ESA reviews are not applicable, since the facility has already been constructed. The facility underwent reviews and was cleared by the jurisdictional land management agencies in 2007. Documentation of the ESA review is attached.

National Historic Preservation Act (NHPA):

NHPA reviews are not applicable, since the facility has already been constructed. The facility underwent reviews and was cleared by the jurisdictional land management agencies in 2007. Documentation of the NHPA review is attached.

ENVIRONMENTAL ANALYSIS
SITE SPECIFIC
PONDEROSA COMPRESSOR STATION

Legal Description: Sections 28, 29, 32 & 33 T8S, R22E,
12" SUCTION PIPELINE "A" Section 33, T 8S, R 22 E
12" SUCTION PIPELINE "B" Sections 29, 31 & 32
Uintah County, UT
COMPANY: Questar Gas Management
Date: May 5, 2007

1.0 - PROPOSED ACTION

	ROAD ACCESS	# of feet	Contained within damage area
	WELL PAD	# of feet	
X	PIPELINE	# of feet	
	POWERLINE	# of feet	
	CORRIDOR ROW	# of feet	"A" -4,419.01 feet, "B" – 10,108.71 feet
	Other		Compressor Station 17.360 acres

Notes: PIPELINE IS A CORRIDOR ROW

2.0 - ALTERNATIVE ACTIONS

A. ALTERNATIVE CONSIDERED: The proposed action is the preferred alternative.

B. NO ACTION: Under the no action alternative, the proposed action would not be implemented.

C. OTHER: NA ;

3.0 - SITE SPECIFIC SURVEY

A. SITE DESCRIPTION

1. Elevation (feet)	4,762-4,779 feet					
2. Annual precipitation (inches)	4-6"					
3. Topography	Rolling hills					
4. Soil	Clay / Clay loam					
5. Est. Infiltration Rage		Low		Moderate X		High

B. VEGETATION

1. Habitat type is:	Semi-desert

2. Percent Ground Cover:									
3. Vegetation consists of:	3 %	Grasses	10%	Shrubs	%	Forbs	%	Trees

The main variety of grasses are

- [ ] blue grama
- [ ] poa
- [ ] bluebunch wheat
- [ ] Indian rice
- [X] squirrel tail
- [X] cheat Grass
- [X] needle & thread
- [X] galletta
- [ ] None

Shrubs consist of:

- [X] prickly pear
- [ ] Spiny horse bush
- [ ] Wild buckwheat
- [ ] spiny hopsage
- [X] Grease wood
- [ ] Black sage
- [ ] rabbit brush
- [ ] Snake weed
- [ ] Fourwing salt bush
- [X] Sand sage
- [ ] None

Forbs consist of:

- [ ] Annuals
- [ ] Mustard
- [ ] Lamb quaters
- [ ] Gilia
- [ ] Penstamen
- [ ] None

Trees consist of:

- [ ] Pinion pine
- [ ] Utah juniper
- [ ] Upland pinion juniper
- [ ] None

4. Observed T&E species:	none
5. Potential For T&E species:	none
6. Observed Noxious Weeds:	none

C. AFFECTED ENVIRONMENT

1. There are no surface damages as a result of the initial survey.

3.1 - WILDLIFE

A. POTENTIAL SITE UTILIZATION

1. Big Game	[ ] Elk	[ ] Mule Deer	[X] Antelope	[ ] Other:
2. Small Game	[X] Cotton Tail Rabbit	[ ] Dove	[ ] Quail	[ ] Other
3. Raptors	[ ] Golden Eagles	[ ] Red tail Hawk	[ ] Kestrel	[ ] Other
4. Non-Game Wildlife	[X] Cattle [X] Song birds	[X] Coyote [X] Black Tail Jack Rabbit	[ ] Fox	[ ] Other
5. T&E Species	[ ] none			

3.2 - PRESENT SITE USE

A. USE

	Acres
Rangeland & Woodland	0
Irrigable land	0
Non-Irrigable land	0
Commercial timber	0
Floodplain	0
Wetland	0
Riparian	0
Other:	0

3.3 - CULTURAL RESOURCES

A. CULTURAL RESOURCES/SURVEY

Cultural Resource Surveys were performed by Montgomery Archaeological Consultants on May 1, 2007, MOAC Report No. 07-125

Company Name *Date*

The consultant recommends clearance of the project as it is presently staked, and approved by BIA and UT Technicians.

☐ Consultant ☐ UT Technician ☒ BIA Representative

All personnel should refrain from collecting artifacts, any pale ontological fossils, and from disturbing any significant cultural resources in the area.

4.0 - ENVIRONMENTAL IMPACTS

A. SURFACE ALTERATIONS:

	Acres
1. Access road	
2. Compressor Station	17.360 acres
3. Pipeline right-of-way	16.675 acres
4. Total area disturbed	34.035 acres

B. VEGETATION/LANDSCAPE

1. Production loss (AUM's)/year:	
2. Permanent scar on landscape:	
3. Potential impacts to T&E species:	

C. SOIL/RANGE/WATERSHED

The area is presently used as rangeland. In recent years the area has been permitted for livestock grazing, but at the present time no permits have been issued for the area. This project will reduce livestock & wildlife grazing by approximately 0.29 AUM/year.

The area is not used as irrigated cropland and a water right has not been designated for the area.

D. WILDLIFE/THREATENED & ENDANGERED SPECIES

There will be an insignificant reduction of wildlife habitat and grazing for livestock. There will also be an increase in wildlife disturbance and poaching resulting from the additional traffic and people using the area.

There are no known impacts to Threatened or Endangered species but the area is important winter range for big game.

5.0 - MITIGATION STIPULATIONS

A. VEGETATION/LANDSCAPE

1. Before the site is abandoned the company will be required to restore the right-of-way to near its original state. The disturbed area will be reseeded with desirable perennial vegetation.

2. Noxious weeds will be controlled on all rights-of-way. If noxious weeds spread from the rights-of-way onto adjoining land, the company will also be responsible for their control.

B. SOILS/RANGE/WATERSHEDS

1. Soil erosion will be mitigated by reseeding all disturbed areas.

2. The pipeline will be constructed to lie on the soil surface, and the right-of-way will not be bladed or cleared of vegetation.

Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way.

Where pipelines do not parallel roads but cross-country between stations, they shall be welded in place at wellsites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.

C. DRILLING SYSTEM

An open drilling system shall be used. The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0 feet below the soil surface elevation.

A closed drilling system shall be used in all flood plain areas, and other highly sensitive areas, as recommended by the Ute Tribe Technician, BIA and other agencies involved.

D. PRODUCTION SYSTEM

A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.

E. WILDLIFE/VEGETATION/THREATENED & ENDANGERED SPECIES

No Threatened & Endangered species have been identified associated with this project. Therefore, no stipulations have been developed for their protection.

F. UTE TRIBAL REGULATIONS

1. Prior to commencing surveys or construction on the U&O Indian Reservation the operator, and any of its sub-contractors, shall acquire access permits and business permits from the Ute Indian Tribe.

2. Prior to the commencement of construction, the operator shall notify the Ute Tribal Department of Energy and Minerals of the date construction shall begin.

6.0 - UNAVOIDABLE ADVERSE IMPACTS

A. SURFACE ALTERATIONS

None of the adverse impacts listed in 5.0 above can be avoided in a practical manner except those which are mitigated in item 6.0 above.

B. RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT VS LONG TERM PRODUCTIVITY.

1. Short Term: (Estimated 20 years) A total loss of production on the land and the associated environmental impacts will continue to influence the surrounding area for the productive life of the well.

2. Long Term: Standard policies provide for rehabilitation of rights-of-ways. After the land is rehabilitated, it is expected to return to its original productive capability. Normally, there will be no permanent scar left on the landscape.

C. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT

Oil and Gas are non-renewable resources, once they have been removed they can never be replaced.

7.0 - CUMULATIVE IMPACTS

A. FULL DEVELOPMENT

Each additional well drilled for development increases the soil erosion potential, reduces wildlife habitat and grazing, increases potential soil and geologic pollution resulting from salt loading, reduces the soil's potential to recover, and increases the potential of water pollution from produced waters and hydro-carbons. Therefore, strict conformance with the mitigation measures and recommendations in this document is emphasized to minimize the adverse environmental impacts.

8.0 - NEPA COMPLIANCE

A. RESEARCH/DOCUMENTATION

Based on available information, the proposed location in the following areas of environmental impacts has been cleared:

Listed Threatened & Endangered species	Cleared
Critical wildlife habitat	Cleared
Historical and cultural resources	Cleared

9.0 - REMARKS

A. SURFACE PROTECTION/REHABILITATION

All essential surface protection and rehabilitation requirements are specified above.

10.0 – ADDITIONAL STIPULATIONS

- A ___50___ foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understand that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROWs.
- **The Company shall assure the Ute Tribe that 'ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONSTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.**
- **You are hereby notified that working under the *"umbrella"* of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.**
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing, and will receive written authorization of any such change with appropriate authorization.
- The company will implement "Safety and Emergency Plan". The Company's safety director will ensure its compliance.
- All company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations should be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel should refrain from collecting artifacts, any pale ontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department should be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigating stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-of-way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

Additional Stipulations:

1. Fence Company Site

11.0 - RECOMMENDATIONS

A. APPROVAL/DISAPPROVAL

We recommend ☒ APPROVAL ☐ DISAPPROVAL of the proposed action as outlined in item 1.0 above.

Date: 5-4-07

UT Energy & Minerals Technician
Ute Indian Tribe

Date: 5/17/07

Lynn Becker, Land Division Manager
UT Energy & Minerals Department

Date: 5.4.07

BIA Representative
Uintah and Ouray Agency

11.0 - DECLARATION

A. APPROVAL

It has been determined that the proposed action is not a federal action significantly affecting the quality of the environment as it would require the preparation of an environmental impact statement in accordance with Section 102(2)(c) of the National Environmental Policy Act of 1969 (42 USC 4331)(2)(C).

Date: 7-1-07

acting Superintendent, Uintah and Ouray Agency

12.0 - CONSULTATION

A. REPRESENTATIVES/ORGANIZATION

Agency/Company Name	*Name*	*Initials*
Questar Gas Management		CW
Questar Gas Management		BS
Ute Tribe Energy and Minerals		FWP
Bureau of Indian Affairs		

CULTURAL RESOURCE INVENTORY OF QUESTAR GAS MANAGEMENT'S PROPOSED PONDEROSA COMPRESSOR AND 12 INCH PIPELINE UINTAH COUNTY, UTAH

Jacki A. Montgomery

CULTURAL RESOURCE INVENTORY OF QUESTAR GAS MANAGEMENT'S PROPOSED PONDEROSA COMPRESSOR AND 12 INCH PIPELINE UINTAH COUNTY, UTAH

By:

Jacki A. Montgomery

Prepared For:

Ute Indian Tribe
Uintah and Ouray Agency
and
Bureau of Land Management
Vernal Field Office

Prepared Under Contract With:

Questar Gas Management
11018 East 17500 South
Vernal, UT 84078

Prepared By:

Montgomery Archaeological Consultants, Inc.
P.O. Box 219
Moab, Utah 84532

MOAC Report No. 07-125

May 1, 2007

United States Department of Interior (FLPMA)
Permit No. 07-UT-60122

State of Utah Antiquities Project (Survey)
Permit No. U-07-MQ-0428b,i

Ute Tribal Permit No. A07-363

INTRODUCTION

A cultural resource inventory was conducted by Montgomery Archaeological Consultants Inc. (MOAC) in April 2007 for Questar Gas Management's proposed Ponderosa compressor and 12 inch suction pipeline. The project area occurs south of Glen Bench in Uintah County, Utah. This survey was implemented at the request of Mr. Brent Searle, Questar Gas Management, Vernal, Utah. The project is situated on Ute Tribal Lands (Uintah and Ouray Agency) and public lands administered by the Bureau of Land Management (BLM), Vernal Field Office.

The objective of the inventory was to locate, document, and evaluate any cultural resources within the project area in order to comply with Section 106 of 36 CFR 800, the National Historic Preservation Act of 1966 (as amended). Also, the inventory was implemented to attain compliance with a number of federal and state mandates, including the National Environmental Policy Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, the American Indian Religious Freedom Act of 1978, and Utah State Antiquities Act of 1973 (amended 1990).

The fieldwork was performed on April 4, 2007 by Todd Seacat under the auspices of U.S.D.I. (FLPMA) Permit No. 07-UT-60122 and State of Utah Antiquities Permit (Survey) No. U-07-MQ-0428b,i issued to MOAC, Moab, Utah. The archaeologist was accompanied to the field by Manny Bruns (Ute Tribal Energy and Minerals Technician).

A file search was performed by Keith Montgomery at the BLM (Vernal Field Office) on April 2, 2007. In 2005, Montgomery Archaeological Consultants (MOAC) inventoried Questar Gas Management's 10 mile Glen Bench pipeline and compressor station (Elkins 2005). A portion of the surveyed pipeline crossed Sections 32 and 33, Township 8S, Range 22E and resulted in the documentation of a prehistoric resource processing camp (42Un4710). In 2006, MOAC inventoried Questar Gas Management's Ponderosa pipeline which crossed Sections 33 and 34, Township 8S, Range 22E resulting in no cultural resources within the current project area (Jendresen 2006).

DESCRIPTION OF PROJECT AREA

Questar Gas Management's proposed Ponderosa compressor and 12 inch suction pipeline begins on Ute Indian Tribal land in the SE 1/4 of Section 31 and extends east for 2.9 miles onto BLM land in the NW 1/4 of Section 34 (Figure 1). The Ponderosa compressor station lies mainly in the SW/SW of Section 28. The legal description is Township 8 South, Range 22 East, Sections 28, 29, 31, 32, 33 and 34. A total of 53.4 acres was inventoried of which 47.6 is on Ute Tribal land (Uintah and Ouray Agency) and 5.8 acres occurs on BLM (Vernal Field Office) administered land.

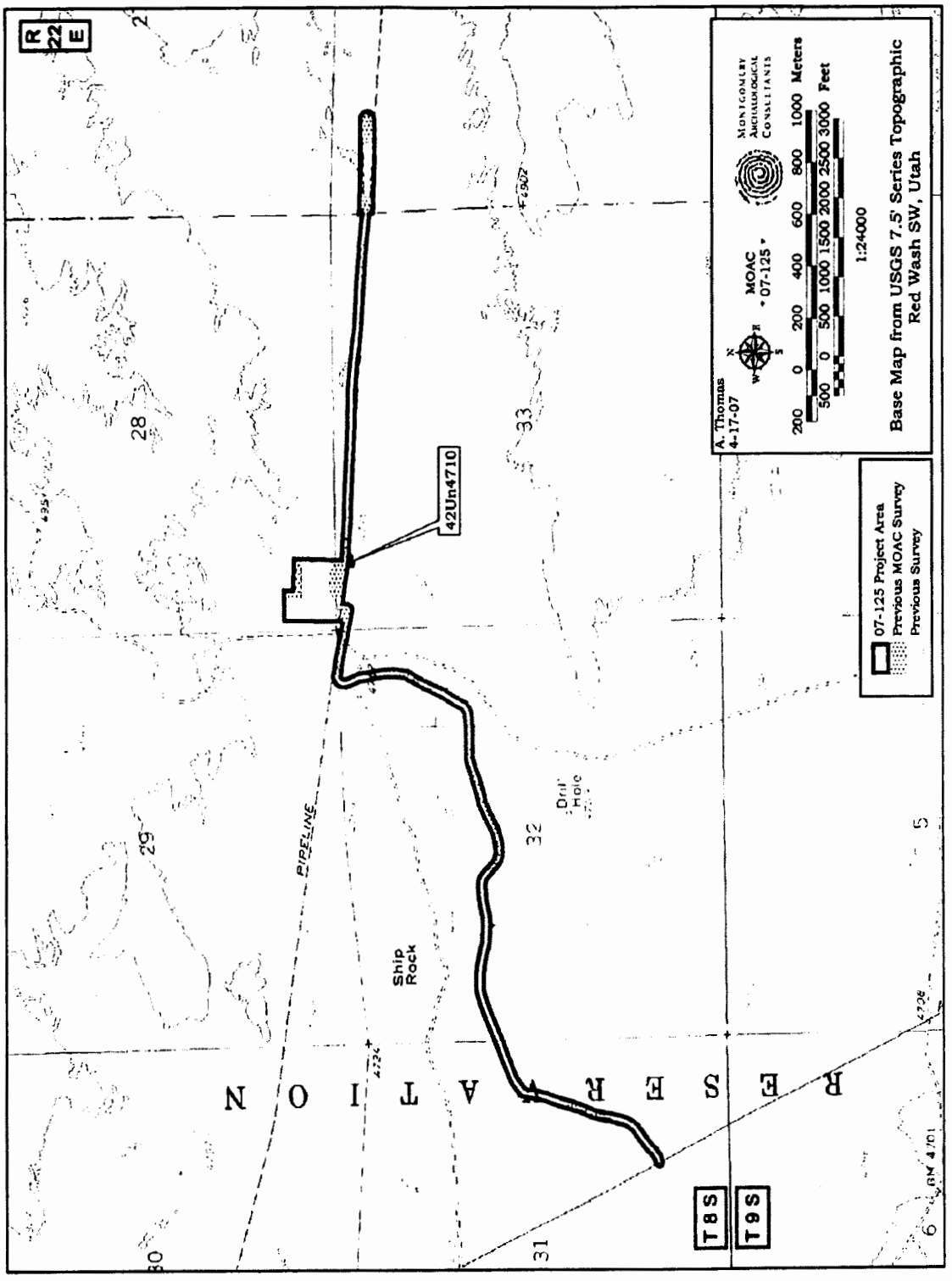


Figure 1. Inventory Area of Questar Gas Management's Ponderosa Compressor Station and 12 Inch Suction Pipeline, Uintah County, Utah.

The study area lies within the Uinta Basin physiographic unit, a distinctly bowl-shaped geologic structure (Stokes 1986:231). The Uinta Basin ecosystem is within the Green River drainage, considered to be the northernmost extension of the Colorado Plateau. The geology is comprised of Tertiary age deposits which include Paleocene age deposits, and Eocene age fluvial and lacustrine sedimentary rocks. The Uinta Formation, which is predominate in the project area, occurs as eroded outcrops formed by fluvial deposited, stream laid interbedded sandstone and mudstone, and is known for its prolific paleontological localities.

Specifically, the project area occurs north of the White River and south of Glen Bench. The area is heavily dissected and carved by ephemeral drainages and characterized by tablelands with rolling dunes. Surface geology consists of hard pan residual soil armored with shale and sandstone pebbles. Elevation ranges between 4710 and 4775 ft asl. The project occurs within the Upper Sonoran Desert Shrub Association which includes sagebrush, shadscale, greasewood, mat saltbush, snakeweed, rabbitbrush, prickly pear cactus, Indian ricegrass and other grasses. Modern disturbances include roads and oil/gas development.

SURVEY METHODOLOGY

An intensive pedestrian survey was performed for this project which is considered 100% coverage. The proposed 12 inch suction pipeline was examined by the archaeologist walking parallel transects spaced no more than 10 m (33 ft) apart. The pipeline was surveyed to a width of 61 m (200 ft) on BLM administrated land and 31 m (100 ft) on Ute Tribal land. The proposed compressor station measured approximately 500 by 700 ft and was examined by the same survey methods as described above. Ground visibility was considered to be good. A total of 53.4 acres was inventoried of which 47.6 is on Ute Tribal land (Uintah and Ouray Agency) and 5.8 acres occurs on BLM (Vernal Field Office) administered land.

INVENTORY RESULTS

The inventory resulted in the location of a previously documented prehistoric site (42Un4710) which is evaluated as eligible to the NRHP.

Smithsonian Site No.: 42Un4710
Temporary Site No.: None
Legal Description: NE/NW/NW, Sec. 33, T 8S, R 22E
NRHP Eligibility: Eligible, Criterion D
Description: This site is a possible prehistoric resource processing camp consisting of numerous groundstone artifacts and a lesser amount of lithic debitage eroding out from the slope of an aeolian dune and scattered within a drainage. A total of 20 lithic flakes were observed representing a wide range of chert and quartzite material types, with some petrified wood also noted. The secondary stage of decortication dominates the flake types, with a large amount of broken flakes, flake fragments, and angular debris; and a lesser amount of tertiary and primary flakes. Thirteen lithic tools were recorded, of which the

majority (n=7) are groundstone fragments. Other tools present include test cobble cores (n=4) and retouched flakes (n=2). In addition to the documented tools, at least 21 additional groundstone fragments were observed. There were no cultural features on the site. The site possesses significant potential for buried cultural material, as numerous artifacts were observed in the eroding cutbank of the dune. No artifacts were observed on the upper surface of the dune, suggesting that the cultural deposits are buried.

MANAGEMENT RECOMMENDATIONS

The cultural resource inventory of Questar Gas Management's proposed Ponderosa compressor and 12 inch suction pipeline resulted in the location of a previously recorded prehistoric site (42Un4710) which is evaluated as eligible to the NRHP. This site occurs along the south edge of the proposed compressor station/pipeline and will be avoided by the undertaking. Based on the findings, a determination of "no historic properties affected" pursuant to Section 106, CFR 800 is proposed for this project.

REFERENCES CITED

Elkins, M.
2005 Cultural Resource Inventory of Questar Gas Management's 10 Mile Glen Bench Pipeline and Compressor Station on Ute Tribal Lands, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah. Report No. U-05-MQ-0088i.

Jendresen, A.
2006 Cultural Resource Inventory of Questar Gas Management's Proposed Ponderosa Pipeline (T8S, R22E Sections 33, 34, 35 and 36 and T9S, R22E Sections 4, 9, and 16), Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah. Report No. U-06-MQ-1752b,i.

Stokes, W.L.
1986 *Geology of Utah*. Utah Museum of Natural History and Utah Geological and Mineral Survey, Salt Lake City.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEDERAL MINOR NEW SOURCE REVIEW PROGRAM IN INDIAN COUNTRY

40 CFR 49.151

Application for New Construction

Form SYNMIN Section B Attachments

- Item 1 - The proposed limitation and a description of its effect on current actual, allowable and the potential to emit.
- Item 2 - The proposed testing, monitoring, recordkeeping, and reporting requirements to be used to demonstrate and assure compliance with the proposed limitation.
- Item 3 - A description of estimated efficiency of air pollution control equipment under present or anticipated operating conditions, including documentation of the manufacturer specifications and guarantees.
- Item 4 - Estimates of the Post-Change Allowable Emissions that would result from compliance with the proposed limitation, including all calculations for the estimates.
- Item 5 – Estimates of the potential emissions of Greenhouse Gas (GHG) pollutants.

Form SYNMIN Section B Attachments

ITEM 1– The proposed limitation and description of its effect on current actual, allowable and the potential to emit.

Condensate and Produced Water Storage Tanks: Flashing, working and breathing vapors (both VOCs and HAPs) from the condensate and produced water storage tanks are routed to a combustor through a closed vent system with a destruction efficiency of 95%. This control device reduced the total *2014 Current Actual* VOC emissions from 12.50 TPY to 0.63 TPY and HAP emissions from 0.35 TPY to 0.02 TPY. With the requested emission limits, the VOC PTE is reduced from 12.50 TPY to 0.63 TPY and HAP PTE from 0.35 to 0.02 TPY.

Dehydration Unit: The dehydration unit TEG regenerator and flash separator vent emissions (both VOCs and HAPs) are routed to a flare through a closed vent system with a destruction efficiency of 95%. This control device reduces the VOC PTE emissions from 122.25TPY to 6.00TPY and HAP emissions from 41.55TPY to 2.01 TPY. The dehydration unit was not in operation in 2014, so this control device does not affect *Current Actual or Current Allowable* emissions.

ITEM 2 – The proposed testing, monitoring, recordkeeping, and reporting requirements to be used to demonstrate and assure compliance with the proposed limitation.

Condensate Tanks: The tank combustor installed at the Ponderosa Compressor Station is designed and operated to reduce VOC emissions by 95 percent or greater and will operate at all times when gases, vapors and fumes are vented from the condensate tank to this device. The pilot flame for this combustor is inspected visually every time the field operator is on location. Records of all combustor monitoring activity will be kept on file for at least 5 years and will be readily available for review.

Dehydration Unit: The flare installed at the Ponderosa Compressor Station is required per 40 CFR Part 63 Subpart HH (National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities) because the associated dehydration unit is considered a HAP major source. Per 40 CFR Part 63 Subpart HH 63.771(d)(1)(iii) this flare must be designed and operated in accordance with the requirements of §63.11(b). The flare will meet these requirements and will meet the monitoring requirements in 40 CFR Part 63 Subpart HH 63.773(d), the recordkeeping requirements in 40 CFR Part 63 Subpart HH 63.774(b), and the reporting requirements in 40 CFR Part 63 Subpart HH 63.775(b). Records of all flare monitoring activity will be kept on file for at least 5 years and will be readily available for expeditious review.

ITEM 3 – A description of estimated efficiency of air pollution control equipment under present or anticipated operating conditions, including documentation of the manufacturer specifications and guarantees.

Condensate Tank: The combustor controlling condensate tank vapors at the Ponderosa Compressor Station is a Tornado Technologies Inc. model TEC 4CS incinerator. This unit has a minimum destruction efficiency of at least 95%. See the manufacturer documentation attached.

Dehydration Unit: The flare controlling dehydration unit vapors at the Ponderosa Compressor Station is a John Zink model LHS-1-12-20-X-1/4-X vapor combustion unit. This device has a guaranteed hydrocarbon destruction efficiency of at least 95%. Please see the manufacturer documentation attached.

ITEM 4: Estimates of the Post-Change Allowable Emissions that would result from compliance with the proposed limitation, including all calculations for the estimates.

The proposed limitation provided by the Synthetic Minor permit would reduce allowable condensate tank VOC emissions to 0.57 TPY and HAP emissions to 0.02 TPY. The Produced Water tank VOC emissions would be reduced to 0.06 TPY VOC and 0.00 TPY HAPs. The dehydration unit VOC PTE would be reduced to 6.00 TPY VOC. See Form SYNMIN Criteria Pollutant Emission Estimates showing Post-Construction Potential Uncontrolled emissions, Post- Construction Allowable emissions without the Synthetic Minor permit, and Post- Construction Allowable emissions *with* the Synthetic Minor permit. Detailed emission calculations are provided in the Emission Inventory included in the Section D attachments.

ITEM 5: Estimates of the potential emissions of Greenhouse Gas (GHG) pollutants.

The Post-Construction Potential uncontrolled GHG emissions are estimated at 44,562 TPY of CO_2e. The Post- Construction Allowable emissions which would be federally enforceable with the synthetic minor permit are estimated at 39,719 TPY CO_2e. Detailed emission calculations are provided in the Emission Inventory included in the Section D attachments.

2014 Emission Inventory

Ponderosa Compressor Station

QEP Field Services, LLC

Emission Inventory Time Frame:

January 1, 2014 – December 31, 2014

Ponderosa Compressor Station
Emission Summary Sheet

Current Actual Emissions (2014)

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NO_x	CO	VOC	SO_2	$PM_{10,2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri	Benzene	E-benzene	Formald	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	38.69	24.59	6.86	0.78	1.60	0.00	0.00	0.00	0.00	0.00	0.00	28340.87	13.36	15.93	28370.16	0.00	0.00	0.01	0.17	0.00	0.03	0.02	0.23
(2) 400 bbl. Condensate Tanks	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.09	0.00	2.29	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
(1) 300 bbl. Produced Water Tank	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous Venting [1]	0.00	0.00	11.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98	1691.34	0.00	1693.31	0.00	0.03	0.00	0.00	0.22	0.03	0.00	0.27
Tank Combustor (pilot plus combustion vapors)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.56	0.01	0.01	14.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck Loadouts	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Equipment Leaks	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	0.36
Total Pollutants	**38.70**	**24.60**	**23.02**	**0.78**	**1.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**28,358**	**1,718**	**16**	**30,411**	**0.03**	**0.05**	**0.01**	**0.17**	**0.38**	**0.15**	**0.08**	**0.87**
Total Criteria Pollutants (Minus Fugitive Leaks)	**38.70**	**24.60**	**18.80**	**0.78**	**1.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

Current Allowable Emissions (2014 Uncontrolled)

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NO_x	CO	VOC	SO_2	$PM_{10,2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri	Benzene	E-benzene	Formald	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	38.69	24.59	6.86	0.78	1.60	0.00	0.00	0.00	0.00	0.00	0.00	28340.87	0.53	0.05	28370.16	0.00	0.00	0.01	0.17	0.00	0.03	0.02	0.23
(2) 400 bbl. Condensate Tanks	0.00	0.00	8.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	1.71	0.00	42.85	0.02	0.02	0.00	0.00	0.13	0.03	0.00	0.21
(1) 300 bbl. Produced Water Tank	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous Venting [1]	0.00	0.00	11.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98	67.65	0.00	1693.31	0.00	0.03	0.00	0.00	0.22	0.03	0.00	0.27
Tank Combustor (pilot)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.56	0.00	0.00	14.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck Loadouts	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Equipment Leaks	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	0.36
Total Pollutants	**38.70**	**24.60**	**31.02**	**0.78**	**1.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**28,358**	**83**	**0**	**30,452**	**0.04**	**0.08**	**0.01**	**0.17**	**0.50**	**0.18**	**0.08**	**1.06**
Total Criteria Pollutants (Minus Fugitive Leaks)	**38.70**	**24.60**	**26.81**	**0.78**	**1.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

Post-Construction Potential Emissions (Uncontrolled)

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NOx	CO	VOC	SO_2	$PM_{10,2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri	Benzene	E-benzene	Formald	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	50.24	31.93	8.91	1.01	2.08	0.00	0.00	0.00	0.00	0.00	0.00	36,804.69	0.69	0.07	36,842.73	0.00	0.00	0.01	0.22	0.00	0.04	0.02	0.30
Dehydration Unit with Flash Tank	0.00	0.00	122.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.05	202.36	0.00	5,094.95	0.00	15.29	0.00	0.00	3.79	22.46	0.00	41.55
TEG Reboiler Burner	0.39	0.33	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	514.53	0.01	0.00	515.07	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
(2) 400 bbl. Condensate Tanks	0.00	0.00	11.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	2.66	0.00	67.34	0.03	0.04	0.00	0.00	0.20	0.04	0.01	0.32
(1) 300 bbl. Produced Water Tank	0.00	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.26	0.00	6.61	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03
Tank Combustor (pilot)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.37	0.00	0.00	14.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flare (pilot)	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.04	0.00	0.00	31.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous Venting [1]	0.00	0.00	11.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94	66.24	0.00	1,657.95	0.00	0.03	0.00	0.00	0.21	0.03	0.00	0.27
Truck Loadouts	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Equipment Leaks	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	0.36
Total Pollutants	**50.67**	**32.29**	**159.32**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**37,403**	**285**	**0**	**44,561**	**0.05**	**15.38**	**0.02**	**0.22**	**4.39**	**22.67**	**0.09**	**42.82**
Total Criteria Pollutants (Minus Fugitive Leaks)	**50.67**	**32.29**	**155.10**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

Post-Construction Allowable Emissions (Federally Enforceable without Syn Minor limits)

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NOx	CO	VOC	SO_2	$PM_{10,2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri	Benzene	E-benzene	Formald	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	50.24	31.93	8.91	1.01	2.08	0.00	0.00	0.00	0.00	0.00	0.00	36,804.69	0.69	0.07	36,842.73	0.00	0.00	0.00	0.22	0.00	0.04	0.02	0.29
Dehydration Unit with Flash Tank	0.00	0.00	124.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.05	202.36	0.00	5,094.95	0.01	0.75	0.00	0.00	0.19	1.06	0.00	2.01
TEG Reboiler Burner	0.39	0.33	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	514.53	0.01	0.00	515.07	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
(2) 400 bbl. Condensate Tanks	0.00	0.00	11.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	2.66	0.00	67.34	0.03	0.04	0.00	0.00	0.20	0.04	0.01	0.32
(1) 300 bbl. Produced Water Tank	0.00	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.26	0.00	6.61	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03
Tank Combustor (pilot)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.37	0.01	0.01	14.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flare (pilot and combustion of vapors)	0.73	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	642.64	0.00	0.00	642.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous Venting [1]	0.00	0.00	11.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94	66.24	0.00	1,657.95	0.00	0.03	0.00	0.00	0.21	0.03	0.00	0.27
Truck Loadouts	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Equipment Leaks	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	0.36
Total Pollutants	**51.37**	**32.47**	**161.33**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**38,015**	**285**	**0**	**45,172**	**0.06**	**0.84**	**0.01**	**0.22**	**0.78**	**1.27**	**0.09**	**3.28**
Total Criteria Pollutants (Minus Fugitive Leaks)	**51.37**	**32.47**	**157.12**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

only 19.24 tons/yr of [illegible]

Post-Construction Allowable Emissions (Federally Enforceable with requested Syn Minor limits)

Source	Criteria Emissions (TPY)											GHG (TPY)				HAPs (TPY)							
Emission Source	NOx	CO	VOC	SO_2	$PM_{10,2.5}$	Pb	Fluorides	H_2SO_4	H_2S	Total Reduced Sulfur	Reduced Sulfur Compounds	CO_2	CH_4	N_2O	CO_2e	2,2,4-Tri	Benzene	E-benzene	Formald	n-Hexane	Toluene	Xylene	HAP TOTALS
Taurus 70 turbine	50.24	31.93	8.91	1.01	2.08	0.00	0.00	0.00	0.00	0.00	0.00	36,804.69	0.69	0.07	36,842.73	0.00	0.00	0.00	0.22	0.00	0.04	0.02	0.29
Dehydration Unit with Flash Tank	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.05	10.12	0.00	288.99	0.01	0.75	0.00	0.00	0.19	1.06	0.00	2.01
TEG Reboiler Burner	0.39	0.33	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	514.53	0.01	0.00	515.07	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
(2) 400 bbl. Condensate Tanks	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.13	0.00	3.57	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
(1) 300 bbl. Produced Water Tank	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tank Combustor (pilot and combustion of vapors)	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.37	0.01	0.01	14.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flare (pilot and combustion of vapors)	0.73	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.57	0.00	0.00	64.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous Venting [1]	0.00	0.00	11.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94	66.24	0.00	1,657.95	0.00	0.03	0.00	0.00	0.21	0.03	0.00	0.27
Truck Loadouts	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Equipment Leaks	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	13.21	0.00	330.68	0.02	0.03	0.01	0.00	0.15	0.09	0.06	0.36
Total Pollutants	**51.44**	**32.49**	**31.19**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**37,437**	**90**	**0**	**39,718**	**0.04**	**0.81**	**0.01**	**0.22**	**0.57**	**1.22**	**0.08**	**2.95**
Total Criteria Pollutants (Minus Fugitive Leaks)	**51.44**	**32.49**	**26.97**	**1.01**	**2.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**												

Notes:
[1] Miscellaneous Venting emissions include those from Turbine Startups, Turbine Shutdowns, and Turbine Seals
[2] Fugitive emissions from equipment leaks are not included in the total criteria pollutant emissions because facility is not a listed source pursuant to CAA section 302(j)

Ponderosa Compressor Station
Engine Detail Sheet - Potential to Emit

Engine Usage	Compressor	
Engine Make	Solar	
Engine Model	Taurus 70	
Serial Number	0255B	
Engine Configuration	Turbine	
Emission Controls	NA	
Design Rating [1]	10915	BHP
Site Rating [2]	7691	BHP
Fuel Heating Value [3]	1123	Btu/scf (HHV)
Fuel Heating Value [3]	1015	Btu/scf (LHV)
Heat Rate	65.0	MMBtu/hr
Engine Heat Rate [2]	8453	Btu/hp-hr (LHV)
Engine Heat Rate	9350	Btu/hp-hr (HHV)
Potential Operation	8760	hr/yr
Potential Fuel Usage	560.99	MMscf/yr

Potential Emissions

Pollutant	Emission Factor		Nominal Rating	Hrs of Operation	Estimated Emissions		Source of Emission	Global Warming Potential [8]	Total Emissions CO_2e (tpy)
	(lb/MMBtu) (HHV)	(g/hp-hr)	(hp)	(hrs/yr)	(lb/hr)	(tpy)	Factor		
NOx	0.16	0.68	7691	8760	11.47	50.24	40 CFR 60 KKKK [4]		
CO	0.10	0.43	7691	8760	7.29	31.93	Manufacturer [5]		
VOC	0.03	0.12	7691	8760	2.03	8.91	Manufacturer [5]		
SO2	3.20E-03	1.36E-02	7691	8760	0.23	1.01	AP-42 [6]		
PM_{10}	6.60E-03	2.80E-02	7691	8760	0.47	2.08	AP-42 [6]		
Lead	NA	NA	7691	8760	0.00	0.00	AP-42 [6]		
1,3-Butadiene	4.30E-07	1.82E-06	7691	8760	0.00	0.00	AP-42 [6]		
Acetaldehyde	4.00E-05	1.70E-04	7691	8760	0.00	0.01	AP-42 [6]		
Acrolein	6.40E-06	2.71E-05	7691	8760	0.00	0.00	AP-42 [6]		
Benzene	1.20E-05	5.09E-05	7691	8760	0.00	0.00	AP-42 [6]		
Ethylbenzene	3.20E-05	1.36E-04	7691	8760	0.00	0.01	AP-42 [6]		
Formaldehyde	7.10E-04	3.01E-03	7691	8760	0.05	0.22	AP-42 [6]		
Toluene	1.30E-04	5.51E-04	7691	8760	0.01	0.04	AP-42 [6]		
Xylene	6.40E-05	2.71E-04	7691	8760	0.00	0.02	AP-42 [6]		
CO_2	116.8561	4.96E+02	7691	8760	8403	36805	40 CFR 98 [7]	1	36804.69
CH_4	0.0022	9.35E-03	7691	8760	0.16	0.69	40 CFR 98 [7]	25	17.35
N_2O	0.0002	9.35E-04	7691	8760	0.02	0.07	40 CFR 98 [7]	298	20.69
								TOTAL CO_2e	**36,842.73**

[1] Compressor design rating data taken from manufacturer spec sheet.

[2] Solar Turbine predicted engine performance. Based on 70 deg F. Job ID - SL07-209. Run by Michael E. Clay on July 27, 2007.

[3] Fuel heat value based on Ponderosa fuel gas analysis dated 2/2/2013

[4] NO_x factor from 40 CFR Part 60 Subpart KKKK Table 1 (2.0 lbs/MWh for modified or reconstructed engines)

[5] Solar Turbine predicted engine performance. Job ID - SL07-209. Run by Michael E. Clay on July 27, 2007.

[6] From AP-42 Table 3.1-1, 3.1-2a, and 3.1-3

[7] 40 CFR Part 98, Subpart C, Tables C-1 and C-2. (53.02 kg/MMBtu CO_2, $1x10^{-3}$ kg/MMBtu CH_4, and $1x10^{-4}$ kg/MMBtu N_20)

[8] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

Ponderosa Compressor Station
Engine Detail Sheet - Actual Emissions 2014

Engine Usage	Compressor	
Engine Make	Solar	
Engine Model	Taurus 70	
Serial Number	0255B	
Engine Configuration	Turbine	
Emission Controls	NA	
Design Rating [1]	10915	BHP
Site Rating [2]	7691	BHP
Fuel Heating Value [3]	1123	Btu/scf (HHV)
Fuel Heating Value [3]	1015	Btu/scf (LHV)
Heat Rate	65.0	MMBtu/hr
Engine Heat Rate [2]	8453	Btu/hp-hr (LHV)
Engine Heat Rate	9350	Btu/hp-hr (HHV)
Actual Operation (2014)	6745.5	hr/yr
Actual Fuel Usage (2014)	431.98	MMscf/yr

2014 Actual Emissions

Pollutant	Emission Factor		Nominal Rating	Hrs of Operation	Estimated Emissions		Source of Emission	Global Warming Potential [8]	Total Emissions CO_2e (tpy)
	(lb/MMBtu)	(g/hp-hr)	(hp)	(hrs/yr)	(lb/hr)	(tpy)	Factor		
NOx	0.16	0.68	7691	6745.5	11.47	38.69	40 CFR 60 KKKK [4]		
CO	0.10	0.43	7691	6745.5	7.29	24.59	Manufacturer [5]		
VOC	0.03	0.12	7691	6745.5	2.03	6.86	Manufacturer [5]		
SO2	3.20E-03	1.36E-02	7691	6745.5	0.23	0.78	AP-42 [6]		
PM_{10}	6.60E-03	2.80E-02	7691	6745.5	0.47	1.60	AP-42 [6]		
Lead	NA	NA	7691	6745.5	0.00	0.00	AP-42 [6]		
1,3-Butadiene	4.30E-07	1.82E-06	7691	6745.5	0.00	0.00	AP-42 [6]		
Acetaldehyde	4.00E-05	1.70E-04	7691	6745.5	0.00	0.01	AP-42 [6]		
Acrolein	6.40E-06	2.71E-05	7691	6745.5	0.00	0.00	AP-42 [6]		
Benzene	1.20E-05	5.09E-05	7691	6745.5	0.00	0.00	AP-42 [6]		
Ethylbenzene	3.20E-05	1.36E-04	7691	6745.5	0.00	0.01	AP-42 [6]		
Formaldehyde	7.10E-04	3.01E-03	7691	6745.5	0.05	0.17	AP-42 [6]		
Toluene	1.30E-04	5.51E-04	7691	6745.5	0.01	0.03	AP-42 [6]		
Xylene	6.40E-05	2.71E-04	7691	6745.5	0.00	0.02	AP-42 [6]		
CO_2	116.8561	4.96E+02	7691	6745.5	8403	28341	40 CFR 98 [7]	1	28340.87
CH_4	0.0022	9.35E-03	7691	6745.5	0.16	0.53	40 CFR 98 [7]	25	13.36
N_2O	0.0002	9.35E-04	7691	6745.5	0.02	0.05	40 CFR 98 [7]	298	15.93
								TOTAL CO_2e	**28,370.16**

[1] Compressor design rating data taken from manufacturer spec sheet.

[2] Solar Turbine predicted engine performance. Based on 70 deg F. Job ID - SL07-209. Run by Michael E. Clay on July 27, 2007.

[3] Fuel heat value based on Ponderosa fuel gas analysis dated 2/2/2013

[4] NO_x factor from 40 CFR Part 60 Subpart KKKK Table 1 (2.0 lbs/MWh for modified or reconstructed engines)

[5] Solar Turbine predicted engine performance. Job ID - SL07-209. Run by Michael E. Clay on July 27, 2007.

[6] From AP-42 Table 3.1-1, 3.1-2a, and 3.1-3

[7] 40 CFR Part 98, Subpart C, Tables C-1 and C-2. (53.02 kg/MMBtu CO_2, $1x10^{-3}$ kg/MMBtu CH_4, and $1x10^{-4}$ kg/MMBtu N_2O)

[8] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

Ponderosa Compressor Station
Condensate Storage Tank Detail Sheet - Potential to Emit

Source ID Number	T-1 and T-2	
Tank Usage	Condensate Tanks	
Tank Capacity	400	bbls
Serial Number	760040991	
Date in Service	2009	
Tank Contents	Condensate	
Emission Controls	Yes	
Tank Orientation	Vertical	
Potential Operation	8760	hr/yr
Vent Vapor Volume	0.0011	MMSCFD
Potential Throughput (annual)	3650	bbls/yr
Potential Throughput	10.0	bbls/day

	Tank Flashing Emissions [1]		Working Losses [1]		Breathing Losses [1]		Total Losses [1]		Total Controlled Losses [1]	
	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
Total Flash Gas Mass Flow	2.807	12.296	NA	NA	NA	NA	NA	NA	NA	NA
N2 Flash Gas Mass Flow	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CO2 Flash Gas Mass Flow	0.038	0.165	0.002	0.007	0.010	0.045	0.049	0.217	0.002	0.011
C1 Flash Gas Mass Flow	0.581	2.546	0.004	0.019	0.027	0.120	0.613	2.685	0.031	0.134
C2 Flash Gas Mass Flow	0.530	2.320	0.043	0.187	0.270	1.182	0.842	3.689	0.042	0.184
C3 Flash Gas Mass Flow	0.680	2.979	0.052	0.229	0.329	1.442	1.061	4.649	0.053	0.232
i-C4 Flash Gas Mass Flow	0.220	0.962	0.018	0.078	0.112	0.491	0.350	1.531	0.017	0.077
n-C4 Flash Gas Mass Flow	0.286	1.255	0.023	0.102	0.147	0.645	0.457	2.002	0.023	0.100
i-C5 Flash Gas Mass Flow	0.128	0.560	0.010	0.045	0.065	0.284	0.203	0.889	0.010	0.044
n-C5 Flash Gas Mass Flow	0.099	0.433	0.008	0.036	0.051	0.225	0.158	0.693	0.008	0.035
Hexanes Flash Gas Mass Flow	0.069	0.302	0.006	0.027	0.039	0.170	0.114	0.500	0.006	0.025
Heptanes Flash Gas Mass Flow	0.097	0.423	0.008	0.035	0.051	0.221	0.155	0.679	0.008	0.034
Octanes Flash Gas Mass Flow	0.012	0.053	0.001	0.004	0.006	0.028	0.020	0.086	0.001	0.004
Nonanes Flash Gas Mass Flow	0.001	0.006	0.000	0.001	0.001	0.003	0.002	0.010	0.000	0.001
Decanes Flash Gas Mass Flow	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.002	0.000	0.000
VOC Flash Gas Mass Flow	**1.659**	**7.266**	**0.128**	**0.560**	**0.807**	**3.534**	**2.594**	**11.360**	**0.130**	**0.568**
n-Hexane Flash Gas Mass Flow	0.044	0.193	0.000	0.001	0.002	0.008	0.046	0.203	0.002	0.010
Benzene Flash Gas Mass Flow	0.008	0.035	0.000	0.000	0.000	0.001	0.008	0.037	0.000	0.002
Toluene Flash Gas Mass Flow	0.009	0.040	0.000	0.000	0.001	0.003	0.010	0.043	0.000	0.002
E-Benzene Flash Gas Mass Flow	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
2,2,4 Trimethylpentane	0.004	0.017	0.000	0.001	0.002	0.009	0.006	0.027	0.000	0.001
Xylene Flash Gas Mass Flow	0.001	0.006	0.000	0.000	0.000	0.001	0.002	0.008	0.000	0.000
HAP Flash Gas Mass Flow	**0.067**	**0.292**	**0.001**	**0.004**	**0.005**	**0.023**	**0.073**	**0.319**	**0.001**	**0.006**
Stream Molecular Weight		**33.2**		**33.2**		**33.2**				
Stream Standard Vol. Flow (MMSCFD)		**7.71E-04**		**4.84E-05**		**3.06E-04**				

[1] Tank flashing, working and breathing emissions were calculated using Promax 4.0 modeling software. The condensate analysis was sampled by ATS in 2010 at 135 psig.

Uncontrolled Potential Emissions

Pollutant	Hrs of Operation (hrs/yr)	Estimated Emissions	
		(lb/hr)	(tpy)
VOC	8760	2.59	11.36
CO_2	8760	0.05	0.22
CH_4	8760	0.61	2.68
CO_2e	8760	15.37	67.34

Controlled Potential Emissions

Pollutant	Hrs of Operation (hrs/yr)	Estimated Emissions	
		(lb/hr)	(tpy)
VOC	8760	0.13	0.57
CO_2	8760	0.05	0.22
CH_4	8760	0.03	0.13
CO_2e	8760	0.82	3.57

Ponderosa Compressor Station
Condensate Storage Tank Detail Sheet - Actual Emissions 2014

Source ID Number	T-1 and T-2	
Tank Usage	Condensate Tanks	
Tank Capacity	400	bbls
Serial Number	B3196-01-02	
Date in Service	2009	
Tank Contents	Condensate	
Emission Controls	Yes	
Tank Orientation	Vertical	
Potential Operation	8760	hr/yr
Vent Vapor Volume	0.0008	MMSCFD
Actual Throughput (2014)	2358	bbls/yr
Actual Throughput (2014)	6.46	bbls/day

	Tank Flashing Emissions [1]		Working Losses [1]		Breathing Losses [1]		Total Losses [1]		Total Controlled Losses [1]	
	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
Total Flash Gas Mass Flow	1.7373	7.609	NA	NA	NA	NA	NA	NA	NA	NA
N2 Flash Gas Mass Flow	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.000
CO2 Flash Gas Mass Flow	0.0233	0.102	0.001	0.0046	0.010	0.0449	0.035	0.151	0.002	0.008
C1 Flash Gas Mass Flow	0.3597	1.575	0.003	0.0123	0.027	0.1201	0.390	1.708	0.019	0.085
C2 Flash Gas Mass Flow	0.3278	1.436	0.028	0.1211	0.270	1.1820	0.625	2.739	0.031	0.137
C3 Flash Gas Mass Flow	0.4208	1.843	0.034	0.1476	0.329	1.4420	0.784	3.433	0.039	0.172
i-C4 Flash Gas Mass Flow	0.1360	0.596	0.011	0.0503	0.112	0.4912	0.260	1.137	0.013	0.057
n-C4 Flash Gas Mass Flow	0.1773	0.776	0.015	0.0661	0.147	0.6453	0.340	1.488	0.017	0.074
i-C5 Flash Gas Mass Flow	0.0791	0.346	0.007	0.0291	0.065	0.2842	0.151	0.660	0.008	0.033
n-C5 Flash Gas Mass Flow	0.0611	0.268	0.005	0.0230	0.051	0.2249	0.118	0.516	0.006	0.026
Hexanes Flash Gas Mass Flow	0.0427	0.187	0.004	0.0174	0.039	0.1704	0.086	0.375	0.004	0.019
Heptanes Flash Gas Mass Flow	0.0597	0.262	0.005	0.0227	0.051	0.2213	0.115	0.506	0.006	0.025
Octanes Flash Gas Mass Flow	0.0075	0.033	0.001	0.0029	0.006	0.0280	0.015	0.064	0.001	0.003
Nonanes Flash Gas Mass Flow	0.0009	0.004	0.000	0.0003	0.001	0.0033	0.002	0.008	0.000	0.000
Decanes Flash Gas Mass Flow	0.0001	0.001	0.000	0.0001	0.000	0.0005	0.000	0.001	0.000	0.000
VOC Flash Gas Mass Flow	**1.027**	**4.496**	**0.083**	**0.362**	**0.807**	**3.533**	**1.916**	**8.391**	**0.096**	**0.420**
n-Hexane Flash Gas Mass Flow	0.0273	0.119	0.000	0.0009	0.002	0.0084	0.029	0.129	0.001	0.006
Benzene Flash Gas Mass Flow	0.0050	0.022	0.000	0.0001	0.000	0.0013	0.005	0.023	0.000	0.001
Toluene Flash Gas Mass Flow	0.0056	0.025	0.000	0.0003	0.001	0.0031	0.006	0.028	0.000	0.001
E-Benzene Flash Gas Mass Flow	0.0001	0.001	0.000	0.0000	0.000	0.0001	0.000	0.001	0.000	0.000
2,2,4 Trimethylpentane	0.0024	0.010	0.000	0.0009	0.002	0.0087	0.005	0.020	0.000	0.001
Xylene Flash Gas Mass Flow	0.0009	0.004	0.000	0.0000	0.000	0.0005	0.001	0.005	0.000	0.000
HAP Flash Gas Mass Flow	**0.041**	**0.181**	**0.001**	**0.002**	**0.005**	**0.022**	**0.047**	**0.205**	**0.001**	**0.004**
Stream Molecular Weight		**33.2**		**33.2**		**33.2**				
Stream Standard Vol. Flow (MMSCFD)		**4.77E-04**		**3.13E-05**		**3.07E-04**				

[1] Tank flashing, working and breathing emissions were calculated using Promax 4.0 modeling software. The condensate analysis was sampled by ATS in 2010 at 135 psig.

Uncontrolled Potential Emissions

Pollutant	Hrs of Operation (hrs/yr)	Estimated Emissions	
		(lb/hr)	(tpy)
VOC	8760	1.92	8.39
CO_2	8760	0.03	0.15
CH_4	8760	0.39	1.71
CO_2e	8760	9.78	42.85

Controlled Potential Emissions

Pollutant	Hrs of Operation (hrs/yr)	Estimated Emissions	
		(lb/hr)	(tpy)
VOC	8760	0.10	0.42
CO_2	8760	0.03	0.15
CH_4	8760	0.02	0.09
CO_2e	8760	0.52	2.29

Ponderosa Compressor Station
Produced Water Storage Tank Detail Sheet - Potential to Emit

Source ID Number	T-3	
Tank Usage	Produced Water Tank	
Tank Capacity	300	bbls
Serial Number	3B196-02-01	
Date in Service	2009	
Tank Contents	Produced Water	
Emission Controls	Yes	
Tank Orientation	Vertical	
Potential Operation	8760	hr/yr
Vent Vapor Volume	0.0001	MMSCFD
Potential Throughput (annual)	400	bbls/yr
Potential Throughput	1.096	bbls/day

	Tank Flashing Emissions [1]		Working Losses [1]		Breathing Losses [1]		Total Losses [1]		Total Controlled Losses [1]	
	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
Total Flash Gas Mass Flow	0.2807	1.22952	NA	NA	NA	NA	NA	NA	NA	NA
N2 Flash Gas Mass Flow	0.0000	0.00000	0.00000	0.0000	0.00000	0.0000	0.00000	0.00000	0.00000	0.00000
CO2 Flash Gas Mass Flow	0.0037	0.01613	0.00009	0.0004	0.00110	0.0048	0.00488	0.02136	0.00024	0.00107
C1 Flash Gas Mass Flow	0.0572	0.25038	0.00023	0.0010	0.00278	0.0122	0.06017	0.26356	0.00301	0.01318
C2 Flash Gas Mass Flow	0.0524	0.22939	0.00240	0.0105	0.02840	0.1244	0.08318	0.36432	0.00416	0.01822
C3 Flash Gas Mass Flow	0.0677	0.29648	0.00298	0.0131	0.03525	0.1544	0.10592	0.46394	0.00530	0.02320
i-C4 Flash Gas Mass Flow	0.0220	0.09616	0.00102	0.0045	0.01210	0.0530	0.03507	0.15362	0.00175	0.00768
n-C4 Flash Gas Mass Flow	0.0286	0.12548	0.00135	0.0059	0.01592	0.0697	0.04591	0.20108	0.00230	0.01005
i-C5 Flash Gas Mass Flow	0.0128	0.05604	0.00059	0.0026	0.00703	0.0308	0.02041	0.08941	0.00102	0.00447
n-C5 Flash Gas Mass Flow	0.0099	0.04335	0.00047	0.0021	0.00556	0.0244	0.01593	0.06976	0.00080	0.00349
Hexanes Flash Gas Mass Flow	0.0069	0.03029	0.00036	0.0016	0.00422	0.0185	0.01149	0.05031	0.00057	0.00252
Heptanes Flash Gas Mass Flow	0.0097	0.04237	0.00046	0.0020	0.00548	0.0240	0.01561	0.06839	0.00078	0.00342
Octanes Flash Gas Mass Flow	0.0012	0.00532	0.00006	0.0003	0.00069	0.0030	0.00197	0.00862	0.00010	0.00043
Nonanes Flash Gas Mass Flow	0.0001	0.00064	0.00001	0.0000	0.00008	0.0004	0.00023	0.00102	0.00001	0.00005
Decanes Flash Gas Mass Flow	0.0000	0.00010	0.00000	0.0000	0.00001	0.0001	0.00004	0.00016	0.00000	0.00001
VOC Flash Gas Mass Flow	**0.166**	**0.725**	**0.007**	**0.032**	**0.087**	**0.381**	**0.260**	**1.138**	**0.013**	**0.057**
n-Hexane Flash Gas Mass Flow	0.0044	0.01933	0.00002	0.0001	0.00021	0.0009	0.00464	0.02032	0.00023	0.00102
Benzene Flash Gas Mass Flow	0.0008	0.00355	0.00000	0.0000	0.00003	0.0001	0.00084	0.00370	0.00004	0.00018
Toluene Flash Gas Mass Flow	0.0009	0.00397	0.00001	0.0000	0.00008	0.0003	0.00099	0.00433	0.00005	0.00022
E-Benzene Flash Gas Mass Flow	0.0000	0.00008	0.00000	0.0000	0.00000	0.0000	0.00002	0.00010	0.00000	0.00000
2,2,4 Trimethylpentane	0.0004	0.00169	0.00002	0.0001	0.00021	0.0009	0.00062	0.00271	0.00003	0.00014
Xylene Flash Gas Mass Flow	0.0001	0.00065	0.00000	0.0000	0.00003	0.0002	0.00019	0.00081	0.00001	0.00004
HAP Flash Gas Mass Flow	**0.00668**	**0.02928**	**0.00005**	**0.00021**	**0.00057**	**0.00249**	**0.00730**	**0.03197**	**0.00037**	**0.00160**
Stream Molecular Weight		**33.1**		**33.1**		**33.1**				
Stream Standard Vol. Flow (MMSCFD)		**7.7E-05**		**2.8E-06**		**3.3E-05**				

[1] Tank flashing, working and breathing emissions were calculated using Promax 4.0 modeling software. The produced water composition was created by mixing 10% condensate with 90% water. The condensate analysis was sampled by ATS in 2010 at 135 psig.

Uncontrolled Potential Emissions

Pollutant	Hrs of Operation (hrs/yr)	Estimated Emissions	
		(lb/hr)	(tpy)
VOC	8760	0.26	1.14
CO_2	8760	0.00	0.02
CH_4	8760	0.06	0.26
CO_2e	8760	1.51	6.61

Controlled Potential Emissions

Pollutant	Hrs of Operation (hrs/yr)	Estimated Emissions	
		(lb/hr)	(tpy)
VOC	8760	0.01	0.06
CO_2	8760	0.00	0.02
CH_4	8760	0.00	0.01
CO_2e	8760	0.08	0.35

Ponderosa Compressor Station
Produced Water Storage Tank Detail Sheet - Actual Emissions 2014

Source ID Number	T-3	
Tank Usage	Produced Water Tank	
Tank Capacity	300	bbls
Serial Number	3B196-02-01	
Date in Service	2009	
Tank Contents	Produced Water	
Emission Controls	Yes	
Tank Orientation	Vertical	
Potential Operation	8760	hr/yr
Vent Vapor Volume	0.000004	MMSCFD
Actual Throughput (2014)	150	bbls/yr
Actual Throughput (2014)	0.411	bbls/day

	Tank Flashing Emissions [1]		Working Losses [1]		Breathing Losses [1]		Total Losses [1]		Total Controlled Losses [1]	
	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
Total Flash Gas Mass Flow	0.0110	0.048	NA	NA	NA	NA	NA	NA	NA	NA
N2 Flash Gas Mass Flow	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.000
CO2 Flash Gas Mass Flow	0.0001	0.000	0.000	0.0000	0.000	0.0003	0.000	0.001	0.000	0.000
C1 Flash Gas Mass Flow	0.0023	0.010	0.000	0.0000	0.000	0.0004	0.002	0.010	0.000	0.001
C2 Flash Gas Mass Flow	0.0021	0.009	0.000	0.0001	0.001	0.0028	0.003	0.012	0.000	0.001
C3 Flash Gas Mass Flow	0.0026	0.012	0.000	0.0001	0.001	0.0034	0.003	0.015	0.000	0.001
i-C4 Flash Gas Mass Flow	0.0009	0.004	0.000	0.0000	0.000	0.0012	0.001	0.005	0.000	0.000
n-C4 Flash Gas Mass Flow	0.0011	0.005	0.000	0.0001	0.000	0.0015	0.001	0.007	0.000	0.000
i-C5 Flash Gas Mass Flow	0.0005	0.002	0.000	0.0000	0.000	0.0007	0.001	0.003	0.000	0.000
n-C5 Flash Gas Mass Flow	0.0004	0.002	0.000	0.0000	0.000	0.0005	0.001	0.002	0.000	0.000
Hexanes Flash Gas Mass Flow	0.0003	0.001	0.000	0.0000	0.000	0.0004	0.000	0.002	0.000	0.000
Heptanes Flash Gas Mass Flow	0.0004	0.002	0.000	0.0000	0.000	0.0005	0.001	0.002	0.000	0.000
Octanes Flash Gas Mass Flow	0.0000	0.000	0.000	0.0000	0.000	0.0001	0.000	0.000	0.000	0.000
Nonanes Flash Gas Mass Flow	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.000
Decanes Flash Gas Mass Flow	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.000
VOC Flash Gas Mass Flow	**0.006**	**0.028**	**0.000**	**0.000**	**0.002**	**0.008**	**0.008**	**0.037**	**0.000**	**0.002**
n-Hexane Flash Gas Mass Flow	0.0002	0.001	0.000	0.0000	0.000	0.0000	0.000	0.001	0.000	0.000
Benzene Flash Gas Mass Flow	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.000
Toluene Flash Gas Mass Flow	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.000
E-Benzene Flash Gas Mass Flow	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.000
2,2,4 Trimethylpentane	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.000
Xylene Flash Gas Mass Flow	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.000
HAP Flash Gas Mass Flow	**0.000**	**0.001**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.001**	**0.000**	**0.000**
Stream Molecular Weight		**33.030**		**33.030**		**33.030**				
Stream Standard Vol. Flow (MMSCFD)		**3.02E-06**		**2.80549E-08**		**7.57331E-07**				

[1] Tank flashing, working and breathing emissions were calculated using Promax 4.0 modeling software. The produced water composition was created by mixing 10% condensate with 90% water. The condensate analysis was sampled by ATS in 2010 at 135 psig.

Uncontrolled Potential Emissions

Pollutant	Hrs of Operation (hrs/yr)	Estimated Emissions	
		(lb/hr)	(tpy)
VOC	8760	0.01	0.04
CO_2	8760	0.00	0.00
CH_4	8760	0.00	0.01
CO_2e	8760	0.06	0.26

Controlled Potential Emissions

Pollutant	Hrs of Operation (hrs/yr)	Estimated Emissions	
		(lb/hr)	(tpy)
VOC	8760	0.00	0.00
CO_2	8760	0.00	0.00
CH_4	8760	0.00	0.00
CO_2e	8760	0.00	0.01

Ponderosa Compressor Station
55 MMSCFD TEG Dehydration Unit - Potential to Emit

Source ID Number	TBD	
Source Description	TEG Dehy Regenerator and Flash Tank Vents	
Annual Throughput	55	MMSCFD
Glycol Pump Type	Electric	
Glycol Pump Rate	11	gpm
Potential operation	8760	hr/yr
Flash Tank Off Gas Flow I	664	scf/hr
Regen Ovhd Stream Flow	3820	scf/hr
Control	Flare	

Uncontrolled	Regenerator		Flash Tank		**Total**	
Pollutant	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Propane	3.90	17.08	4.52	19.80	8.42	36.88
Isobutane	1.42	6.22	1.39	6.09	2.81	12.31
n-Butane	2.45	10.73	2.09	9.15	4.54	19.89
Isopentane	1.11	4.86	0.84	3.66	1.95	8.52
n-Pentane	1.05	4.60	0.69	3.04	1.74	7.64
Cyclohexane	1.45	6.35	0.17	0.74	1.62	7.09
Other Hexanes	0.76	3.32	0.39	1.72	1.15	5.05
Heptanes	1.57	6.88	0.35	1.52	1.92	8.40
Methycyclohexane	1.73	7.58	0.16	0.70	1.89	8.27
C8+ Heavies	1.83	8.02	0.05	0.20	1.88	8.22
Benzene	3.43	15.02	0.06	0.27	3.49	15.29
Toluene	5.07	22.21	0.06	0.26	5.13	22.46
Ethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00
Xylene	0.00	0.00	0.00	0.00	0.00	0.00
n-Hexane	0.61	2.68	0.26	1.12	0.87	3.79
2,2,4-Trimethylpentane	0.04	0.16	0.014	0.06	0.050	0.22
Total HAP	9.15	40.06	0.39	1.70	9.54	41.77
VOC	17.27	75.64	10.64	46.62	27.91	122.25
CO_2	3.74	16.38	4.49	19.67	8.23	36.05
CH_4	26.10	114.32	20.10	88.04	46.20	202.36
CO_2e	656.24	2874.33	506.99	2220.62	1163.23	5094.95

Notes: Emissions calculated using actual operating parameters and GRI GlyCalc v 4.0;
CO_2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1.

Controlled	Regenerator		Flash Tank		**Total**	
Pollutant	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Propane	0.19	0.85	0.23	0.99	0.42	1.84
Isobutane	0.07	0.31	0.07	0.30	0.14	0.62
n-Butane	0.12	0.53	0.10	0.46	0.23	0.99
Isopentane	0.06	0.24	0.04	0.18	0.10	0.42
n-Pentane	0.05	0.23	0.03	0.15	0.09	0.38
Cyclohexane	0.07	0.31	0.01	0.04	0.08	0.35
Other Hexanes	0.04	0.16	0.02	0.09	0.06	0.25
Heptanes	0.06	0.27	0.02	0.08	0.08	0.34
Methycyclohexane	0.08	0.37	0.01	0.04	0.09	0.40
C8+ Heavies	0.09	0.39	0.00	0.01	0.09	0.40
Benzene	0.17	0.74	0.00	0.01	0.17	0.75
Toluene	0.24	1.05	0.00	0.01	0.24	1.06
Ethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00
Xylene	0.00	0.00	0.00	0.00	0.00	0.00
n-Hexane	0.03	0.13	0.01	0.06	0.04	0.19
2,2,4-Trimethylpentane	0.002	0.01	0.001	0.00	0.00	0.01
Total HAP	0.44	1.93	0.02	0.08	0.46	2.01
VOC	0.84	3.67	0.53	2.33	1.37	6.00
CO_2	3.74	16.38	4.49	19.67	8.23	36.05
CH_4	1.31	5.72	1.01	4.40	2.31	10.12
CO_2e	36.37	159.28	29.62	129.71	65.98	288.99

Notes: Emissions calculated using actual operating parameters and GRI GlyCalc v 4.0;
CO_2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1.

Fed Enforceable [1]	Regenerator		Flash Tank		**Total**	
Pollutant [2]	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Propane (u)	3.90	17.08	4.52	19.80	8.42	36.88
Isobutane (u)	1.42	6.22	1.39	6.09	2.81	12.31
n-Butane (u)	2.45	10.73	2.09	9.15	4.54	19.89
Isopentane (u)	1.11	4.86	0.84	3.66	1.95	8.52
n-Pentane (u)	1.05	4.60	0.69	3.04	1.74	7.64
Cyclohexane (u)	1.45	6.35	0.17	0.74	1.62	7.09
Other Hexanes (u)	0.76	3.32	0.39	1.72	1.15	5.05
Heptanes (u)	1.57	6.88	0.35	1.52	1.92	8.40
Methycyclohexane (u)	1.73	7.58	0.16	0.70	1.89	8.27
C8+ Heavies (u)	1.83	8.02	0.05	0.20	1.88	8.22
Benzene (c)	0.17	0.74	0.00	0.01	0.17	0.75
Toluene (c)	0.24	1.05	0.00	0.01	0.24	1.06
Ethylbenzene (c)	0.00	0.00	0.00	0.00	0.00	0.00
Xylene (c)	0.00	0.00	0.00	0.00	0.00	0.00
n-Hexane (c)	0.03	0.13	0.01	0.06	0.04	0.19
2,2,4-Trimethylpentane (c)	0.00	0.01	0.00	0.00	0.00	0.01
Total HAP	0.44	1.93	0.02	0.08	0.46	2.01
VOC	17.71	77.56	10.66	46.70	28.37	124.27
CO_2	3.74	16.38	4.49	19.67	8.23	36.05
CH_4	26.10	114.32	20.10	88.04	46.20	202.36
CO_2e	656.24	2874.33	506.99	2220.62	1163.23	5094.95

Notes: Emissions calculated using actual operating parameters and GRI GlyCalc v 4.0;
CO_2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1.

[1] Since emission control is federally enforceable per 40 CFR Part 63 Subpart HH, the HAP contributions of the total VOC emissions are controlled by 95%.

[2] (u) = uncontrolled; (c) = controlled

Ponderosa Compressor Station
External Combustion Source - Reboiler Heater - Potential to Emit

Emission Unit Number	Unknown	
Equipment Usage	Reboiler	
Equipment Make	Dickson Process Systems	
Equipment Model	Unknown	
Serial Number	Unknown	
Installation Date	Unknown	
Emission Controls	None	
Fuel Heating Value	1123	Btu/scf (HHV)
Operating Duty	1.01	MMBtu/hr
Potential Operation	8760	hr/yr
Potential Fuel Usage	7.84	MMscf/yr

Potential Emissions - Controlled

Pollutant	Emission Factor (lb/MMscf)	Emission Factor (lb/MMBtu) (HHV)[6]	Nominal Rating (MMBtu/hr)	Hrs of Operation (hrs/yr)	Estimated Emissions (lb/hr)	Estimated Emissions (tpy)	Source of Emission Factor	Global Warming Potential[5]	Total Emissions CO_2e (tpy)
NOx	100.00	0.0891	1.01	8760	0.090	3.92E-01	AP-42[1]		
CO	84.00	0.0748	1.01	8760	0.075	3.29E-01	AP-42[1]		
VOC	5.50	0.0049	1.01	8760	0.005	2.16E-02	AP-42[2]		
SO_2	0.60	0.0005	1.01	8760	0.001	2.35E-03	AP-42[2]		
PM, PM_{10}, $PM_{2.5}$	7.60	0.0068	1.01	8760	0.007	2.98E-02	AP-42[2]		
Lead	0.0005	0.0000	1.01	8760	0.000	1.96E-06	AP-42[2]		
Benzene	2.10E-03	0.0000	1.01	8760	0.000	8.23E-06	AP-42[3]		
Dichlorobenzene	1.20E-03	0.0000	1.01	8760	0.000	4.70E-06	AP-42[3]		
Formaldehyde	7.50E-02	0.0001	1.01	8760	0.000	2.94E-04	AP-42[3]		
n-Hexane	1.80E+00	0.0016	1.01	8760	0.002	7.06E-03	AP-42[3]		
Toluene	3.40E-03	0.0000	1.01	8760	0.000	1.33E-05	AP-42[3]		
CO_2		116.8891	1.01	8760	117.474	5.15E+02	40 CFR 98[4]	1	514.53
CH_4		0.0022	1.01	8760	0.002	9.70E-03	40 CFR 98[4]	25	0.24
N_2O		0.0002	1.01	8760	0.000	9.70E-04	40 CFR 98[4]	298	0.29
Total CO_2e									**515.07**

[1] EPA AP-42, Table 1.4-1, Emission Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Natural Gas Combustion (July 1998).

[2] EPA AP-42, Table 1.4-2, Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion (July 1998). PM includes both condensible and filterable PM. All PM is assumed to be $PM_{2.5}$, so PM = PM_{10} = $PM_{2.5}$.

[3] EPA AP-42, Table 1.4-3, Emission Factors for Speciated Organic Compounds from Natural Gas Combustion (July 1998)

[4] 40 CFR Part 98, Subpart C, Tables C-1 and C-2. (53.02 kg/MMBtu CO_2, 1x10-3 kg/MMBtu CH_4, and 1x10-4 kg/MMBtu N_20)

[5] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

[6] All emission factors were converted to a lb/MMBtu basis by dividing by the reboiler heater fuel heating value (HHV).

Ponderosa Compressor Station
Tank Vapor Combustion Device - Potential to Emit

Source ID	NA		Fuel Heat Value	1123 Btu/scf		Tank Flash Heat Value	1902 Btu/scf
Description	Tank Combustor		Pilot Flow Rate	25 scf/hr		Tank Flash Vapor Volume	1.24 MSCFD
Manufacturer	Tornado		Pilot Heat Input	0.03 MMBtu/hr		Tank Flash Vapor Volume	51.56 scf/hr
Model	TEC 4CS		Pilot Potential Operation	8760 hr/yr			
Serial #	1734		Pilot Potential Fuel Usage	0.22 MMscf/yr			
Startup Date	Unknown		Destruction Efficiency	95 %			
Stack Height	NA	ft	Fuel VOC Weight %	0.13 wt%			
Stack Diameter	NA	in					

Emissions from Pilot Combustion

Pollutant	CAS Number	Emission Factor (lb/MMscf)	Emission Factor (lb/MMBtu)[6]	(lb/hr)	(lb/yr)	(ton/yr)	Global Warming Potential	CO_2e (ton/yr)	Source of Emission Factor
NOx		100	0.0980	0.00	24.11	0.01			AP-42[1]
CO		84	0.0824	0.00	20.25	0.01			AP-42[1]
VOC		0.01	0.0000	0.00	0.00	0.00			AP-42[2]
SO_2		0.6	0.0006	0.00	0.14	0.00			AP-42[2]
PM		7.6	0.0075	0.00	1.83	0.00			AP-42[2]
Lead		0.0005	0.0000	0.00	0.00	0.00			AP-42[2]
Benzene	71-43-2	2.10E-03	2.06E-06	5.78E-08	5.06E-04	2.53E-07			AP-42[3]
Formaldehyde	50-00-0	7.50E-02	7.35E-05	2.06E-06	1.81E-02	9.04E-06			AP-42[3]
n-Hexane	110-54-3	1.80E+00	1.76E-03	4.95E-05	4.34E-01	2.17E-04			AP-42[3]
Toluene	108-88-3	3.40E-03	3.33E-06	9.36E-08	8.20E-04	4.10E-07			AP-42[3]
CO_2			116.88908	3.28	28744.04	14.37	1.00	14.37	40 CFR Part 98[4,5]
CH_4			0.0022046	0.00006	0.54	0.00027	25.00	0.01	40 CFR Part 98[4,5]
N_2O			0.0002205	0.00001	0.05	0.00003	298.00	0.01	40 CFR Part 98[4,5]
Total CO_2e								**14.39**	

[1] EPA AP-42, Table 1.4-1, July 1998.

[2] EPA AP-42, Table 1.4-2, July 1998. PM includes both condensible and filterable PM. All PM is assumed to be $PM_{2.5}$, so PM = PM_{10} = $PM_{2.5}$.

[3] EPA AP-42, Table 1.4-3, July 1998.

[4] 40 CFR Part 98, Subpart C, Tables C-1 and C-2. (53.02 kg/MMBtu CO_2, $1x10^{-3}$ kg/MMBtu CH_4, and $1x10^{-4}$ kg/MMBtu N_20).

[5] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

[6] All emission factors were converted to a lb/MMBtu factor by dividing by 1020 per AP-42 Table 1.4-1.

Emissions from Tank Vapor Combustion

Pollutant	Tank Flash Heat Value (Btu/scf)	Tank Flash Vapor Vol (scf/hr)	Emission Factor (lb/MMBtu)	(lb/hr)	(lb/yr)	(ton/yr)	Global Warming Potential	CO_2e (ton/yr)	Source of Emission Factor
NOx	1902	51.56	0.14	0.01	120.24	0.06			WYDEQ C6 S2 Guidance[1]
CO	1902	51.56	0.035	0.00	30.06	0.02			WYDEQ C6 S2 Guidance[1]
CO_2	1902	51.56	116.88908	11.46	100393.84	50.20	1.00	50.20	40 CFR Part 98 [2,3]
CH_4	1902	51.56	0.0022046	0.00	1.89	0.00095	25.00	0.02	40 CFR Part 98 [2,3]
N_2O	1902	51.56	0.0002205	0.00	0.19	0.00009	298.00	0.03	40 CFR Part 98 [2,3]
Total CO_2e								**50.25**	

[1] NO_X and CO emissions factors based on Wyoming Air Quality Standards and Regulations; Chapter 6, Section 2 Oil and Gas Production Facilites Permitting Guidance for flares.

[2] 40 CFR Part 98, Subpart C, Tables C-1 and C-2. (53.02 kg/MMBtu CO_2, $1x10^{-3}$ kg/MMBtu CH_4, and $1x10^{-4}$ kg/MMBtu N_20).

[3] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

Total

Pollutant	(lb/hr)	(ton/yr)	Global Warming Potential	CO_2e (ton/yr)
NO_x	0.02	0.07		
CO	0.01	0.03		
VOC	0.00	0.00		
SO_2	0.00	0.00		
PM	0.00	0.00		
Lead	0.00	0.00		
Benzene	5.78E-08	2.53E-07		
Formaldehyde	2.06E-06	9.04E-06		
n-Hexane	4.95E-05	2.17E-04		
Toluene	9.36E-08	4.10E-07		
CO_2	14.74	64.57	1	64.57
CH_4	0.00	0.00	25	0.03
N_2O	0.00	0.00	298	0.04
TOTAL CO_2e				**64.64**

Ponderosa Compressor Station
Tank Vapor Combustion Device - Actual Emissions 2014

Source ID	NA		Fuel Heat Value	1123 Btu/scf		Tank Flash Heat Value	1902 Btu/scf
Description	Tank Combustor		Pilot Flow Rate	25 scf/hr		Tank Flash Vapor Volume	0.005 MSCFD
Manufacturer	Tornado		Pilot Heat Input	0.03 MMBtu/hr		Tank Flash Vapor Volume	0.19 scf/hr
Model	TEC 4CS		Pilot Potential Operation	8760 hr/yr			
Serial #	1734		Pilot Potential Fuel Usage	0.22 MMscf/yr			
Startup Date	Unknown		Destruction Efficiency	95 %			
Stack Height	NA	ft	Fuel VOC Weight %	0.13 wt%			
Stack Diameter	NA	in					

Emissions from Pilot Combustion

Pollutant	CAS Number	Emission Factor (lb/MMscf)	Emission Factor (lb/MMBtu)[6]	(lb/hr)	(lb/yr)	(ton/yr)	Global Warning Potential	CO_2e (ton/yr)	Source of Emission Factor
NOx		100	0.0980	0.00	24.11	0.01			AP-42[1]
CO		84	0.0824	0.00	20.25	0.01			AP-42[1]
VOC		0.01	0.0000	0.00	0.00	0.00			AP-42[2]
SO_2		0.6	0.0006	0.00	0.14	0.00			AP-42[2]
PM		7.6	0.0075	0.00	1.83	0.00			AP-42[2]
Lead		0.0005	0.0000	0.00	0.00	0.00			AP-42[2]
Benzene	71-43-2	2.10E-03	2.06E-06	5.78E-08	5.06E-04	2.53E-07			AP-42[3]
Formaldehyde	50-00-0	7.50E-02	7.35E-05	2.06E-06	1.81E-02	9.04E-06			AP-42[3]
n-Hexane	110-54-3	1.80E+00	1.76E-03	4.95E-05	4.34E-01	2.17E-04			AP-42[3]
Toluene	108-88-3	3.40E-03	3.33E-06	9.36E-08	8.20E-04	4.10E-07			AP-42[3]
CO_2			116.88908	3.28	28744.04	14.37	1.00	14.37	40 CFR Part 98[4,5]
CH_4			0.0022046	0.00006	0.54	0.00027	25.00	0.01	40 CFR Part 98[4,5]
N_2O			0.0002205	0.00001	0.05	0.00003	298.00	0.01	40 CFR Part 98[4,5]
Total CO_2e								**14.39**	

[1] EPA AP-42, Table 1.4-1, July 1998.

[2] EPA AP-42, Table 1.4-2, July 1998. PM includes both condensible and filterable PM. All PM is assumed to be $PM_{2.5}$, so PM = PM_{10} = $PM_{2.5}$.

[3] EPA AP-42, Table 1.4-3, July 1998.

[4] 40 CFR Part 98, Subpart C, Tables C-1 and C-2. (53.02 kg/MMBtu CO_2, $1x10^{-3}$ kg/MMBtu CH_4, and $1x10^{-4}$ kg/MMBtu N_20).

[5] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

[6] All emission factors were converted to a lb/MMBtu factor by dividing by 1020 per AP-42 Table 1.4-1.

Emissions from Tank Vapor Combustion

Pollutant	Tank Flash Heat Value (Btu/scf)	Tank Flash Vapor Vol (scf/hr)	Emission Factor (lb/MMBtu)	(lb/hr)	(lb/yr)	(ton/yr)	Global Warning Potential	CO_2e (ton/yr)	Source of Emission Factor
NOx	1902	0.19	0.14	0.00	0.45	0.00			WYDEQ C6 S2 Guidance[1]
CO	1902	0.19	0.035	0.00	0.11	0.00			WYDEQ C6 S2 Guidance[1]
CO_2	1902	0.19	116.88908	0.04	374.88	0.19	1.00	0.19	40 CFR Part 98[2,3]
CH_4	1902	0.19	0.0022046	0.00	0.01	0.00000	25.00	0.00	40 CFR Part 98[2,3]
N_2O	1902	0.19	0.0002205	0.00	0.00	0.00000	298.00	0.00	40 CFR Part 98[2,3]
Total CO_2e								**0.19**	

[1] NO_X and CO emissions factors based on Wyoming Air Quality Standards and Regulations; Chapter 6, Section 2 Oil and Gas Production Facilites Permitting Guidance for flares.

[2] 40 CFR Part 98, Subpart C, Tables C-1 and C-2. (53.02 kg/MMBtu CO_2, $1x10^{-3}$ kg/MMBtu CH_4, and $1x10^{-4}$ kg/MMBtu N_20).

[3] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

Total

Pollutant	(lb/hr)	(ton/yr)	Global Warming Potential	CO_2e (ton/yr)
NO_x	0.00	0.01		
CO	0.00	0.01		
VOC	0.00	0.00		
SO_2	0.00	0.00		
PM	0.00	0.00		
Lead	0.00	0.00		
Benzene	5.78E-08	2.53E-07		
Formaldehyde	2.06E-06	9.04E-06		
n-Hexane	4.95E-05	2.17E-04		
Toluene	9.36E-08	4.10E-07		
CO_2	3.32	14.56	1	14.56
CH_4	0.00	0.00	25	0.01
N_2O	0.00	0.00	298	0.01
TOTAL CO_2e				**14.57**

Ponderosa Compressor Station
Flare Detail Sheet - Potential to Emit

Source ID Number	SC-C-1	
Equipment ID	FL-5100	
Equipment Usage	High Pressure Flare	
Equipment Make	Flare Industries	
Equipment Model	MAVP-1236	
Serial Number	Unknown	
Installation Date	2014	
Equipment Configuration	N/A	
Fuel Heating Value	1122.87	Btu/scf
Pilot Flow Rate [1]	54	scf/hr
Flare Heat Input	0.06	MMBtu/hr
Potential Operation	8760	hr/yr

[1] John Zink Company; Proposal for Open Flame Vapor Combustion Unit, Section IV Performance.

Vents to Combustor

Vent ID	Description	Number of Units	Flow Rate (scf/hr) [2]	Flow Rate (MMscf/yr) [2]	Vent Heating Value (Btu/scf) [3] (HHV)	Annual Heat Input to Flare (MMBtu/yr)
Dehydration Unit	Condenser Vent Stream	1	942	8.3	330	2721.1
Dehydration Unit	Flash Tank Off Gas Stream	1	664	5.8	1267	7372.3

[2] Flow rates from the dehydration unit TEG regenerator and flash tank separator are taken from the Glycalc Aggregate Report (6/22/15)

Potential Emissions from Pilot and Igniter

Pollutant	Emission Factor		Nominal Rating	Hrs of Operation	Estimated Emissions		Source of Emission
	(lb/MMscf)	(lb/MMBtu) (HHV)	(MMBtu/hr)	(hrs/yr)	(lb/hr)	(tpy)	Factor
NOx	100.00	0.09	0.06	8760	5.40E-03	0.02	AP-42[1]
CO	84.00	0.07	0.06	8760	4.54E-03	0.02	AP-42[1]
VOC	5.50	0.00	0.06	8760	2.97E-04	0.00	AP-42[2]
SO_2	0.60	0.001	0.06	8760	3.24E-05	1.42E-04	AP-42[2]
PM, PM_{10}, $PM_{2.5}$ [6]	7.60	0.007	0.06	8760	4.10E-04	1.80E-03	AP-42[2]
Lead	0.0005	0.00	0.06	8760	2.70E-08	1.18E-07	AP-42[2]
Benzene	2.1E-03	0.000002	0.06	8760	1.13E-07	4.97E-07	AP-42[3]
Dichlorobenzene	1.2E-03	0.000001	0.06	8760	6.48E-08	2.84E-07	AP-42[3]
Formaldehyde	7.5E-02	0.000067	0.06	8760	4.05E-06	1.77E-05	AP-42[3]
Hexane	1.8E+00	0.001603	0.06	8760	9.72E-05	4.26E-04	AP-42[3]
Toluene	3.4E-03	0.000003	0.06	8760	1.84E-07	8.04E-07	AP-42[3]
CO_2	1.31E+05	116.89	0.06	8760	7.09E+00	31.04	Subpart C[4]
CH_4	2.48E+00	0.0022	0.06	8760	1.34E-04	0.001	Subpart C[4]
N_2O	2.48E-01	0.0002	0.06	8760	1.34E-05	0.000	Subpart C[4]
CO_2e	--	--	--	--	7.09	31.08	Subpart A[5]

[1] EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-1, Emission Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Natural Gas Combustion

[2] EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-2, Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion

[3] EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-3, Emission Factors for Speciated Organic Compounds from Natural Gas Combustion

[4] 40 CFR Part 98, Subpart C, Tables C-1 and C-2.

[5] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

[6] PM includes both condensible and filterable PM. All PM is assumed to be PM2.5, so PM = PM_{10} = $PM_{2.5}$

Potential Emissions from Combustion (NOx and CO)

Pollutant	Emission Factor (lb/MMBtu)	Hrs of Operation (hrs/yr)	Annual Heat Input to Combustor (MMBtu/yr)	Potential Heat Input (MMBtu/hr)	Estimated Emissions (lb/hr)	Estimated Emissions (tpy)	Source of Emission Factor
NOx	0.14	8760	10093.4	1.152	0.1613	0.71	WY C6S2[7]
CO	0.035	8760	10093.4	1.152	0.0403	0.18	WY C6S2[7]

[7] Emission Factors from Wyoming C6S2 - O&G Production Facilities Permitting Guidance.

Potential Emissions from Combustion (GHG)

Pollutant	Actual Mol.Wt. CO_2 (lb/mol)	Moles CO2 per mol waste gas (Yj * Rj)	Flow Rate (scf/yr)	Estimated Emissions (lb/hr)	Estimated Emissions (tpy) [8]	Global Warming Potential	Total Emissions CO_2e (lb/hr)	Total Emissions CO_2e (tpy)
CO_2 (EG Regen)	44.01	0.38	8251920	39.59	173.43	1	39.59	173.43
CO_2 (Flash Tank)	44.01	1.37	5816640	100.04	438.17	1	100.04	438.17

[8] Combusted CO2 emissions are estimated using equation W-21 from 40 CFR Part 98.233(n), Flare Stack Emissions. **Flare Destruction Efficiency (%) * Volum to flare (scf/yr) * mole fraction of gas hydrocarbon constituents * number of carbon atoms in gas hydrocarbon constituent**

Potential Contolled / Uncontrolled Emissions

Pollutant	Estimated Emissions (lb/hr)	Estimated Emissions (tpy)
NOx	0.1667	0.73
CO	0.0449	0.20
VOC	0.0003	0.00
SO_2	0.0000	1.42E-04
PM, PM_{10}, $PM_{2.5}$	0.0004	1.80E-03
Lead	0.0000	1.18E-07
Benzene	1.13E-07	4.97E-07
Dichlorobenzene	6.48E-08	2.84E-07
Formaldehyde	4.05E-06	1.77E-05
Hexane	9.72E-05	4.26E-04
Toluene	1.84E-07	8.04E-07
CO_2	1.47E+02	6.43E+02
CH_4	1.34E-04	5.86E-04
N_2O	1.34E-05	5.86E-05
CO_2e	1.47E+02	6.43E+02

Note: These emissions represent the pilot and ignitor gas combustion and emissions created in combustion of vented blowdown vapors. The emissio the combustion of other source streams routed to this flare for control are shown as the controlled emissions with each respective emission source.

Ponderosa Compressor Station
Vent Detail Sheet - Actual Emissions 2014

Source ID Number	N/A
Source Description	Vented Emissions

Potential Venting Volumes - Startup/Warmup

Source Type	Equipment	No. of Units	Gas Emitted per Event (scf) [1]	Events per Year	Annual Volume Emitted (scf)	Emission Factor Source
Emergency Shutdown	Taurus 70-CG-7101	1	50,000	1	50,000	Engineering Estimate
Turbine Blowdown	Taurus 70-CG-7201	1	21,800	51	1,111,800	Engineering Estimate
SUBTOTAL					**1,161,800**	

Potential Venting Volumes - Turbine Seals

Source Type	Seal Vent Rate (scf/hr)	Hours per Year [3]	Annual Volume Emitted (scf)	Emission Factor Source
Turbine Seals	360	6746	2,428,380	Engineering Estimate[3]
SUBTOTAL			**2,428,380**	

Potential Venting Emissions

Pollutant	Gas Wt. %	Actual Mol.Wt. Gas (lb/mol)	Venting Emissions (tpy)			**TOTAL**	Global Warming Potential[4]	Total Emissions CO_2e (tpy)
			Emergency Shutdown	Turbine Blowdown	Turbine Seals			
VOC	12.69	18.75	0.16	3.49	7.63	11.28		
n-Hexane	0.25	18.75	0.00	0.07	0.15	0.22		
2,2,4 Trimethylpentane	0.00	18.75	0.00	0.00	0.00	0.00		
Benzene	0.03	18.75	0.00	0.01	0.02	0.03		
Toluene	0.03	18.75	0.00	0.01	0.02	0.03		
Ethylbenzene	0.000	18.75	0.00	0.00	0.00	0.00		
Xylenes	0.00	18.75	0.00	0.00	0.00	0.00		
CO_2	2.22	18.75	0.03	0.61	1.34	1.98	1	1.98
CH_4	76.17	18.75	0.94	20.95	45.76	67.65	25	1691.34
						TOTAL CO_2e		**1693.31**

[1] Volume per event estimation conservatively based on volume of similarly sized facility. (Coyote Wash Compressor Station)
[2] Operating hours conservatively based on 8,760 hours per year.
[3] Seal vent rate based on manufacturer vent rates for like kind turbine located at the Ironhorse Complex.
[4] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

Ponderosa Compressor Station
Vent Detail Sheet - Potential to Emit

Source ID Number	N/A
Source Description	Vented Emissions

Potential Venting Volumes - Startup/Warmup

Source Type	Equipment	No. of Units	Gas Emitted per Event (scf)	Events per Year	Annual Volume Emitted (scf)	Emission Factor Source
Emergency Shutdown	Taurus 70-CG-7101	1	50,000	2	100,000	Engineering Estimate[1]
Turbine Blowdown	Taurus 70-CG-7201	1	21,800	12	261,600	Engineering Estimate[1]
SUBTOTAL					**361,600**	

Potential Venting Volumes - Turbine Seals

Source Type	Seal Vent Rate (scf/hr)	Hours per Year[3]	Annual Volume Emitted (scf)	Emission Factor Source
Turbine Seals	360	8760	3,153,600	Engineering Estimate[3]
SUBTOTAL			**3,153,600**	

Potential Venting Emissions

Pollutant	Gas Wt. %	Actual Mol.Wt. Gas (lb/mol)	Venting Emissions (tpy)			**TOTAL**	Global Warming Potential[4]	Total Emissions CO_2e (tpy)
			Emergency Shutdown	Turbine Blowdown	Turbine Seals			
VOC	12.69	18.75	0.31	0.82	9.90	11.04		
n-Hexane	0.25	18.75	0.01	0.02	0.19	0.21		
2,2,4 Trimethylpentane	0.00	18.75	0.00	0.00	0.00	0.00		
Benzene	0.03	18.75	0.00	0.00	0.02	0.03		
Toluene	0.03	18.75	0.00	0.00	0.02	0.03		
Ethylbenzene	0.000	18.75	0.00	0.00	0.00	0.00		
Xylenes	0.00	18.75	0.00	0.00	0.00	0.00		
CO_2	2.22	18.75	0.06	0.14	1.74	1.94	1	1.94
CH_4	76.17	18.75	1.88	4.93	59.43	66.24	25	1656.01
						TOTAL CO_2e		**1657.95**

[1] Volume per event estimation conservatively based on volume of similarly sized facility. (Coyote Wash Compressor Station)
[2] Operating hours conservatively based on 8,760 hours per year.
[3] Seal vent rate based on manufacturer vent rates for like kind turbine located at the Ironhorse Complex.
[4] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

Ponderosa Compressor Station
Fugitive Equipment Leaks - Potential to Emit

Existing Fugitive Equipment Leaks TOC Emission Factors[1]

Component		Leak Rate w/o LDAR	
		kg/hr/component	lb/hr/component
Valves	Gas	4.50E-03	9.92E-03
	Heavy Oil	8.40E-06	1.85E-05
	Light Oil	2.50E-03	5.51E-03
	Water/Oil	9.80E-05	2.16E-04
Connectors	Gas	2.00E-04	4.41E-04
	Heavy Oil	7.50E-06	1.65E-05
	Light Oil	2.10E-04	4.63E-04
	Water/Oil	1.10E-04	2.43E-04
Flanges	Gas	3.90E-04	8.60E-04
	Heavy Oil	3.90E-07	8.60E-07
	Light Oil	1.10E-04	2.43E-04
	Water/Oil	2.90E-06	6.39E-06
Open-ended Lines	Gas	2.00E-03	4.41E-03
	Heavy Oil	1.40E-04	3.09E-04
	Light Oil	1.40E-03	3.09E-03
	Water/Oil	2.50E-04	5.51E-04
Others	Gas	8.80E-03	1.94E-02
	Heavy Oil	3.20E-05	7.05E-05
	Light Oil	7.50E-03	1.65E-02
	Water/Oil	1.40E-02	3.09E-02
Pump seals	Gas	2.40E-03	5.29E-03
	Heavy Oil	NA	NA
	Light Oil	1.30E-02	2.87E-02
	Water/Oil	2.40E-05	5.29E-05

[1]Emission Factors from Table 2-4, EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates", November 1995).

Facility Fugitive Component Count Summary

Equipment	Light Oil [1]	Gas [1]	Water/Oil
Valves	51	257	0
Relief Valves	0	0	0
Connectors/Flanges	171	857	0
Compressors	0	1	0
OEL	3	14	0
Other	6	30	0
Pumps	1	5	0

[1] Component count estimated using HAP-Calc for "standard" compressor station. Only Gas components provided. Light Oil counts were estimated as 20% of the Gas counts.

Fugitive Equipment Leaks TOC Emissions (tpy)

Equipment	Light Oil	Gas	Water/Oil
Valves	1.23	11.17	0.00
Relief Valves	0.00	0.00	0.00
Connectors/Flanges	0.18	3.23	0.00
OEL	0.04	0.27	0.00
Other	0.43	2.55	0.00
Pumps	0.13	0.12	0.00
Total	2.01	17.33	0.00

[1]Emissions (tpy) = # components × EF lb TOC/component-hr × 1 ton/2000 lb × 365 day/hr.

Fugitive Equipment Leaks VOC, HAP, and GHG Emissions (tpy)[2]

Pollutant	Light Oil Wt. %	Gas Wt. %	Water/Oil Wt. %	(tpy)	Global Warming Potential[1]	Total Emissions CO2e (tpy)
VOC	100	12.69	100	4.21		
n-Hexane	5.4	0.25	0	0.15		
2,2,4 Trimethylpentane	1.2	0.00	0	0.02		
Benzene	1.0	0.03	0	0.03		
Toluene	4.2	0.03	0	0.09		
Ethylbenzene	0.3	0.00	0	0.01		
Xylenes	3.0	0.00	0	0.06		
CO_2	0.0	2.22	0	0.4	1	0.39
CH_4	0.6	76.17	0	13.2	25	330.30
					Total	**330.68**

[1] 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

[2] Fugitive equipment leak emissions based on Ponderosa wet gas sample analyzed on 8/14/2007. And Ponderosa scrubber liquids sample analyzed 3/23/2010.

Ponderosa Compressor Station
Facility Fuel Usage

Actual Natural Gas Fuel Usage 2014				
Source	Sulfur Content (lb SO_2/MMBtu)	SCF/hr	MSCFD	MSCF/yr
Turbine	0.0	49,313	1,184	431,978
Combustor	0.0	25	0.6	219
Total		49,338	1,184	432,197

Potential Natural Gas Fuel Usage				
Source	Sulfur Content (lb SO_2/MMBtu)	SCF/hr	MSCFD	MSCF/yr
Turbine	0.0	64,039	1,537	560,986
Flare	0.0	54	1.3	473
Combustor	0.0	25	0.6	219
Reboiler	0.0	895	21	7,840
Total		65,014	1,560	569,518

Ponderosa Compressor Station
Vent Detail Sheet - Truck Loadout - Potential to Emit

Source ID Number	NA	
Source Description	Vented Emissions	
Source Usage	Truck Loadouts	
Potential operation	8760	hr/yr

Potential Emissions

Pollutant	EPA S Factor[1]	True VP of Liquid (psia)[2]	Mol. Wt. of Vapors (lb/lb-mol)[2]	T of Liquid (R)	Sales Volume (bbl/yr)	Estimated Emissions VOC lb/1000 gal	Estimated Emissions VOC (tpy)	Source of Emission Factor
VOC	0.6	5.20	66	520	3650	4.93	0.38	AP-42

[1] EPA AP-42, Table 5.2-1, June, 2008 and Table 7.1-2 November, 2006.

[2] EPA AP-42, Table 7.1-2, November, 2006.
True vapor pressure of liquid and molar weight of vapors based on engineering estimation of liquid RVP.

Ponderosa Compressor Station
Vent Detail Sheet - Truck Loadout - Actual Emissions 2014

Source ID Number	NA	
Source Description	Vented Emissions	
Source Usage	Truck Loadouts	
Potential operation	8760	hr/yr

Potential Emissions

Pollutant	EPA S Factor[1]	True VP of Liquid (psia)[2]	Mol. Wt. of Vapors (lb/lb-mol)[2]	T of Liquid (R)	Sales Volume (bbl/yr)	Estimated Emissions VOC lb/1000 gal	Estimated Emissions VOC (tpy)	Source of Emission Factor
VOC	0.6	5.20	66	520	2358	4.93	0.24	AP-42

[1] EPA AP-42, Table 5.2-1, June, 2008 and Table 7.1-2 November, 2006.

[2] EPA AP-42, Table 7.1-2, November, 2006.
True vapor pressure of liquid and molar weight of vapors based on engineering estimation of liquid RVP.

Ponderosa Compressor Station
Ponderosa Inlet Scrubber Condensate

Source of analysis: QEP ATS
Date of analysis: 3/23/2010

[redacted]				
Methane	16.04	3.398%	0.5451	0.60%
Ethane	30.07	2.332%	0.7011	0.77%
Total HC (Non-VOC)		*5.7292%*	*1.2462*	*1.37%*
Propane	44.10	3.997%	1.7625	1.94%
i-Butane	58.12	2.193%	1.2748	1.40%
n-Butane	58.12	4.018%	2.3353	2.57%
i-Pentane	72.15	3.665%	2.6446	2.91%
n-Pentane	72.15	3.914%	2.8241	3.11%
n-Hexane	86.18	5.678%	4.8928	5.39%
Hexanes	86.18	6.096%	5.2532	5.78%
Heptanes	100.20	34.869%	34.9400	38.47%
Octanes	114.23	13.450%	15.3635	16.92%
Nonanes	128.26	4.841%	6.2092	6.84%
Decanes +	142.28	2.309%	3.2846	3.62%
'2,2,4-Trimethylpentane	100.20	1.082%	1.0838	1.19%
Benzene	78.11	1.152%	0.9000	0.99%
Toluene	92.14	4.114%	3.7906	4.17%
Ethylbenzene	106.17	0.264%	0.2800	0.31%
o-Xylene	106.16	2.539%	2.6950	2.97%
Methanol	32.04	0.000%	0.0000	0.00%
Total NMNE VOC		*94.1795%*	*89.5339*	*98.58%*
Water	18.02	0.000%	0.0000	0.00%
Carbon Dioxide	43.99	0.091%	0.0402	0.04%
Nitrogen	28.02	0.000%	0.0000	0.00%
H2S	34.06	0.000%	0.0000	0.00%
Helium	4.00	0.000%	0.0000	0.00%
	Totals	100.00%	90.8202	100.00%

NMNE VOC Content mol % 94.18%
Average VOC Molecular Weight 95.07 lb/mol

Company	QEP Field Services, LLC
Project	Ponderosa Compressor Station

Based on: **Ponderosa Condensate Tank Flash Gas Analysis**
From ProMax Report for model performed 11/4/14

							LHV BTU CONTENT		HHV BTU CONTENT			
Component	**mole %**	**Mole Frac.**	**Component MW**	**Sample MW**	**VOC**	**HAPs**	**Btu/scf**	**Btu/scf*Mole Frac**	**Btu/scf**	**Btu/scf*Mole Frac**		
Water	0	0	18	0.0000				0		0	0	0
Nitrogen	0	0	28.0134	0.0000			0	0	0	0	0	0
Methane	42.8178	0.428178	16.043	6.8693			909.4	389.3850732	1010	432.45978	1	0.428178
Carbon Dioxide	1.00924	0.010092	44.01	0.4442			0	0	0	0	0	0
Ethane	20.8162	0.208162	30.07	6.2594			1618.7	336.9518294	1769.6	368.3634752	2	0.416324
H2S (Max)	0	0	34.08	0.0000			586.8	0	637.1	0	0	0
Propane	18.2264	0.182264	44.097	8.0373	8.0373		2314.9	421.9229336	2516.1	458.5944504	3	0.546792
i-Butane	4.46756	0.044676	58.123	2.5967	2.5967		3000.4	134.0446702	3251.9	145.2805836	4	0.178702
N-Butane	5.82474	0.058247	58.123	3.3855	3.3855		3010.8	175.3712719	3262.3	190.020493	4	0.23299
I-Pentane	2.0927	0.020927	72.15	1.5099	1.5099		3699	77.408973	4000.9	83.7268343	5	0.104635
N-Pentane	1.61857	0.016186	72.15	1.1678	1.1678		3706.9	59.99877133	4008.9	64.88685273	5	0.080929
Other Hexanes	0.946484	0.009465	86.177	0.8157	0.8157		4392.7	41.57621585	4744.5	44.90594761	6	0.056789
N-hexane	0.604025	0.00604	86.177	0.5205	0.5205	0.5205	4404.1	26.60186503	4750.2	28.69239555	6	0.036242
Methylcyclopentane	0	0	84.1608	0.0000	0.0000		4392.7	0	4744.5	0	6	0
Benzene	0.122526	0.001225	78.114	0.0957	0.0957	0.0957	3591.1	4.400031186	3741.5	4.58431029	6	0.007352
CycloHexane	0	0	84.1608	0.0000	0.0000		4179.9	0	4481.2	0	6	0
Heptane	1.13852	0.011385	100.204	1.1408	1.1408		5100.3	58.06793556	5500.4	62.62315408	7	0.079696
Methylcyclohexane	0	0	98.18	0.0000	0.0000		4863.9	0	5215.7	0	7	0
Toluene	0.115954	0.00116	92.141	0.1068	0.1068	0.1068	4273.7	4.955526098	4474.5	5.18836173	7	0.008117
Iso-Octane (2,2,4 Tri-)	0.0399	0.000399	114.22	0.0456	0.0456		5796.3	2.312706311	6249	2.493332253	8	0.003192
Octanes	0.125442	0.001254	114.22	0.1433	0.1433		5796.3	7.270994646	6249	7.83887058	8	0.010035
Ethylbenzene	0.002115	2.12E-05	106.167	0.0022	0.0022	0.0022	4970.7	0.105146211	5221.7	0.110455664	8	0.000169
Xylene	0.016499	0.000165	106.167	0.0175	0.0175	0.0175	4957.4	0.817901101	5208.4	0.859312562	8	0.00132
Nonanes	0.013436	0.000134	128.25	0.0172	0.0172		6494	0.872553322	6997	0.940137911	9	0.001209
NMHC		0	102.09	0	0.0000			0		0	10	0
Totals	**100.00**	**1.00**		**33.18**	**19.60**	**0.74**		**1742.06**		**1901.57**		**2.19**

Weight Fraction of Vapors that are VOC	0.590876476
Weight Fraction of Vapors that are HAP	0.022391364
Weight Fraction of Vapors that are Benzene	0.002884963
Weight Fraction of Vapors that are Toluene	0.003220489
Weight Fraction of Vapors that are E-Benzene	6.76938E-05
Weight Fraction of Vapors that are Xylene	0.000527983
Weight Fraction of Vapors that are n-Hexane	0.015690235

Company	QEP Field Services, LLC
Project	Ponderosa Compressor Station

Based on: **Ponderosa Wet Gas Analysis**
Inlet gas sample taken from Ponderosa inlet (5/26/2015)

							LHV BTU CONTENT		HHV BTU CONTENT	
Component	**mole %**	**Mole Frac.**	**Component MW**	**Sample MW**	**VOC**	**HAPs**	**Btu/scf**	**Btu/scf*Mole Frac**	**Btu/scf**	**Btu/scf*Mole Frac**
Water	0	0	18	0.0000				0		0
Nitrogen	0.3768	0.003768	28.0134	0.1056			0	0	0	0
Methane	89.0344	0.890344	16.043	14.2838			909.4	809.6788336	1010	899.24744
Carbon Dioxide	0.9481	0.009481	44.01	0.4173			0	0	0	0
Ethane	5.2095	0.052095	30.07	1.5665			1618.7	84.3261765	1769.6	92.187312
H2S (Max)	0	0	34.08	0.0000			586.8	0	637.1	0
Propane	2.5064	0.025064	44.097	1.1052	1.1052		2314.9	58.0206536	2516.1	63.0635304
i-Butane	0.521	0.00521	58.123	0.3028	0.3028		3000.4	15.632084	3251.9	16.942399
N-Butane	0.6846	0.006846	58.123	0.3979	0.3979		3010.8	20.6119368	3262.3	22.3337058
I-Pentane	0.2528	0.002528	72.15	0.1824	0.1824		3699	9.351072	4000.9	10.1142752
N-Pentane	0.1835	0.001835	72.15	0.1324	0.1324		3706.9	6.8021615	4008.9	7.3563315
Other Hexanes	0.0883	0.000883	86.177	0.0761	0.0761		4392.7	3.8787541	4744.5	4.1893935
N-hexane	0.0534	0.000534	86.177	0.0460	0.0460	0.0460	4404.1	2.3517894	4750.2	2.5366068
Methylcyclopentane	0	0	84.1608	0.0000	0.0000		4392.7	0	4744.5	0
Benzene	0.007	0.00007	78.114	0.0055	0.0055	0.0055	3591.1	0.251377	3741.5	0.261905
CycloHexane	0.0237	0.000237	84.1608	0.0199	0.0199		4179.9	0.9906363	4481.2	1.0620444
Heptane	0.0632	0.000632	100.204	0.0633	0.0633		5100.3	3.2233896	5500.4	3.4762528
Methylcyclohexane	0.0239	0.000239	98.18	0.0235	0.0235		4863.9	1.1624721	5215.7	1.2465523
Toluene	0.0065	0.000065	92.141	0.0060	0.0060	0.0060	4273.7	0.2777905	4474.5	0.2908425
Iso-Octane (2,2,4 Tri-)	0.0032	0.000032	114.22	0.0037	0.0037		5796.3	0.1854816	6249	0.199968
Octanes	0.0137	0.000137	114.22	0.0156	0.0156		5796.3	0.7940931	6249	0.856113
Ethylbenzene	0	0	106.167	0.0000	0.0000	0.0000	4970.7	0	5221.7	0
Xylene	0	0	106.167	0.0000	0.0000	0.0000	4957.4	0	5208.4	0
Nonanes	0.0001	0.000001	128.25	0.0001	0.0001		6494	0.006494	6997	0.006997
NMHC	0	0	102.09	0	0.0000			0		0
Totals	**100.00**	**1.00**		**18.75**	**2.38**	**0.06**		**1017.55**		**1125.37**

Weight Fraction of Vapors that are VOC	0.126936102
Weight Fraction of Vapors that are HAP	0.003064779
Weight Fraction of Vapors that are Benzene	0.000291569
Weight Fraction of Vapors that are Toluene	0.000319361
Weight Fraction of Vapors that are E-Benzene	0
Weight Fraction of Vapors that are Xylene	0
Weight Fraction of Vapors that are n-Hexane	0.002453849
Spec. Gravity	0.6068

Company QEP Field Services, LLC
Project Ponderosa Compressor Station

Based on: **Ponderosa Fuel Gas Analysis**
Fuel gas analysis dated 9/2/2014 provided by Questar Applied Technology.

							LHV BTU CONTENT		HHV BTU CONTENT	
Component	mole %	Mole Frac.	Component MW	Sample MW	VOC	HAPs	Btu/scf	Btu/scf*Mole Frac	Btu/scf	Btu/scf*Mole Frac
Water		0	18	0.0000				0		0
Nitrogen	0.3433	0.003433	28.0134	0.0962			0	0	0	0
Methane	89.4905	0.894905	16.043	14.3570			909.4	813.826607	1010	903.85405
Carbon Dioxide	1.0182	0.010182	44.01	0.4481			0	0	0	0
Ethane	4.9066	0.049066	30.07	1.4754			1618.7	79.4231342	1769.6	86.8271936
H2S (Max)	0	0	34.08	0.0000			586.8	0	637.1	0
Propane	2.3169	0.023169	44.097	1.0217	1.0217		2314.9	53.6339181	2516.1	58.2955209
i-Butane	0.4589	0.004589	58.123	0.2667	0.2667		3000.4	13.7688356	3251.9	14.9229691
N-Butane	0.6482	0.006482	58.123	0.3768	0.3768		3010.8	19.5160056	3262.3	21.1462286
I-Pentane	0.2328	0.002328	72.15	0.1680	0.1680		3699	8.611272	4000.9	9.3140952
N-Pentane	0.1888	0.001888	72.15	0.1362	0.1362		3706.9	6.9986272	4008.9	7.5688032
Other Hexanes	0.1833	0.001833	86.177	0.1580	0.1580		4392.7	8.0518191	4744.5	8.6966685
N-hexane		0	86.177	0.0000	0.0000	0.0000	4404.1	0	4750.2	0
Methylcyclopentane		0	84.1608	0.0000	0.0000		4392.7	0	4744.5	0
Benzene		0	78.114	0.0000	0.0000	0.0000	3591.1	0	3741.5	0
CycloHexane		0	84.1608	0.0000	0.0000		4179.9	0	4481.2	0
Heptane	0.1455	0.001455	100.204	0.1458	0.1458		5100.3	7.420936S	5500.4	8.003082
Methylcyclohexane		0	98.18	0.0000	0.0000		4863.9	0	5215.7	0
Toluene		0	92.141	0.0000	0.0000	0.0000	4273.7	0	4474.5	0
Iso-Octane (2,2,4 Tri-)		0	114.22	0.0000	0.0000		5796.3	0	6249	0
Octanes	0.0596	0.000596	114.22	0.0681	0.0681		5796.3	3.4545948	6249	3.724404
Ethylbenzene		0	106.167	0.0000	0.0000	0.0000	4970.7	0	5221.7	0
Xylene		0	106.167	0.0000	0.0000	0.0000	4957.4	0	5208.4	0
Nonanes	0.0074	0.000074	128.25	0.0095	0.0095		6494	0.480556	6997	0.517778
NMHC		0	102.09	0	0.0000			0		0
Totals	**100.00**	**1.00**		**18.73**	**2.35**	**0.00**		**1015.19**		**1122.87**

Weight Fraction of Vapors that are VOC	0.125520973
Weight Fraction of Vapors that are HAP	0
Weight Fraction of Vapors that are Benzene	0
Weight Fraction of Vapors that are Toluene	0
Weight Fraction of Vapors that are E-Benzene	0
Weight Fraction of Vapors that are Xylene	0
Weight Fraction of Vapors that are n-Hexane	0

Company QEP Field Services, LLC
Project Ponderosa Compressor Station

Based on: **Ponderosa Dehydration Unit Flash Separator Gas Analysis**
From Aggregate Glycalc Report (Flash Tank Off Gas Stream)
For model performed 6/22/15

							LHV BTU CONTENT		HHV BTU CONTENT			
Component	**mole %**	**Mole Frac.**	**Component MW**	**Sample MW**	**VOC**	**HAPs**	**Btu/scf**	**Btu/scf*Mole Frac**	**Btu/scf**	**Btu/scf*Mole Frac**		
Water	0.261	0.00261	18	0.0470				0		0	0	0
Nitrogen	0.357	0.00357	28.0134	0.1000			0	0	0	0	0	0
Methane	71.5	0.715	16.043	11.4707			909.4	650.221	1010	722.15	1	0.715
Carbon Dioxide	5.84	0.0584	44.01	2.5702			0	0	0	0	0	0
Ethane	10.6	0.106	30.07	3.1874			1618.7	171.5822	1769.6	187.5776	2	0.212
H2S (Max)	0	0	34.08	0.0000			586.8	0	637.1	0	0	0
Propane	5.86	0.0586	44.097	2.5841	2.5841		2314.9	135.65314	2516.1	147.44346	3	0.1758
i-Butane	1.36	0.0136	58.123	0.7905	0.7905		3000.4	40.80544	3251.9	44.22584	4	0.0544
N-Butane	2.06	0.0206	58.123	1.1973	1.1973		3010.8	62.02248	3262.3	67.20338	4	0.0824
I-Pentane	0.661	0.00661	72.15	0.4769	0.4769		3699	24.45039	4000.9	26.445949	5	0.03305
N-Pentane	0.549	0.00549	72.15	0.3961	0.3961		3706.9	20.350881	4008.9	22.008861	5	0.02745
Other Hexanes	0.261	0.00261	86.177	0.2249	0.2249		4392.7	11.464947	4744.5	12.383145	6	0.01566
N-hexane	0.169	0.00169	86.177	0.1456	0.1456	0.1456	4404.1	7.442929	4750.2	8.027838	6	0.01014
Methylcyclopentane	0.0927	0.000927	84.1608	0.0780	0.0780		4392.7	4.0720329	4744.5	4.3981515	6	0.005562
Benzene	0.0446	0.000446	78.114	0.0348	0.0348	0.0348	3591.1	1.6016306	3741.5	1.668709	6	0.002676
CycloHexane	0.114	0.00114	84.1608	0.0959	0.0959		4179.9	4.765086	4481.2	5.108568	6	0.00684
Heptane	0.199	0.00199	100.204	0.1994	0.1994		5100.3	10.149597	5500.4	10.945796	7	0.01393
Methylcyclohexane	0.0927	0.000927	98.18	0.0910	0.0910		4863.9	4.5088353	5215.7	4.8349539	7	0.006489
Toluene	0.0365	0.000365	92.141	0.0336	0.0336	0.0336	4273.7	1.5599005	4474.5	1.6331925	7	0.002555
Iso-Octane (2,2,4 Tri-)	0.00697	6.97E-05	114.22	0.0080	0.0080		5796.3	0.40400211	6249	0.4355553	8	0.0005576
Octanes	0.0154	0.000154	114.22	0.0176	0.0176		5796.3	0.8926302	6249	0.962346	8	0.001232
Ethylbenzene	0	0	106.167	0.0000	0.0000	0.0000	4970.7	0	5221.7	0	8	0
Xylene	0	0	106.167	0.0000	0.0000	0.0000	4957.4	0	5208.4	0	8	0
Nonanes		0	128.25	0.0000	0.0000		6494	0	6997	0	9	0
NMHC		0	102.09	0	0.0000			0		0	10	0
Totals	**100.08**	**1.00**		**23.75**	**6.37**	**0.21**		**1151.95**		**1267.45**		**1.37**

Weight Fraction of Vapors that are VOC	0.268382357
Weight Fraction of Vapors that are HAP	0.009015436
Weight Fraction of Vapors that are Benzene	0.001466948
Weight Fraction of Vapors that are Toluene	0.001416109
Weight Fraction of Vapors that are E-Benzen	0
Weight Fraction of Vapors that are Xylene	0
Weight Fraction of Vapors that are n-Hexane	0.006132379

Company	QEP Field Services, LLC
Project	Ponderosa Compressor Station

Based on: **Ponderosa Dehydration Unit Regenerator Overheads Gas Analysis**
From Aggregate Glycalc Report (Regenerator Overheads Stream)
For model performed 6/22/15

							LHV BTU CONTENT		HHV BTU CONTENT			
Component	**mole %**	**Mole Frac.**	**Component MW**	**Sample MW**	**VOC**	**HAPs**	**Btu/scf**	**Btu/scf*Mole Frac**	**Btu/scf**	**Btu/scf*Mole Frac**		
Water	78.1	0.781	18	14.0580				0		0	0	0
Nitrogen	0.0688	0.000688	28.0134	0.0193			0	0	0	0	0	0
Methane	16.1	0.161	16.043	2.5829			909.4	146.4134	1010	162.61	1	0.161
Carbon Dioxide	0.845	0.00845	44.01	0.3719			0	0	0	0	0	0
Ethane	1.29	0.0129	30.07	0.3879			1618.7	20.88123	1769.6	22.82784	2	0.0258
H2S (Max)		0	34.08	0.0000			586.8	0	637.1	0	0	0
Propane	0.878	0.00878	44.097	0.3872	0.3872		2314.9	20.324822	2516.1	22.091358	3	0.02634
i-Butane	0.243	0.00243	58.123	0.1412	0.1412		3000.4	7.290972	3251.9	7.902117	4	0.00972
N-Butane	0.418	0.00418	58.123	0.2430	0.2430		3010.8	12.585144	3262.3	13.636414	4	0.01672
I-Pentane	0.153	0.00153	72.15	0.1104	0.1104		3699	5.65947	4000.9	6.121377	5	0.00765
N-Pentane	0.144	0.00144	72.15	0.1039	0.1039		3706.9	5.337936	4008.9	5.772816	5	0.0072
Other Hexanes	0.0874	0.000874	86.177	0.0753	0.0753		4392.7	3.8392198	4744.5	4.146693	6	0.005244
N-hexane	0.0705	0.000705	86.177	0.0608	0.0608	0.0608	4404.1	3.1048905	4750.2	3.348891	6	0.00423
Methylcyclopentane	0.175	0.00175	84.1608	0.1473	0.1473		4392.7	7.687225	4744.5	8.302875	6	0.0105
Benzene	0.436	0.00436	78.114	0.3406	0.3406	0.3406	3591.1	15.657196	3741.5	16.31294	6	0.02616
CycloHexane	0.171	0.00171	84.1608	0.1439	0.1439		4179.9	7.147629	4481.2	7.662852	6	0.01026
Heptane	0.156	0.00156	100.204	0.1563	0.1563		5100.3	7.956468	5500.4	8.580624	7	0.01092
Methylcyclohexane	0.175	0.00175	98.18	0.1718	0.1718		4863.9	8.511825	5215.7	9.127475	7	0.01225
Toluene	0.546	0.00546	92.141	0.5031	0.5031	0.5031	4273.7	23.334402	4474.5	24.43077	7	0.03822
Iso-Octane (2,2,4 Tri-)	0.00313	3.13E-05	114.22	0.0036	0.0036		5796.3	0.18142419	6249	0.1955937	8	0.0002504
Octanes	0.107	0.00107	114.22	0.1222	0.1222		5796.3	6.202041	6249	6.68643	8	0.00856
Ethylbenzene	0	0	106.167	0.0000	0.0000	0.0000	4970.7	0	5221.7	0	8	0
Xylene	0	0	106.167	0.0000	0.0000	0.0000	4957.4	0	5208.4	0	8	0
Nonanes		0	128.25	0.0000	0.0000		6494	0	6997	0	9	0
NMHC		0	102.09	0	0.0000			0		0	10	0
Totals	**100.17**	**1.00**		**20.13**	**2.71**	**0.90**		**302.12**		**329.76**		**0.38**

Weight Fraction of Vapors that are VOC	0.134646999
Weight Fraction of Vapors that are HAP	0.044927942
Weight Fraction of Vapors that are Benzene	0.016918464
Weight Fraction of Vapors that are Toluene	0.024991431
Weight Fraction of Vapors that are E-Benzene	0
Weight Fraction of Vapors that are Xylene	0
Weight Fraction of Vapors that are n-Hexane	0.003018047

Company QEP Field Services, LLC
Project Ponderosa Compressor Station

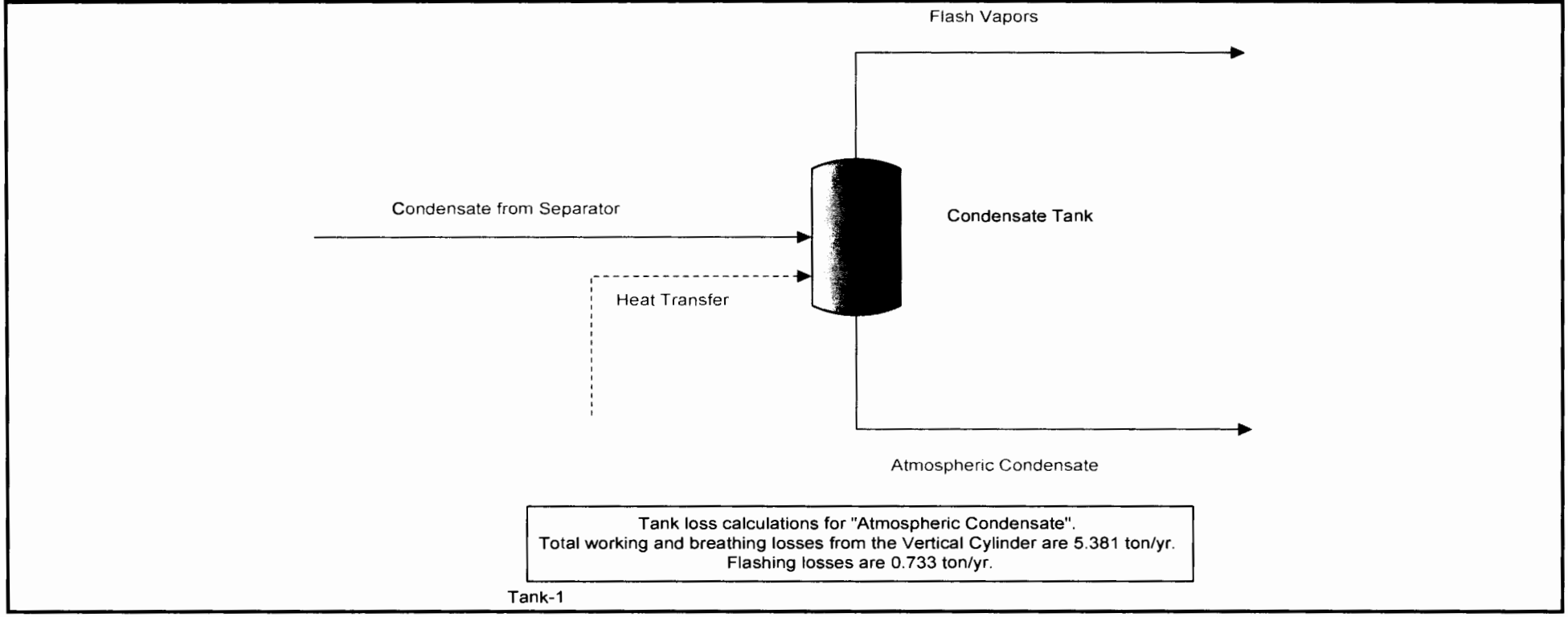
Based on: **Ponderosa Produced Water Storage Tank Flash Gas Analysis**
From ProMax Report for model performed 11/14/14

							LHV BTU CONTENT		HHV BTU CONTENT			
Component	mole %	Mole Frac.	Component MW	Sample MW	VOC	HAPs	Btu/scf	Btu/scf*Mole Frac	Btu/scf	Btu/scf*Mole Frac		
Water	1.21425	0.012143	18	0.2186				0		0	0	0
Nitrogen	0	0	28.0134	0.0000			0	0	0	0	0	0
Methane	42.035	0.42035	16.043	6.7437			909.4	382.26629	1010	424.5535	1	0.42035
Carbon Dioxide	0.987418	0.009874	44.01	0.4346			0	0	0	0	0	0
Ethane	20.5467	0.205467	30.07	6.1784			1618.7	332.5894329	1769.6	363.5944032	2	0.410934
H2S (Max)	0	0	34.08	0.0000			586.8	0	637.1	0	0	0
Propane	18.1086	0.181086	44.097	7.9853	7.9853		2314.9	419.1959814	2516.1	455.6304846	3	0.543258
i-Butane	4.45602	0.04456	58.123	2.5900	2.5900		3000.4	133.6984241	3251.9	144.9053144	4	0.1782408
N-Butane	5.81452	0.058145	58.123	3.3796	3.3796		3010.8	175.0635682	3262.3	189.687086	4	0.2325808
I-Pentane	2.09181	0.020918	72.15	1.5092	1.5092		3699	77.3760519	4000.9	83.69122629	5	0.1045905
N-Pentane	1.61822	0.016182	72.15	1.1675	1.1675		3706.9	59.98579718	4008.9	64.87282158	5	0.080911
Other Hexanes	0.946652	0.009467	86.177	0.8158	0.8158		4392.7	41.58357801	4744.5	44.9138994	6	0.056799114
N-hexane	0.604182	0.006042	86.177	0.5207	0.5207	0.5207	4404.1	26.60877946	4750.2	28.69985336	6	0.03625092
Methylcyclopentane	0	0	84.1608	0.0000	0.0000		4392.7	0	4744.5	0	6	0
Benzene	0.122464	0.001225	78.114	0.0957	0.0957	0.0957	3591.1	4.397804704	3741.5	4.58199056	6	0.00734784
CycloHexane	0	0	84.1608	0.0000	0.0000		4179.9	0	4481.2	0	6	0
Heptane	1.13887	0.011389	100.204	1.1412	1.1412		5100.3	58.08578661	5500.4	62.64240548	7	0.0797209
Methylcyclohexane	0	0	98.18	0.0000	0.0000		4863.9	0	5215.7	0	7	0
Toluene	0.115953	0.00116	92.141	0.1068	0.1068	0.1068	4273.7	4.955483361	4474.5	5.188316985	7	0.00811671
Iso-Octane (2,2,4 Tri-)	0.039913	0.000399	114.22	0.0456	0.0456		5796.3	2.313448238	6249	2.494132125	8	0.003193
Octanes	0.125481	0.001255	114.22	0.1433	0.1433		5796.3	7.273255203	6249	7.84130769	8	0.01003848
Ethylbenzene	0.002115	2.12E-05	106.167	0.0022	0.0022	0.0022	4970.7	0.105148697	5221.7	0.110458275	8	0.00016923
Xylene	0.016499	0.000165	106.167	0.0175	0.0175	0.0175	4957.4	0.817907545	5208.4	0.859319332	8	0.001319898
Nonanes	0.013442	0.000134	128.25	0.0172	0.0172		6494	0.872936468	6997	0.940550734	9	0.001209798
NMHC		0	102.09	0	0.0000			0		0	10	0
Totals	**100.00**	**1.00**		**33.11**	**19.54**	**0.74**		**1727.19**		**1885.21**		**2.18**

Weight Fraction of Vapors that are VOC	0.590033629
Weight Fraction of Vapors that are HAP	0.02243623
Weight Fraction of Vapors that are Benzene	0.002888946
Weight Fraction of Vapors that are Toluene	0.00322654
Weight Fraction of Vapors that are E-Benzene	6.78232E-05
Weight Fraction of Vapors that are Xylene	0.000528983
Weight Fraction of Vapors that are n-Hexane	0.015723937

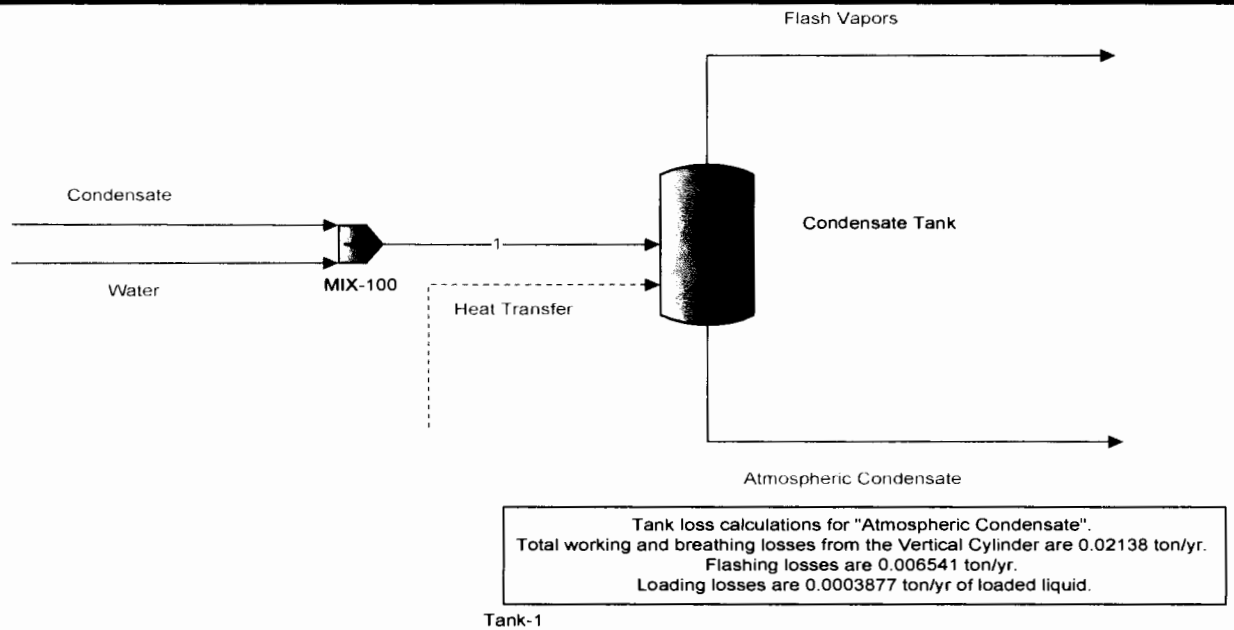
Flowsheet1
Plant Schematic

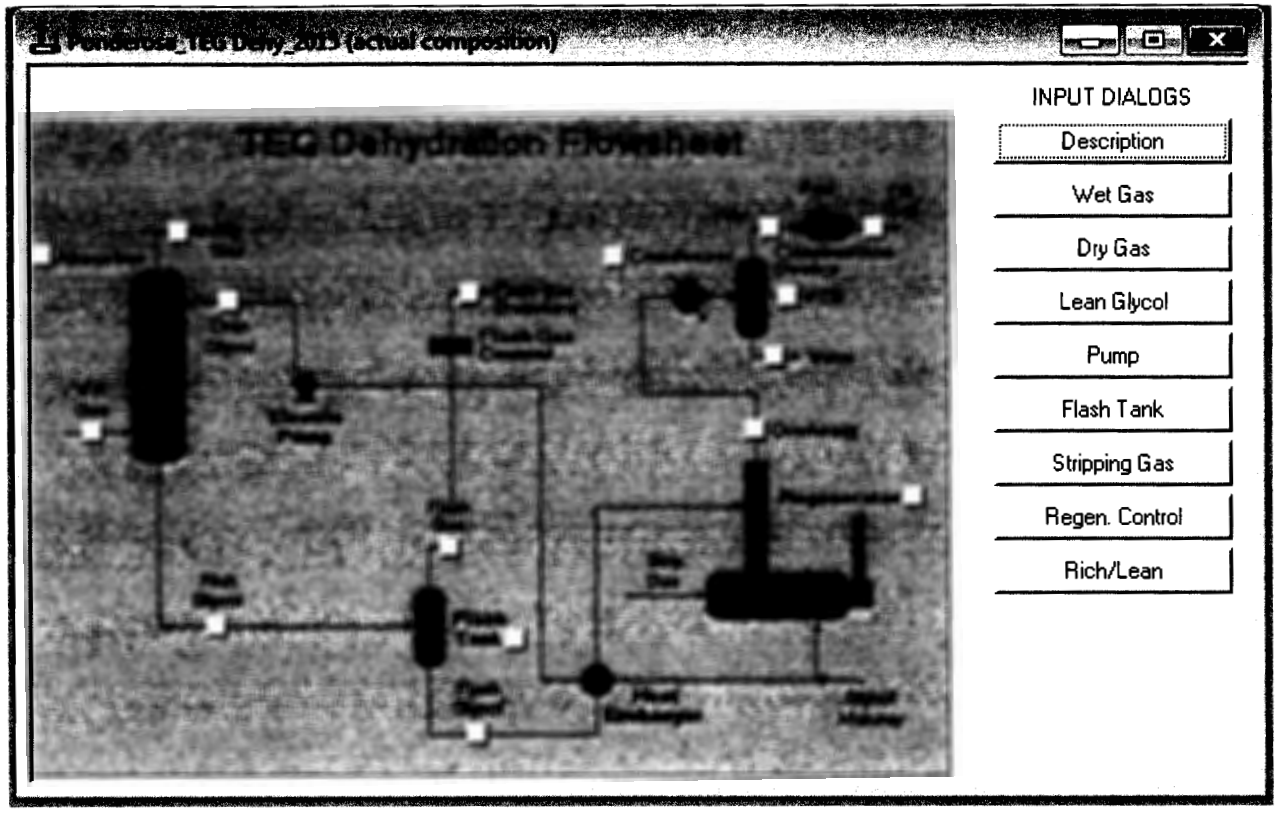
Client Name:	QEPFS	Job: 2014 Condensate Emissions
Location:	Ponderosa compressor station	
Flowsheet:	Flowsheet1	



Flowsheet1
Plant Schematic

Client Name:	QEPFS	Job: 2014 Produced Water Emissions
Location:	Ponderosa compressor station	
Flowsheet:	Flowsheet1	




TEG Dehydration Flowsheet
INPUT DIALOGS
Description
Wet Gas
Dry Gas
Lean Glycol
Pump
Flash Tank
Stripping Gas
Regen. Control
Rich/Lean

PROPOSAL

FOR

OPEN FLAME

VAPOR COMBUSTION UNIT

MODEL NO. LHS-1-12-20-X-1/4-X

Prepared For

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JZ QUOTE NO. 201404-21379-A

April 17, 2014

TABLE OF CONTENTS

SECTION I

PROPOSAL SUMMARY

This proposal describes the operating characteristics of a John Zink open flame, smokeless, air assisted, elevated, hydrocarbon vapor combustion unit (VCU).

The proposed unit includes a self-supported, vertical, carbon steel cylindrical shell air plenum, anti-flashback burner, pilot, air assist blower, detonation arrestor with temperature switch, burner safety control valve, and a solid state programmable controller.

The system will be factory assembled and is given a factory functional test and shipped ready for customer installation. Certain components removed for shipment will be field connected by the customer. All necessary drawings and detailed instructions for proper installation, start-up, and operation will be provided.

SECTION II

DESIGN BASIS

The John Zink Open Flame System is based on proprietary technology and sound engineering. Flow characteristics and other design data are furnished by the customer and summarized as follows:

Process Information

Ponderosa
BETX Scrubger Overhead Flare – 2,047 SCFH – 158 LBS/HR - 1,296 BTU/SCF

Ambient Temperature: -10 °F to 100 °F

AMBIENT TEMPERATURE

Summer .....100 °F max
Winter .....-10 °F min

POWER REQUIRED .....480 V/3 PH/60 Hz
.....120 V/3 PH/60 Hz

SECTION III

PROCESS DESCRIPTION

The system consists of a riser stack with internal gas riser, special anti-flashback burner, automatic ignition pilot with continuous monitor, motor operated burner safety control valve, detonation arrestor, air-assist blower, piping, instrumentation and master control panel packaged as an assembled unit ready for convenient field installation.

The start-up sequence consists of a short air purge using the air-assist blower to purge the air plenum of any combustibles prior to pilot ignition. This brief air purge is followed by automatic electronic ignition of the pilot. After pilot ignition, an air-hydrocarbon vapor mixture begins to flow from the BETX Scrubber to the vapor combustion system and the safety valve opens. The opening of the safety valve, also signals the assist gas valve to open and inject assist gas into the waste gas line to assure a combustible mixture. The compostion of the hydrocarbon stream is rich enough in hydrocarbons that assist gas should not be required for this application. After flowing through the safety valve, the vapors proceed through the detonation arrestor to the burner, where the combustible vapors are ignited by the pilot and burned. The air-assist blower provides partial combustion air and mixing energy to the burner tips to assure smokeless combustion.

The safety design considerations for a vapor combustion unit used in this application is very important in that the vapors to be burned may contain sufficient hydrocarbon concentration to present flashback potential. The John Zink vapor combustion system provides three (3) levels of flashback protection and prevention. These include: (1) proprietary anti-flashback burner, (2) safety burner motor operated valve, and (3) detonation arrestor with high temperature shutdown switch which serves as a final backup flashback protection device to minimize the risk for any flashback.

SECTION IV

PERFORMANCE

The John Zink Vapor Combustion Unit will combust the hydrocarbon vapors from the incoming air/hydrocarbon vapor mixture in order to comply with guaranteed emission limits as stated below.

SUMMARY

GUARANTEED HYDROCARBON EMISSIONS LEVEL
(See Section VI for Performance Guarantee)

98% Destruction Efficiency

ESTIMATED SYSTEM PRESSURE DROPS

10 Inches W. C. estimated at maximum inlet flow conditions. (See Section II, Design Basis)

Pressure drop through 4" burner at 2,047 SCFH is 1.1 inch W.C.

UTILITY REQUIREMENTS

Pilot Gas . . . . . 21 SCFH Propane @ 4 PSIG or
54 SCFH of Natural Gas @ 7 PSIG per pilot

Assist Gas . . . . Will be provided by customer if required.

Instrument Air . . . . None